Government Gazette
Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID-AFRIKA

Regulation Gazette No. 9872 *Regulasiekoerant*

Vol. 570 Pretoria, 12 December / Desember 2012 No. 35950

PART 4 OF 8

35950
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(All amounts to be rounded off to the nearest R'000)

Available sources of stress funding	Line no.	Total[1]	Next day	2 to 7 days	8 days to 1 month	More than 1 month to 2 months	More than 2 month to 3 months
		1	2	3	4	5	6
Realisable by forced sale (total of items 54 to 56)	53						
Investment securities classified as available for sale	54						
Unencumbered trading securities	55						
Assets available for securitisation vehicles	56						
FX market liquidity	57						
Available repo facilities (item 59 plus item 60 minus item 61)	58						
Ringfenced portfolio of prudential liquid securities	59						
25% of liquid assets held	60						
Current utilisation under Reserve Bank allotment	61						
Estimated unutilised interbank funding capacity	62						
Unsecured funding lines	63						
Secured funding lines	64						
Drawdown capacity in respect of call loans	65						
Other funding	66						
Total available liquidity (total of items 53, 57, 58 and 62 to 66)	67						

1. **Means the total for the specified item, and not the mathematical total of the specified columns.**

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

Concentration of deposit funding	Line no.	Total[1]	Next day	2 to 7 days	8 days to 1 month	More than 1 month to 2 months	More than 2 months to 3 months	More than 3 months to 6 months	More than 6 months to 12 months	Longer than 12 months
		1	2	3	4	5	6	7	8	9
Funding supplied by associates of the reporting bank	68									
Ten largest depositors	69									
Ten largest financial institutions funding balances	70									
Ten largest government and parastatals funding balances	71									
Negotiable paper funding instruments	72									
of which: issued for a period not exceeding twelve months	73									
of which: issued for a period exceeding five years	74									

1. **Means the total for the specified item, as well as the mathematical total of the specified columns.**

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

Foreign exchange contractual maturity ladder (converted to ZAR)	**Line no.**	**Total**	**Next day**	**2 to 7 days**	**8 days to 1 month**	**More than 1 month to 2 months**	**More than 2 months to 3 months**	**More than 3 months to 6 months**	**More than 6 months to 1 year**	**More than 1 year**	**Non contractual**
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
FX assets (total of items 76 to 80)	75										
USD	76										
EUR	77										
GBP	78										
Other	79										
ZAR leg of FX derivatives	80										
FX liabilities (total of items 82 to 86)	81										
USD	82										
EUR	83										
GBP	84										
Other	85										
ZAR leg of FX derivatives	86										
ZAR funding position of FX exposures (item 75 less item 81)	87										

Anticipated change in business[1]	**Line no.**	**Total**	**During next 6 months**	**More than 6 months to 1 year**
		1	**2**	**3**
Expected incremental change due to change in assets (total of items 89 to 91)	88			
Advances	89			
Trading, hedging and other investment instruments	90			
Other assets	91			
Expected incremental change due to change in liabilities (total of items 93 to 96)	92			
Stable deposits	93			
Volatile deposits	94			
Trading and hedging instruments	95			
Other liabilities	96			
Expected funding inflows / (outflows) to fund change in business (item 88 less item 92)	97			

1. During the next 12 months

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

Liquidity coverage ratio (LCR): High-quality liquid assets	Line no.	Total	Specified factor[6]	Weighted total (col.1 * 2)
		1	2	3
Total qualifying high-quality liquid assets (total of items 99 and 109 to 112)	98			
Total level one high-quality liquid assets[1] (total of items 100 to 104)	99			
Cash	100		100%	
Specified marketable securities from sovereigns, central banks, public sector entities, and multilateral development banks	101		100%	
Qualifying central bank reserves[2]	102		100%	
Specified debt securities issued in Rand by the central government of the RSA or the Reserve Bank	103		100%	
Specified debt securities issued in foreign currency by the central government of the RSA or the Reserve Bank	104		100%	
Total level two high-quality liquid assets[3] (total of items 106 to 108)	105			
Specified marketable securities from sovereign, central bank, and public sector entities	106		85%	
Specified corporate bonds	107		85%	
Other qualifying items[4] (please specify)	108		85%	
Total qualifying level two high-quality liquid assets[5]	109			
Committed Central Bank facility	110		As specified by the Registrar	
Foreign currency liquid assets	111			
Additional level two high-quality liquid assets	112			

1. Refer to regulation 26(12)(b).
2. Means such percentage or amount of central bank reserves as may be determined by the Governor of the Reserve Bank from time to time.
3. Refer to regulation 26(12)(b).
4. Relates to consolidated reporting only. Include in this line item 108 the aggregate amount of instruments qualifying as level two high-quality liquid assets for entities established in jurisdictions other than the RSA.
5. Qualifying level two high-quality liquid assets shall not exceed two-thirds of the bank's total qualifying level one high-quality liquid assets. This item 109 shall be equal to item 105 only when item 105 is less than or equal to two-thirds of item 99.
6. Or such factor as may be directed in writing by the Registrar.

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

Liquidity coverage ratio (LCR): Cash outflows[1]	Line no.	Total	Specified factor[4]	Weighted total (col.1 * 2)
		1	2	3
Retail deposits (total of items 114 and 118)	113			
Demand deposit and qualifying term deposits with residual maturity or notice period within 30 days (total of items 115 to 117)	114			
Stable deposits	115		5%	
Less stable deposits	116		10%	
Other[2] (please specify)	117		Specified by the Registrar	
Term deposit with residual maturity greater than 30 days subject to withdrawal with a significant penalty, or no legal right to withdraw[3]	118		Specified by the Registrar	

1. Based on the respective requirements specified in regulation 26(12)(d).
2. Means such category of retail deposits that is subject to such a run-off factor as may be directed in writing by the Registrar.
3. Means such category of term deposits that is subject to such a run-off factor as may be directed in writing by the Registrar.
4. Or such factor as may be directed in writing by the Registrar.

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

Liquidity coverage ratio (LCR): Cash outflows[1]	**Line no.**	**Total**	**Specified factor**[3]	**Weighted total** (col.1 * 2)
		1	**2**	**3**
Unsecured wholesale funding (total of items 120 to 127)	119			
Stable funding from small business	120		5%	
Less stable funding from small business	121		10%	
Specified term deposit with residual maturity greater than 30 days	122		Specified by the Registrar	
Legal entities with specified operational relationship	123		25%	
Portion of specified corporate deposits with specified operational relationship covered by deposit insurance	124		5%	
Specified funding from cooperative banks in an institutional network	125		25%	
Specified non-financial corporates, sovereigns, central banks and public-sector entities	126		75%	
Other legal entities	127		100%	
Secured funding (total of items 129 to 132)	128			
Secured funding backed by level one high-quality liquid assets	129		0%	
Secured funding backed by level two high-quality liquid assets	130		15%	
Secured funding from specified counterparties not backed by level one or level two high-quality liquid assets	131		25%	
Other secured funding	132		100%	
Other expected outflows (total of items 134 to 139, 144, and 149 to 151)	133			
Net payable amount related to specified derivative transactions	134		100%	
Outflow related to collateral for specified downgrade	135		100%	
Valuation changes on posted collateral securing derivative transactions that is comprised of level two high-quality liquid assets	136		20%	
Specified funding related to asset-backed securities or other structured financing instruments	137		100%	
Sum of liabilities from maturing funding related to asset-backed commercial paper, conduits, securities investment vehicles and other similar financing facilities, and required liquidity related to assets that may be returned	138		100%	
Committed undrawn credit and/ or liquidity facilities (total of items 140 to 143)	139			
Retail or small business	140		5%	
Credit facilities to non-financial corporates, sovereigns and central banks, public sector entities and multilateral development banks	141		10%	
Liquidity facilities to non-financial corporates, sovereigns and central banks, public sector entities and multilateral development banks	142		100%	
Other legal entities	143		100%	
Uncommitted undrawn credit and/ or liquidity facilities[2] (total of items 145 to 148)	144		Specified by the Registrar	
Retail or small business	145			
Credit facilities to non-financial corporates, sovereigns and central banks, public sector entities and multilateral development banks	146			
Liquidity facilities to non-financial corporates, sovereigns and central banks, public sector entities and multilateral development banks	147			
Other legal entities	148			
Specified contractual lending obligations	149		100%	
Other specified outflows, such as dividend payments (please specify)	150		100%	
Other[2] (please specify)	151		Specified by the Registrar	
Total outflows (total of items 113, 119, 128 and 133)	152			

1. **Based on the respective requirements specified in regulation 26(12)(d).**
2. **Relates only to such items, instruments or facilities, and such factors, as may be directed in writing by the Registrar from time to time.**
3. **Or such factor as may be directed in writing by the Registrar.**

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

Liquidity coverage ratio (LCR): Cash inflows[1]	**Line no.**	**Total**	**Specified factor**[3]	**Weighted total** (col.1 * 2)
		1	**2**	**3**
Resale and securities borrowing agreements (total of items 154 to 156)	153			
- with level one high-quality liquid assets as collateral	154		0%	
- with level two high-quality liquid assets as collateral	155		15%	
- with assets other than level one or level two high-quality liquid assets as collateral	156		100%	
Credit or liquidity facilities	157		0%	
Specified net inflows (total of items 159 to 161)	158			
- from retail and small business	159		50%	
- from wholesale clients other than financial institutions	160		50%	
- from financial institutions	161		100%	
Specified deposits held at financial institutions for operational purposes	162		0%	
Specified deposits held at a centralised institution in a cooperative banking network	163		0%	
Net receivable amount from derivative instruments	164		100%	
Other contractual cash inflows[2]	165			
Total inflows (total of items 153; 157; 158; and 162 to 165)	166			

1. **Based on the respective requirements specified in regulation 26(12)(e).**
2. **Relates only to such inflows and such factors as may be directed in writing by the Registrar from time to time.**
3. **Or such factor as may be directed in writing by the Registrar.**

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

Calculation of liquidity coverage ratio (LCR)	**Line no.**	**Total**
		1
Total outflows (item 152, column 3)	167	
Total inflows (item 166, column 3)	168	
Total net cash outflows (item 167 minus min[item 168, 75% of item 167])	169	
		LCR
		1
Liquidity coverage ratio (item 98 divided by item 169, multiplied with 100)	170	

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

Net stable funding ratio (NSFR): Available stable funding[1]	**Line no.**	**Total**	**Specified factor**[3]	**Weighted total** (col.1 * 2)
		1	2	3
Total available stable funding (total of items 172 to 179)	171			
Capital after all relevant deductions, including common equity tier 1 capital and reserve funds, additional tier 1 capital and reserve funds and tier 2 capital and reserve funds	172		100%	
Specified amount of preferred securities with an effective remaining maturity of one year or longer not included in item 172	173		100%	
Specified amount of secured and unsecured borrowings and liabilities with effective remaining maturities of one year or longer	174		100%	
Specified amount of stable demand deposits and/or term deposits with residual maturities of less than one year from retail and small business	175		90%	
Specified amount of less stable demand deposits and/or term deposits with residual maturities of less than one year from retail and small business	176		80%	
Unsecured wholesale funding, non-maturity deposits and/or term deposits with a residual maturity of less than one year, from non-financial corporate, sovereigns, central banks, multilateral development banks and public-sector entities	177		50%	
Specified amount of stable deposits from cooperative banks required by law[2]	178		Specified by the Registrar	
Other liabilities and equity not included elsewhere	179		0%	

1. **Based on the respective requirements specified in regulation 26(14)(b).**
2. **As may be directed in writing by the Registrar from time to time.**
3. **Or such factor as may be directed in writing by the Registrar.**

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

Net stable funding ratio (NSFR): Required stable funding[1]	Line no.	Total	Specified factor[3]	Weighted total (col.1 * 2)
		1	2	3
Total required stable funding related to on-balance-sheet items (total of items 181 to 196)	180			
Unencumbered cash	181		0%	
Specified unencumbered short-term unsecured instruments and transactions with outstanding maturities of less than one year	182		0%	
Specified unencumbered securities with remaining maturities of less than one year	183		0%	
Specified unencumbered securities with offsetting reverse repurchase or resale transactions	184		0%	
Specified unencumbered loans to financial entities with effective remaining maturities of less than one year that are not renewable	185		0%	
Specified unencumbered marketable securities with residual maturities of one year or longer representing claims on or claims guaranteed by specified counterparties assigned a zero per cent risk-weight	186		5%	
Specified unencumbered corporate bonds or covered bonds (when allowed in a particular jurisdiction) rated AA- or higher with residual maturities of one year or longer meeting specified conditions	187		20%	
Specified unencumbered marketable securities with residual maturities of one year or longer representing claims on or claims guaranteed by specified counterparties assigned a twenty per cent risk-weight	188		20%	
Unencumbered gold	189		50%	
Specified unencumbered listed equity securities, not issued by financial institutions or their affiliates or associates	190		50%	
Specified unencumbered corporate bonds and covered bonds (when allowed in a particular jurisdiction) that meet specified conditions	191		50%	
Specified unencumbered loans to specified non-financial counterparties with a remaining maturity of less than one year	192		50%	
Unencumbered residential mortgages of any maturity that qualify for a risk weight of thirty five per cent or lower	193		65%	
Specified unencumbered loans, excluding loans to financial institutions, with a remaining maturity of one year or longer, that qualify for a risk weight of thirty five per cent or lower	194		65%	
Specified unencumbered retail or small business loans with a remaining maturity of less than one year, other than those that qualify for the aforesaid RSF of sixty five per cent	195		85%	
All other assets not included elsewhere, including assets encumbered for more than 1 year	196		100%	
Total required stable funding related to off-balance-sheet items (total of items 198 and 199)	197			
Conditionally revocable and irrevocable credit and liquidity facilities	198		5%	
Other contingent funding obligations[2]	199		Specified by the Registrar	
Total required stable funding (total of items 180 and 197)	200			

1. **Based on the respective requirements specified in regulation 26(14)(c).**
2. **As may be directed in writing by the Registrar from time to time.**
3. **Or such factor as may be directed in writing by the Registrar.**

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

Calculation of net stable funding ratio (NSFR)	Line no.	Total
		1
Total available stable funding (item 171)	201	
Total required stable funding (item 200)	202	
		NSFR
		1
Net stable funding ratio (item 201 divided by item 202, multiplied with 100)	203	

26. Liquidity risk – Directives, definitions and interpretations for completion of monthly return concerning liquidity risk (Form BA 300)

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

(2) The purpose of the return, among other things, is to determine-

(a) at the reporting date, in respect of specified time buckets-

(i) the contractual mismatch between assets and liabilities;

(ii) the "business-as-usual" mismatch between assets and liabilities;

(iii) the bank-specific stress mismatch;

(b) in respect of a crisis scenario, the quantity and sources of funding available to the reporting bank;

(c) in respect of funding sources, the reporting bank's potential concentration risk, that is, to identify those sources of funding that are of such significance that the withdrawal thereof may cause liquidity problems;

(d) in respect of significant currencies, the reporting bank's exposure to foreign exchange;

(e) the expected change in the bank's balance sheet.

(3) A bank shall retain an audit trail in respect of the underlying data relating to the base models supporting the relevant form BA 300, which audit trail-

(a) shall provide a reconciliation between the total assets and the total liabilities reported on the form BA 300 and the total assets and the total liabilities contained in the reporting bank's general ledger systems, which reconciliation-

(i) shall be made available to the Registrar on request;

(ii) shall not be included in the form BA 300;

(b) shall contain adequate explanations in respect of any reconciliation differences.

(4) Unless specifically otherwise provided, any position reported on the form BA 300 shall be included in the relevant time bucket based on the position's remaining term to contractual maturity. In the case of a product with multiple maturity dates, the reporting bank shall assume that-

(a) cash inflows will occur only at the latest residual contractual maturity date;

(b) cash outflows will occur at the earliest residual contractual maturity date.

(5) Whenever specified or relevant, all amounts reported on the form BA 300 in respect of a specified bucket shall represent the respective total amounts relating to, amongst others-

(a) assets, which total amount of assets shall be gross of any related impairment, allowance or provision for loss;

(b) liabilities; or

(c) derivative instruments, which total amount shall be the aggregate present value amount of the relevant cash flow amounts.

(6) Whenever relevant, unless specifically otherwise stated, a bank-

(a) shall include any asset or liability item with no maturity profile in the bucket titled "non contractual" or "indeterminate maturity", as the case may be;

(b) shall in accordance with Financial Reporting Standards issued from time to time translate to the reporting currency any asset or liability item denominated in foreign currency;

(c) shall report all inflows and outflows as positive amounts.

(7) Whenever relevant, for purposes of reporting on the form BA 300 of-

(a) specified asset classes, the category titled-

(i) "advances" shall include-

(A) all loans or advances made by the reporting bank, whether asset-backed or unsecured;

(B) all advances originated by the reporting bank through transactional banking facilities, such as overdrafts;

(C) any structured finance loans;

(ii) "trading, hedging and investment instruments" shall include-

(A) any financial market investment instrument, collateral deposits and unlisted equity investments;

(B) any relevant derivative position or instrument;

(C) any asset held in terms of a trading or investment activity of the reporting bank;

(iii) "other assets" shall include all assets other than the asset items envisaged in subparagraphs (i) and (ii) above, including-

(A) any debit balance in respect of items in transit arising from timing differences in external settlement processes; and

(B) fixed assets, and intangible assets such as goodwill, patents and trademarks, which assets, by virtue of their nature, shall be regarded as non-contractual or of indeterminate maturity, as the case may be.

(b) specified liability classes, the category titled-

(i) "volatile deposits" shall include any deposit likely to be quickly withdrawn in a stress situation, including deposits received from government, parastatal institutions such as the Public Investment Commissioner, financial institutions, asset managers, pension fund managers, banks or other private sector financial institutions, or private individuals;

(ii) "stable deposits", whenever referred to in items 1 to 97 of the form BA 300, shall include any deposit deemed by the reporting bank to be less liquid, that is, deposits other than volatile deposits, including deposits received from government, parastatal institutions such as the Public Investment Commissioner, financial institutions, asset managers, pension fund managers, banks or other private sector financial institutions, or private individuals;

Provided that in respect of subparagraphs (i) and (ii)-

(A) a bank shall duly document the specific definitions and/or criteria applied by the bank to distinguish between "stable deposits" and "volatile deposits" and, at the request of the Registrar, the bank shall in writing submit to the Registrar the said specific definitions and/or criteria;

(B) the Registrar may from time to time issue directives in respect of criteria to be applied by banks in order to distinguish between "stable deposits" and "volatile deposits";

(iii) "trading and hedging instruments" shall include-

(A) any financial market instrument, collateral liabilities and unlisted equity instruments;

(B) any liability arising from a trading or investment activity of the reporting bank;

(C) any relevant derivative position or instrument;

(iv) "other liabilities" shall include all liabilities other than the liability items or instruments envisaged in subparagraphs (i) to (iii) above, including any relevant amount related to a non-funding related liability,

(c) items relating to maturity-

(i) "next day" shall include any item with a legal right for the relevant amount to be paid or received on the business day immediately following the reporting date;

(ii) "2-7 days" shall include any item with a legal right for the relevant amount to be paid or received from the second business day up to and including the seventh day immediately following the reporting date;

(iii) "non contractual" or "indeterminate maturity", as the case may be, shall include any item or position in respect of which no right or obligation in respect of maturity exists, including items such as deferred tax or provisions for non-performing assets.

(8) Matters relating to a bank's contractual balance sheet position

(a) In order to determine, among other things, the extent to which a bank makes use of maturity transformation in terms of its current contracts, and to identify the gaps between the contractual inflows and contractual outflows of liquidity within specified time bands, a bank shall complete the section of the form BA 300 that relates to its contractual balance sheet on a static gap basis with all relevant cash flows being reported strictly on the basis of an item's residual or remaining contractual term to maturity, provided that-

(i) the bank shall include accounts such as current accounts, savings accounts and transmission accounts in the next day bucket;

(ii) the bank shall classify any marketable instrument tradable in a secondary market into an appropriate time bucket based on the said instrument's remaining contractual maturity;

(iii) the bank shall report the relevant required information without applying any behavioural or other assumption to the relevant required contractual inflows and contractual outflows.

(b) In order to monitor-

(i) securities movements that mirror corresponding cash flows as well as the contractual maturity of collateral swaps and any uncollateralised stock lending or borrowing, where stock movements occur without any corresponding cash flows, a bank shall separately report all relevant required information related to securities flows;

(ii) collateral received from customers that the bank is permitted to rehypothecate, and the relevant amount of such collateral that is rehypothecated at each relevant reporting date, a bank shall separately report the relevant required details related to the said collateral.

(9) Matters relating to a bank's business as usual balance sheet mismatch

A bank-

(a) shall in the completion of the section of the form BA 300 that relates to its business as usual balance sheet apply the same going-concern behavioural or other relevant assumptions as in the bank's ALCO process, that is, the reported amounts shall be based on and be reconcilable to the bank's ALCO model;

(b) shall obtain the prior written approval of its board of directors or board approved committee in respect of any assumption and reasoning applied in respect of the bank's ALCO process;

(c) shall on request submit to the Registrar any board approved assumption applied by the bank in respect of the bank's ALCO process;

(d) shall duly document any related policies, procedures and underlying workings in respect of the relevant business as usual balance sheet;

(e) shall report the business as usual balance sheet on a static gap basis.

(10) Matters related to a bank-specific stress mismatch

A bank-

(a) shall obtain the prior written approval of its board of directors or board approved committee in respect of any going-concern behavioural or other relevant assumption and reasoning applied in respect of the bank-specific stress mismatch;

(b) shall on request submit to the Registrar all relevant board approved assumptions and reasoning applied in respect of the bank-specific stress mismatch;

(c) shall have in place sufficiently robust early warning indicators to identify the emergence of increased risk or vulnerabilities in its liquidity position or funding needs;

(d) shall regularly perform robust liquidity stress tests or scenario analyses, which stress tests or scenario analyses shall be based on the bank's relevant strategic and business plans-

(i) in order to ensure that-

(A) the bank has in place an adequate framework that satisfactorily accounts for the liquidity risk inherent in its individual products and business lines;

(B) the bank estimates and understands the potential behavioural aspects related to the repayment of assets and the withdrawal of deposits under a bank specific stress scenario;

(C) the bank duly identifies the potential sources of liquidity strain;

(D) the bank's incentives at business level are aligned with the overall risk tolerance of the bank;

(E) the bank duly considers the amount of liquidity it may need to satisfy contingent obligations;

(F) the bank duly considers and understands the potential impact of any plausible severe and prolonged liquidity disruption;

(ii) in order to identify and quantify the bank's exposure to possible future liquidity stresses;

(iii) to analyse possible impacts on the bank's cash flows, liquidity positions, profitability, and solvency;

(iv) the results of which stress tests or scenario analyses-

(A) shall be thoroughly discussed and understood by the bank's senior management;

(B) shall form the basis for taking remedial or mitigating action-

(i) to limit the bank's liquidity exposure;

(ii) to timely build up a liquidity cushion;

(iii) to timely adjust the bank's liquidity profile according to the bank's risk tolerance approved by the bank's board of directors;

(C) shall be appropriately linked to and play a key role in shaping the bank's contingency funding plan, which, among other things, shall outline policies for managing a range of stress events and clearly set out strategies for addressing liquidity shortfalls in emergency situations;

(e) shall duly document any related policies, procedures and underlying workings in respect of its relevant stress mismatch;

(f) shall report the bank-specific stress mismatch on a static gap basis.

(11) Matters related to potential concentration of funding

(a) Specified minimum requirements

As a minimum, in order to identify potential sources of funding that are of such significance that the withdrawal thereof may cause liquidity problems, a bank shall separately report the relevant required information related to significant counterparties, significant instruments or products, and significant currencies, provided that-

(i) in all relevant cases, the bank shall continuously monitor both the absolute percentage of the specified funding exposures relative to the bank's total balance sheet size, as well as all significant increases in any potential concentration;

(ii) in the case of secured and unsecured funding from counterparties, the bank shall aggregate the respective amounts related to all relevant types of liabilities to a particular counterparty or group of connected, associated or affiliated counterparties, and all other relevant direct borrowings;

(iii) in relevant cases the requirements specified in this subregulation (11) shall be applied on a solo and consolidated basis;

(iv) for purposes of this subregulation (11),

(A) a significant counterparty-

(i) means a single counterparty or group of connected, associated or affiliated counterparties representing in aggregate more than one per cent of the bank's total balance sheet as reported in item 54 of the form BA 100;

(ii) includes intra-group deposits and deposits from related parties, the relevant required information of which shall be reported separately from other relevant significant counterparties;

(B) a significant instrument or product means a single instrument or product or group of similar instruments or products that in aggregate amount to more than one per cent of the bank's total balance sheet as reported in item 54 of the form BA 100, that is, the requirements for a significant type of instrument or product shall apply for each relevant individually significant funding instrument or product, as well as for groups of similar types of instruments or products;

(C) a significant currency means the aggregate liabilities denominated in that currency amount to two per cent or more of the bank's total liabilities as reported in item 79 of the form BA 100, provided that in respect of funding denominated in foreign currency, the bank shall in addition to any relevant requirement specified in this subregulation (11) comply with the relevant requirements specified in subregulation (15) below;

(12) Matters related to the calculation of a bank's liquidity coverage ratio (LCR)

(a) Specified minimum requirements

As a minimum, in order to promote the short-term resilience of a bank's liquidity risk profile and ensure that the bank continuously maintains an adequate level of unencumbered level one and level two high-quality liquid assets that can be converted into cash to meet the bank's liquidity needs over a 30 calendar day time horizon under a significantly severe liquidity stress scenario, a bank shall calculate and maintain a Liquidity Coverage Ratio (LCR) in accordance with the relevant requirements specified in this subregulation (12), provided that-

(i) in addition to the relevant requirements specified in this subregulation (12), a bank shall comply with such further or other conditions or requirements related to LCR as may be specified in writing by the Registrar;

(ii) between 1 January 2013 and 31 December 2014 banks, controlling companies and the Registrar shall apply the relevant requirements specified in this subregulation (12) to monitor the readiness of relevant banks and controlling companies to implement and fully comply with the said requirements and any subsequent amendments thereto as a minimum standard from 1 January 2015;

(iii) in all relevant cases the requirements specified in this subregulation (12) shall be applied on a solo and consolidated basis, provided that-

(A) a bank shall have in place policies, processes and procedures-

(i) to capture any relevant liquidity transfer restrictions;

(ii) to monitor the rules and regulations in the jurisdictions in which the group operates, and to assess the liquidity implications for the group as a whole;

(B) when calculating its consolidated LCR, a bank or controlling company shall not recognise any excess liquidity in any relevant cross-border entity when there is reasonable doubt regarding the availability of such liquidity or the transferability of liquid assets, which availability, transferability or flow of funds, for example, may be affected by liquidity transfer restrictions such as ring-fencing measures, non-convertibility of local currency or foreign exchange controls, that is, any surplus of liquid assets held at a legal entity level shall only be included in the consolidated portfolio of liquid assets if those assets are freely available to the consolidating entity in times of stress;

(C) in the case of consolidation, a bank may include in its portfolio of qualifying liquid assets, assets or instruments held to meet legal entity requirements to the extent that the related risks as measured by the legal entity's net cash outflows are also reflected in the consolidated LCR;

(D) in the case of consolidation or solo reporting of relevant entities, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank may apply the rules and/ or regulations of relevant host supervisors in respect of the treatment of retail or small business deposits of relevant entities operating in those jurisdictions;

(E) in all relevant cases the bank shall actively monitor and control its liquidity risk exposures and funding needs at the level of each material individual legal entitiy, foreign branch or subsidiary, and the group as a whole, taking into account any relevant legal, regulatory or operational limitation that may affect the transferability of liquidity;

(iv) for purposes of this subregulation (12), unencumbered means not pledged, either explicitly or implicitly, to secure, collateralise or credit-enhance any transaction, or not otherwise subject to any further commitment, provided that-

(A) assets or instruments received in reverse repo, resale and/ or securities financing transactions-

(i) that are held at the bank;

(ii) that have not been rehypothecated; and

(iii) that are legally and contractually available for the bank's use,

may be included in the bank's relevant portfolio of high-quality liquid assets.

(B) assets or instruments that qualify as high-quality liquid assets that have been pledged to a central bank to secure facilities shall not be regarded as pledged except to the extent that such assets or instruments are required to secure facilities actually utilised;

(C) a bank may hedge the price risk associated with ownership of the relevant assets or instruments, and still include the assets in the relevant pool of high-quality liquid assets, provided that if the bank chooses to hedge the associated risks, the bank shall take into account, that is, in the relevant market value applied to each relevant asset or instrument, the cash outflow that would arise if the hedge was to be closed out early, that is, in the event of the asset being sold;

(D) client pool securities or cash received from a repo backed by client pool securities shall not qualify as liquid assets of the relevant reporting bank or controlling company;

(v) the bank shall manage its business in such a manner that a least sixty per cent of the bank's portfolio of qualifying high-quality liquid assets consists of level one high-quality liquid assets, that is, the bank's portfolio of qualifying high-quality liquid assets may consist of between sixty and one hundred per cent of level one high-quality liquid assets, but level two high-quality liquid assets shall in no case exceed forty per cent of the bank's aggregate portfolio of level one and level two high-quality liquid assets, provided that the bank shall manage its business in such a manner that-

(A) the limit related to level two high-quality liquid assets duly takes into account the impact on the amounts held in cash or other level one or level two assets or instruments caused by secured funding transactions or collateral swaps maturing within 30 calendar days undertaken with any level two assets, that is, the limit related to level two high-quality liquid assets shall effectively include cash or other level one high-quality liquid assets generated by secured funding transactions or collateral swaps maturing within 30 days;

(B) the bank's portfolio of level two high-quality liquid assets is as far as possible well diversified in terms of type of assets, type of issuer related to, for example, the economic sector in which it participates, and any specific counterparty or issuer;

(C) the aforesaid limits are adhered to and maintained after all relevant haircuts have been applied;

(vi) while the bank has to report its LCR in Rand on a solo and consolidated basis, the bank has to continuously meet its liquidity needs in each relevant currency, and the bank shall therefore maintain high-quality liquid assets consistent with the distribution of the bank's liquidity needs by currency, that is-

(A) the bank shall ensure that it is able to generate the required liquidity in the currency and jurisdiction in which the relevant net cash outflows may arise;

(B) the bank shall monitor and report to its senior management the bank's LCR by currency to ensure that all relevant currency mismatches are duly managed;

(C) the bank shall take into account the risk that its ability to swap currencies and access the relevant foreign exchange markets may erode rapidly under stressed conditions, and that sudden, adverse exchange rate movements may sharply widen existing mismatched positions and alter the effectiveness of any foreign exchange hedges that the bank may have in place;

(D) since foreign exchange may constitute a material component of a bank's exposure to liquidity risk, and in order to duly monitor and manage the bank's overall level and trend of currency exposure, a bank shall separately assess the impact on its LCR of each significant currency, provided that the bank shall on request submit to the Registrar in writing all relevant LCR calculations and assessments in respect of each significant currency;

(vii) the bank shall have in place sufficiently robust policies, processes and procedures-

(A) to ensure that-

(i) the bank manages all relevant mismatches within the aforesaid 30-day period;

(ii) the bank has sufficient level one and level two high-quality liquid assets available to meet any potential cashflow mismatches throughout the said 30-day period;

(iii) the bank's internal stress tests also cover time horizons longer than the 30 calendar day time horizon envisaged in this subregulation (12);

(B) to test-

(i) that the scenario and assumptions underlying the net cash outflows envisaged in this subregulation (12) are adequate for the bank's specific business activities;

(ii) the level of liquidity the bank may have to hold beyond the level of high-quality liquid assets envisaged in this subregulation (12);

(C) to periodically monetise a portion of the assets or instruments in the relevant portfolio through repo or outright sale to the market in order to test the bank's access to the market, the effectiveness of its processes for monetisation, and the usability of the assets, as well as to minimise the risk of negative signalling during a period of stress;

(viii) only assets or instruments that can be easily and immediately converted into cash at little or no loss of value and that contain specified fundamental and market-related characteristics shall qualify as high-quality liquid assets, which assets or instruments typically-

(A) constitute eligible instruments for intraday liquidity needs and overnight liquidity facilities from the Central Bank, provided that Central Bank eligibility does not in itself mean that an asset or instrument qualify as a high-quality liquid asset;

(B) raise confidence in the safety and soundness of liquidity risk management in the relevant bank, and the banking system;

(ix) the aforesaid fundamental characteristics, as a minimum, mean-

(A) low credit and market risk, that is, for example-

(i) assets or instruments that are less risky tend to have higher liquidity;

(ii) a high credit standing of an issuer and a low degree of subordination increases an asset or instrument's liquidity;

(iii) low duration, low volatility, low inflation risk and denomination in a convertible currency with low foreign exchange risk enhance an asset or instrument's liquidity;

(B) ease and certainty of valuation, that is, for example-

(i) an asset or instrument's liquidity increases if market participants are more likely to agree on its valuation;

(ii) the pricing formula of the asset or instrument does not contain strong assumptions;

(iii) the relevant inputs into the pricing formula are publicly available;

(C) low correlation with risky assets, that is, for example, the asset or instrument is not subject to wrong-way risk, that is, highly correlated risk;

(D) the asset or instrument is listed on a developed and recognised exchange;

(x) the aforesaid market-related characteristics, as a minimum, mean-

(A) the existence of an active and sizable market, which may be evidenced by factors such as a large number of market participants, high trading volume and historical evidence of market breadth, that is, price impact per unit of liquidity, and market depth, that is, units of the asset that can be traded for a given price impact;

(B) the presence of committed market makers, which may be evidenced by factors such as available quotes for buying and/or selling of the liquid asset or instrument;

(C) low market concentration, that is, a diverse group of buyers and sellers exists that increases the reliability of the asset or instrument's liquidity;

(D) evidence of historic flight to quality, that is, historically, the market has shown tendencies to move into these types of assets or instruments during a systemic crisis;

(xi) all high-quality liquid assets or instruments shall be managed as part of that portfolio of assets or instruments-

(A) which assets or instruments shall at all times-

(i) be available for the bank to convert into cash to fill any funding gap that may arise between cash inflows and outflows during the said period of stress;

(ii) be unencumbered;

(iii) be under the control of the specific function or functions responsible for managing the bank's liquidity risk, which is typically the bank's treasurer;

(B) which assets or instruments-

(i) shall not be co-mingled with or used as hedges on trading positions, be designated as collateral or be designated as credit enhancements in structured transactions or be designated to cover operational costs, such as rents or salaries;

(ii) shall be managed with the clear and sole intent for use as a source of contingent funds;

(xii) in order to allow a bank time to adjust its portfolio of qualifying high-quality liquid assets, when a qualifying asset or instrument is subsequently disqualified, for example, due to a rating downgrade, the bank may retain the asset or instrument in its portfolio of qualifying liquid assets for 30 calendar days following the date that the asset or instrument became so disqualified.

(b) Specific matters related to level one and level two high-quality liquid assets

No asset or instrument shall qualify as-

(i) a level one high-quality liquid asset as envisaged in section 1 of the Act unless the said asset or instrument constitutes-

(A) a marketable instrument that, as a minimum-

(i) is assigned a zero per cent risk-weight in terms of the provisions of the Standardised Approach specified in regulation 23(8) of these Regulations;

(ii) trades in large, deep and active repo or cash markets, characterised by a low level of concentration;

(iii) has a proven record as a reliable source of liquidity in all relevant markets, including the repurchase, resale or sale markets, even during stressed market conditions; and

(iv) does not constitute an obligation of a financial institution or any of its associated or affiliated entities;

(B) a debt security issued in Rand by the central government of the RSA or the Reserve Bank; or

(C) a debt security issued in foreign currency by the central government of the RSA or the Reserve Bank, to the extent that holding of such debt matches the currency needs of the bank's operation;

(ii) a level two high-quality liquid asset as envisaged in section 1 of the Act unless the said asset or instrument constitutes-

(A) a marketable instrument that, as a minimum-

(i) is assigned a twenty per cent risk-weight in terms of the provisions of the Standardised Approach specified in regulation 23(8) of these Regulations;

(ii) trades in large, deep and active repo or cash markets, characterised by a low level of concentration;

(iii) has a proven record as a reliable source of liquidity in all relevant markets, including the repurchase, resale or sale markets, even during stressed market conditions, that is, the maximum decline in the price or increase in the haircut of the relevant instrument over a 30-day period during a relevant period of significant liquidity stress did not exceed ten per cent; and

(iv) does not constitute an obligation of a financial institution or any of its associated or affiliated entities;

(B) a corporate bond that, as a minimum-

(i) is not issued by a financial institution or any of its associated or affiliated entities;

(ii) has a credit rating from an eligible institution of at least AA- or, in the absence of a credit assessment by an eligible institution, is internally rated with a probability of default (PD) corresponding to an external credit rating of at least AA-, provided that in the case of a split rating the bank shall determine the appropriate rating in accordance with the relevant requirements specified in regulation 23(5) of these Regulations;

(iii) trades in large, deep and active repo or cash markets, characterised by a low level of concentration; and

(v) has a proven record as a reliable source of liquidity in all relevant markets, including the repurchase, resale or sale markets, even during stressed market conditions, that is, the maximum decline in the price or increase in the haircut of the relevant instrument over a 30-day period during a relevant period of significant liquidity stress did not exceed ten per cent;

Provided that for purposes of this subregulation (12), corporate bonds shall only include plain vanilla instruments, the valuation of which shall be readily available based on standard methods and shall not depend on private knowledge, that is, complex structured products or subordinated debt are explicitly excluded from the definition of level two high-quality liquid assets.

(c) *Matters related to the calculation of a bank's relevant amount of net cash outflow*

Based on the relevant requirements specified in this subregulation (12), a bank shall continuously calculate its expected total net cash outflows as the difference between total expected cash outflows and total expected cash inflows as envisaged in these Regulations, provided that-

(i) the bank's relevant calculation shall be based on a specified stress scenario applied for the subsequent 30 calendar days, that is-

(A) the bank's total expected cash outflows shall be equal to the outstanding balances of specified categories or types of liabilities and off-balance-sheet commitments, multiplied by the relevant run-off or drawn-down rates specified in this paragraph (c);

(B) the bank's total expected cash inflows shall be equal to the outstanding balances of specified categories of contractual receivables, multiplied by the specified rates at which the said receivables are expected to flow in under the said stress scenario, provided that the bank's total expected cash inflows shall be limited to seventy five per cent of the bank's total expected cash outflows, that is:

$$\text{Total net cash outflows over the next 30 calendar days} = \text{outflows} - \min\{\text{inflows}; 75\% \text{ of outflows}\}$$

(ii) when the bank calculates its LCR, the bank shall not double count any relevant item, that is, when the bank, for example, includes a high-quality liquid asset in the numerator, that asset cannot also be included as part of cash inflows;

(iii) when an item may be counted in multiple outflow categories, such as a committed liquidity line granted to cover debt maturing within the 30 calendar day period, the bank only has to assume up to the maximum contractual outflow for that product.

(d) *Matters related to the calculation of a bank's total expected cash outflows*

Based on the relevant requirements specified in this subregulation (12), including, in particular, the categories of funding and other liabilities or potential liabilities, and run-off or drawdown factors, specified below, a bank shall continuously calculate its expected or potential total cash outflows, for which purposes-

(i) retail deposits mean deposits placed with the bank by a natural person, which retail deposits shall include all relevant demand deposits and term deposits, provided that-

(A) deposits received from legal entities, sole proprietorships or partnerships shall be included in the bank's wholesale deposit category;

(B) the bank shall divide its retail deposits between "stable" and "less stable" retail deposits;

(C) in respect of the aforesaid stable retail deposits, that is, deposits that are fully covered by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection, and where-

(i) the depositors have other established relationships with the bank that make deposit withdrawal highly unlikely; or

(ii) the deposits are in transactional accounts, such as accounts where salaries are automatically deposited,

the bank shall apply a run-off factor of no less than five per cent.

Based on the aforesaid, the mere existence of deposit insurance alone shall not be sufficient to classify a deposit as "stable".

(D) an effective deposit insurance scheme as envisaged hereinbefore means a scheme-

(i) that guarantees that it has the ability to make prompt payouts; and

(ii) for which the coverage is clearly defined; and

(iii) of which public awareness is high.

Provided that-

(aa) the deposit insurer in an effective deposit insurance scheme shall have formal legal powers to fulfil its mandate and shall be operationally independent, transparent and accountable;

(bb) an explicit and legally binding sovereign deposit guarantee that effectively functions as deposit insurance may be regarded as an effective deposit insurance scheme;

(E) when the bank is unable to readily identify the retail deposits that qualify as "stable" retail deposits, the bank shall allocate the relevant full amount to the "less stable" retail deposits category;

(F) in respect of the aforesaid less stable retail deposits, that is, for example, deposits that are not covered by an effective deposit insurance scheme or sovereign deposit guarantee, high-value deposits, deposits from sophisticated or high net worth individuals, deposits that can be withdrawn quickly, such as internet deposits, and foreign currency deposits, the bank shall apply a run-off factor of no less than ten per cent;

(G) to capture depositor behaviour in a period of stress, the Registrar may require a bank in writing to add further reporting categories of deposits with specified run-off factors and/ or apply a run-off factor higher than the percentages specified hereinbefore;

(ii) fixed or time retail deposits with a residual maturity or withdrawal notice period of more than 30 days may be excluded from the bank's calculation of LCR, provided that-

(A) the depositor shall have no legal right to withdraw the deposit within the said 30-day horizon of the LCR;

(B) subject to such conditions as may be specified in writing by the Registrar, and the bank's sole discretion, the bank may allow a depositor to early withdraw the deposit, provided that-

(i) the withdrawal shall be subject to a penalty substantially higher than the loss of interest;

(ii) when the bank allows early withdrawal without applying the aforesaid penalty or despite the clause that states the depositor has no legal right to withdraw, the bank shall for purposes of its LCR regard the entire category of those funds as demand deposits, regardless of the remaining term to maturity;

(iii) unsecured wholesale funding, in respect of which the bank shall apply the relevant run-off factors specified in subparagraphs (iv) to (ix) below-

(A) shall include-

(i) liabilities and general obligations that are raised from non-natural persons, such as legal entities, including sole proprietorships and partnerships, and that are not collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution;

(ii) all relevant funding that is callable within or with an earliest possible contractual maturity date within the LCR's horizon of 30 days, such as maturing term deposits and unsecured debt securities, as well as funding with an undetermined maturity;

(iii) all relevant funding with options that are exercisable at the investor's discretion within the LCR's horizon of 30 calendar days;

(iv) all relevant liabilities in respect of which the market is likely to expect redemption before the relevant legal final maturity date;

(B) shall exclude-

(i) wholesale funding that is callable by fund providers subject to a contractually defined and binding notice period beyond the 30-day horizon;

(ii) obligations related to derivative instruments or contracts;

(iv) in respect of unsecured wholesale funding provided by small business customers, that is, deposits and other extensions of funds made by non-financial small business customers that are managed as retail exposures, and which are generally considered as having liquidity risk characteristics similar to retail accounts, the bank shall follow an approach similar to the approach for retail deposits, that is, the bank shall, based on the relevant criteria specified hereinbefore for retail deposits, distinguish between-

(A) a stable portion of unsecured wholesale funding provided by small business customers, in respect of which the bank shall apply a run-off factor of no less than five per cent; and

(B) a less stable portion of unsecured wholesale funding provided by small business customers, in respect of which the bank shall apply a run-off factor of no less than ten per cent,

Provided that-

(i) this category of unsecured wholesale funding provided by non-financial small business customers shall only include small business customers in respect of which the total aggregate amount of funding raised from one customer and its relevant associates or affiliates, on a gross consolidated basis, is less than R7.5 million;

(ii) term deposits from small businesses shall be treated in accordance with the relevant requirements specified hereinbefore for term retail deposits;

(v) subject to the provisions of subparagraph (vi) below, in respect of unsecured wholesale funding received from financial and non-financial wholesale customers with specific operational relationships,

(A) which customers have an established operational relationship with the bank upon which it has a substantive dependency, such as clearing, custody or cash management relationships in which the customer is reliant on the bank to perform these services as an independent third party intermediary in order to fulfil its normal banking activities over the next 30 days; and

(B) which funding or deposits-

(i) are by-products of the underlying services provided by the bank; and

(ii) are not sought in the wholesale market in the sole interest of offering interest income; and

(iii) are priced below the market in comparison to deposits of a similar duration and held in specifically designated accounts,

the bank shall apply a run-off factor of twenty five per cent, provided that in respect of the portion of the unsecured wholesale funding provided by non-financial corporate customers, sovereigns, central banks and public sector entities with operational relationships that is fully covered by deposit insurance the bank may apply a run-off factor of five per cent;

(vi) in respect of unsecured wholesale funding received from financial and non-financial wholesale customers with specific operational relationships as envisaged in subparagraph (v) above,

(A) a clearing relationship means a service arrangement that enables customers to transfer funds or securities indirectly through direct participants in domestic settlement systems to final recipients,

(i) which services are limited to-

(aa) transmission, reconciliation and confirmation of payment orders;

(bb) daylight overdraft, overnight financing and maintenance of post-settlement balances; and

(cc) determination of intra-day and final settlement positions;

(ii) which clearing and related services shall be provided in terms of a legally binding agreement to institutional customers;

(B) a custody relationship means the provision of safekeeping, reporting, processing of assets and/or the facilitation of the operational and administrative elements of related activities on behalf of customers in the process of their transacting and retaining financial assets,

(i) which services are limited to-

(aa) the settlement of securities transactions;

(bb) the transfer of contractual payments;

(cc) the processing of collateral;

(dd) the execution of foreign currency transactions;

(ee) the receipt of dividends and other income;

(ff) client subscriptions and redemptions;

(gg) scheduled distributions of client funds and the payment of fees, taxes and other expenses;

(hh) the holding of related cash balances and the provision of ancillary cash management services;

(ii) which custody related services may, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, be extended to asset and corporate trust servicing, treasury, escrow, funds transfer, stock transfer and agency services, including payment and settlement services, trade financing, and depository receipts;

(iii) which custody related services exclude correspondent banking related services;

(iv) which custody related services shall be provided in terms of a legally binding custodial services or other similar agreement to institutional customers;

(C) a cash management relationship means the provision of cash management and related services to customers, that is, the provision of cash management services related to products and services provided to a customer to manage its cash flows, assets and liabilities, and conduct financial transactions necessary to the customer's ongoing operations,

(i) which services are limited to-

(aa) the provision of information or of information systems used to manage the customer's financial transactions;

(bb) payment remittance;

(cc) collection and aggregation;

(dd) payroll administration;

(ee) control over the disbursement of funds;

(ff) automated payments; and

(gg) other transactions that facilitate financial operations;

(ii) which cash management and related services shall be provided in terms of a legally binding agreement to institutional customers;

(D) only the specific amount of deposits utilised for the said operational functions shall be subject to the run-off factor of twenty five per cent, that is, any excess balance that may be withdrawn and still leave sufficient funds to fulfil the said operational requirements shall be excluded from the aforesaid category of funding;

(E) deposits that are subject to the outflow factor of twenty five per cent at the bank holding the deposit shall be subject to a zero per cent inflow assumption for the depositing bank, since these funds are considered to remain with the bank conducting the operational activity;

(F) if the relevant deposit arises from correspondent banking, that is, an arrangement in terms of which one bank (correspondent) holds deposits owned by another bank (respondent) and provides payment and other services in order to settle foreign exchange transactions, such as nostro and vostro accounts used for the provision of clearing and settlement of payments, the bank shall, for purposes of determining the relevant run-off factor, treat the deposit as if there was no operational relationship;

(G) if the deposit arises from the provision of prime brokerage services, that is, a package of services offered to large active investors, particularly hedge funds, which services usually include-

(i) clearing, settlement and custody;

(ii) consolidated reporting;

(iii) margin, repo or synthetic financing;

(iv) securities lending;

(v) capital introduction; and

(vi) risk analytics,

the bank shall, for purposes of determining the relevant run-off factor, treat the deposit as if there was no operational relationship;

(vii) subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, in respect of unsecured wholesale funding related to an institutional network of cooperative banks or similar institutions, that is, a group of legally autonomous banks or similar institutions with a statutory framework of cooperation with common strategic focus and brand where specific functions are performed by central institutions and/or specialised service providers, the relevant central institution and/or specialised central service providers may apply a run-off rate of twenty five per cent in respect of deposits of member institutions that are placed-

(A) due to statutory minimum deposit requirements, which are registered at the relevant regulators; or

(B) in the context of common task sharing and legal, statutory or contractual arrangements,

Provided that-

(i) both the bank that received the funds and the bank that deposited the funds shall participate in the same institutional network's mutual protection scheme against illiquidity and insolvency of its members;

(ii) the depositing bank or institution shall apply a zero per cent inflow assumption in respect of the relevant deposited funds, since the funds are considered to remain with the relevant centralised institution;

(iii) correspondent banking activities are excluded from this category and shall be subject to a run-off factor of one hundred per cent;

(iv) funds placed with a central institution and/or specialised service provider for any reason other than-

(aa) the aforesaid reasons; or

(bb) for operational functions of clearing, custody, or cash management as envisaged in subparagraphs (v) and (vi) above,

shall be subject to a run-off factor of one hundred per cent;

(viii) in respect of unsecured wholesale funding from-

(A) non-financial corporate customers, other than small business customers as envisaged hereinbefore;

(B) domestic and foreign sovereign, central bank and public sector entities that are not specifically held for operational purposes as envisaged hereinbefore; and

(C) multilateral development banks,

the bank shall apply a run-off factor of seventy five per cent;

(ix) in respect of unsecured wholesale funding from institutions or persons other than the institutions or persons specified hereinbefore, including-

(A) funds received from all relevant-

(i) banks;

(ii) securities firms;

(iii) insurance companies;

(iv) fiduciaries, that is, a legal entity that is authorised to manage assets on behalf of a third party, including all relevant asset management entities such as hedge funds, pension funds and other collective investment vehicles;

(v) beneficiaries, that is, a legal entity that receives, or may become eligible to receive, benefits under a will, insurance policy, retirement plan, annuity, trust, or other relevant contract;

(vi) conduits and/ or special purpose vehicles; and

(vii) affiliated entities of the bank,

(B) all relevant notes, bonds and other debt securities issued by the bank, regardless of the holder, unless the bond was sold exclusively in the retail market and held in a retail account, in which case the instrument may be treated in accordance with the requirements related to the retail deposit category,

the bank shall apply a run-off factor of one hundred per cent;

(x) secured funding means those liabilities and general obligations that are collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution, provided that-

(A) the bank shall assume that its ability to continue to transact repurchase agreements, resale agreements and other securities financing transactions is limited to transactions backed by specified high-quality liquid assets;

(B) the bank shall treat collateral swaps and/ or similar transactions as repurchase or resale agreements;

(C) in respect of all outstanding secured funding transactions with maturities within the envisaged 30 calendar day stress horizon, based on the amount of funds raised through the relevant transaction and not the value of the underlying collateral, the bank-

(i) shall apply a zero per cent reduction in funding availability related to maturing transactions backed by level one high-quality liquid assets;

(ii) shall apply a fifteen per cent reduction in funding availability related to maturing transactions backed by level two high quality liquid assets;

(iii) shall, in recognition that the Central Government of the RSA, the Reserve Bank or public sector entities that qualify for a risk weight of twenty per cent or lower in terms of the Standardised Approach for the measurement of the bank's exposure to credit risk in terms of the provisions of regulation 23(8) of these Regulations are unlikely to withdraw secured funding from the bank during a time of market-wide stress, apply a twenty five per cent reduction in funding availability related to maturing transactions with or backed by instruments of the aforesaid persons, entities or institutions, other than instruments or assets qualifying as level one or level two high quality liquid assets;

(iv) shall apply a one hundred per cent reduction in funding availability related to all other relevant maturing transactions;

(D) the bank shall, based on the relevant requirements specified in item (C) above, read with the provisions of this item (D), add to its expected cash outflows the relevant amounts specified in table 1 below:

Table 1

Outstanding maturing secured funding	**Amount to add to cash outflows**
Backed by level one high-quality liquid assets	0%
Backed by level two high-quality liquid assets	15%
Secured funding transactions with Central Government of RSA, Reserve Bank or public sector entities that are 20% or lower risk weighted and not backed by level one or level two high-quality liquid assets	25%
All others	100%

(xi) the bank shall apply a run-off factor of one hundred per cent in respect of any relevant net payable amount related to known payable and receivable amounts arising from derivative instruments, which net payable amount, when relevant, shall also take into consideration relevant level one and level two high-quality liquid assets serving as collateral, to the extent that this collateral is not already counted in the bank's available amount of level one and level two high-quality liquid assets, that is, as already stated hereinbefore, relevant instruments shall in no case be double counted;

(xii) the bank shall apply a run-off factor of one hundred per cent of the relevant amount of collateral that will have to be posted for, or contractual cash outflows generated by, any downgrade up to and including a 3-notch downgrade by an eligible institution, that is, for each contract with "downgrade triggers", the bank shall assume that one hundred per cent of the additionally required collateral shall be posted or cash outflow shall occur for any downgrade up to and including a 3-notch downgrade of the bank's relevant long-term credit rating, provided that the bank shall assume that triggers linked to the bank's short-term rating shall be triggered at the appropriate long-term rating in accordance with the relevant published ratings criteria;

(xiii) the bank shall apply a run-off factor of twenty per cent of the value of level two high-quality liquid assets posted as collateral to cover a potential loss of market value in respect of derivative or other transactions, that is, a bank posting collateral to cover any relevant mark-to-market exposure shall add to the relevant stock of posted level two high-quality liquid assets twenty per cent of the value of all such level two high-quality liquid assets, which twenty per cent shall be calculated off the relevant notional amount required to be posted as collateral after any other relevant haircuts have been applied;

(xiv) the bank shall apply a run-off factor of one hundred per cent in respect of funding related to asset-backed securities or other structured financing instruments, that is, when the aforesaid instruments are issued by the bank itself, the bank shall assume that the re-financing market will not exist, causing a complete outflow of the related funding maturing within the said 30-day period;

(xv) the bank shall apply a run-off factor of one hundred per cent in respect of maturing funding related to asset-backed commercial paper, conduits, securities investment vehicles and other similar financing facilities, and one hundred per cent of the required liquidity related to assets that may be returned, that is-

(A) a bank with structured financing facilities in place that include the issuance of short term debt instruments such as asset backed commercial paper shall duly consider-

(i) the inability to refinance maturing debt; and

(ii) the existence of derivatives or derivative-like components contractually written into the documentation associated with the structure that may cause the "return" of assets in a financing arrangement, or that require the originator to provide liquidity, effectively ending the financing arrangement within the said 30-day period;

(B) when the bank conducts structured financing activities through a special purpose entity or vehicle, the bank shall, in determining its relevant requirement for high quality liquid asset, look through the structure to the maturity of the debt instruments issued by the special purpose entity or vehicle, and any embedded options in financing arrangements that may potentially trigger the "return" of assets or the need for liquidity, irrespective whether or not the special purpose entity or vehicle is consolidated;

(C) based on the relevant requirements specified in this subparagraph (xv), a bank shall determine its relevant requirements in accordance with the requirements specified in table 2 below:

Table 2

Potential risk	Required high-quality liquid assets
Debt maturing within the calculation period	100% of the maturing amount
Embedded options in financing arrangements that allow for the return of assets or potential liquidity support	100% of the amount of assets that may be returned, or the liquidity required

(xvi) the bank shall in respect of any relevant committed undrawn credit or liquidity facility, that is, for example, any relevant explicit contractual agreement or obligation to extend funds at a future date to retail or wholesale counterparties, apply a drawdown factor of-

(A) five per cent in respect of any committed undrawn credit or liquidity facility to retail or small business customers;

(B) ten per cent in respect of any committed undrawn credit facility to non-financial corporates, sovereigns and central banks, public sector entities and multilateral development banks;

(C) one hundred per cent in respect of any committed undrawn liquidity facility to non-financial corporates, sovereigns and central banks, public sector entities, and multilateral development banks;

(D) one hundred per cent in respect of any committed undrawn credit or liquidity facility to any other legal entity, including, for example, financial institutions such as banks, securities firms and insurance companies, conduits and special purpose vehicles, fiduciaries as envisaged hereinbefore, beneficiaries as envisaged hereinbefore, and other entities not included elsewhere in the categories specified above,

Provided that-

(i) for purposes of this subregulation (12),

(aa) the bank shall include all relevant committed facilities that are contractually irrevocable or conditionally revocable, which off-balance sheet facilities or funding commitments may have long or short-term maturities, since customers drawing on facilities of any maturity in a stressed environment are unlikely to be able to quickly pay back the relevant funds borrowed;

(bb) the bank shall exclude from this category any revocable facility that is unconditionally cancellable by the bank, which facility shall be included in the category "other contingent funding liabilities";

(cc) a liquidity facility includes any relevant committed, undrawn back-up facility put in place expressly for the purpose of refinancing the debt of a customer in situations where such a customer is unable to obtain its ordinary course of business funding requirements, such as pursuant to a commercial paper programme, in the financial markets, the relevant amount of which liquidity facility shall include any available unused capacity to issue financing that may mature within the said 30-day horizon, but shall exclude the portion of the liquidity line that is backing securities issued that do not mature within the said 30-day window period;

(dd) any general working capital facility for corporate entities, such as revolving credit facilities for general corporate and/or working capital purposes, shall be classified as a credit facility and not as a liquidity facility;

(ii) the relevant undrawn portion of the aforesaid facilities may be calculated net of any relevant high-quality liquid assets posted as collateral by the relevant counterparty to secure the facility only if the bank is legally entitled and operationally capable to re-use the collateral in further cash raising transactions once the facility is drawn, and there is no undue correlation between the probability of drawing the facility and the market value of the collateral, provided that, as stated hereinbefore, eligible collateral may be netted against the outstanding amount of the relevant line only if that collateral is not included in the bank's relevant portfolio of high-quality liquid assets, that is, no instrument shall be double-counted;

(iii) a bank that acts as a liquidity provider is not required to double count for any maturing financing instrument envisaged in subparagraphs (xiv) and (xv) above, and any relevant related liquidity facility for consolidated programs;

(xvii) the bank shall apply an outflow rate of one hundred per cent in respect of any relevant contractual lending obligation to extend funds to a financial institution within the said 30 calendar day period, not included elsewhere in this subregulation (12);

(xviii) the bank shall apply an outflow rate of one hundred per cent in respect of the relevant excess amount by which the aggregate amount of all contractual obligations to extend funds to retail and non-financial corporate clients within the said 30 calendar days, not included elsewhere in this subregulation (12), exceeds fifty per cent of the aggregate amount of contractual inflows due in the next 30 calendar days from those clients, that is, when the aggregate amount of all contractual obligations to extend funds to retail and non-financial corporate clients within the next 30 calendar days, not included elsewhere in this subregulation (12), exceeds fifty per cent of the total contractual inflows due in the next 30 calendar days from those clients, the bank shall report that difference as a one hundred per cent outflow of funds;

(xix) the bank shall apply such run-off factors or outflow rates in respect of such other relevant contingent funding obligations, and calculated in such a manner, as may be directed in writing by the Registrar, which contingent funding obligations may be either contractual or non-contractual obligations, and-

(A) which contingent funding obligations are not lending commitments;

(B) which non-contractual contingent funding obligations include associations with, or sponsorship of, products sold or services provided that may require the support or extension of funds in the future under stressed conditions;

(C) which non-contractual obligations may be embedded in financial products and instruments sold, sponsored, or originated by the bank that may give rise to unplanned balance sheet growth arising from support given for reputational risk considerations, such as, for example, products and instruments for which the relevant customer or holder has specific expectations regarding the liquidity and marketability of the product or instrument and for which failure to satisfy customer expectations in a commercially reasonable manner may cause material reputational damage to the bank, or otherwise impair its ongoing viability;

(D) which other contingent funding obligations may include-

(i) uncommitted undrawn credit or liquidity facilities;

(ii) guarantees;

(iii) letters of credit;

(iv) other trade finance instruments;

(v) non-contractual obligations such as-

(aa) potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities;

(bb) structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes; and (cc) managed funds that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment funds;

(xx) the bank shall apply an outflow rate of one hundred per cent in respect of other contractual cash outflows within the next 30 calendar days, such as dividend payments, provided that any relevant outflow related to operating costs shall be excluded from the provisions of this subregulation (12).

(e) Matters related to the calculation of a bank's total expected cash inflows

Based on the relevant requirements specified in this subregulation (12), a bank shall continuously calculate its expected or potential total cash inflows, for which purposes-

(i) the bank shall include only contractual inflows from outstanding exposures that are fully performing, and in respect of which the bank has no reason to expect a default within the envisaged 30-day time horison;

(ii) the bank shall manage its business in such a manner that its liquidity position is at no stage overly dependent on the expected inflows from one or a limited number of wholesale counterparties;

(iii) the bank-

(A) shall assume that maturing resale or securities borrowing agreements secured by level one high-quality liquid assets will be rolled-over, and will therefore not give rise to any cash inflows, that is, in respect of maturing resale or securities borrowing agreements secured by level one high-quality liquid assets, the bank shall apply an inflow factor of zero per cent;

(B) shall, due to the reduction of funds extended against the relevant collateral, assume an inflow of fifteen per cent in respect of maturing resale or securities lending agreements secured by level two high-quality liquid assets;

(C) shall assume no roll-over in respect of maturing resale or securities borrowing agreements secured by assets other than level one or level two high-quality liquid assets, and as such assume to receive back one hundred per cent of the cash related to such agreements, Provided that,

(i) when the collateral obtained through resale or securities borrowing agreements, or collateral swaps, which agreements or contracts mature within the said 30-day horizon, is re-used, that is, rehypothecated, and is subsequently tied up for 30 days or longer to cover the relevant short positions, the bank shall assume that such resale or securities borrowing arrangements will be rolled-over, and as such the bank shall apply an inflow factor of zero per cent to reflect the need to continue to cover the short position or to re-purchase the relevant securities, which respective aforesaid scenarios may be summarised as follows:

Maturing resale agreement backed by the following:	**Assumed inflow rate if collateral is not used to cover short positions:**	**Assumed inflow rate if collateral is used to cover short positions:**
Level one high-quality liquid assets	0%	0%
Level two high-quality liquid assets	15%	0%
All other collateral	100%	0%

(ii) irrespective of the aforesaid applied assumptions, the bank shall continuously manage its collateral in such a manner that the bank is able to fulfil any obligation to return collateral whenever the relevant counterparty decides not to roll-over the resale or securities lending transaction;

(iv) the bank shall, in order to-

(A) reduce the contagion risk of liquidity shortages at one bank causing shortages at other banks;

(B) reflect the risk that other banks may not be in a position to honour credit lines; or

(C) reflect the risk that other banks may decide to incur the legal and reputational risk involved in not honouring their commitments, to conserve their own liquidity or reduce their exposure to that bank, apply an inflow factor of zero per cent in respect of any relevant line of credit, liquidity facility or other contingent funding facility that the bank may hold at any other relevant institution for its own purposes;

(v) the bank shall, in respect of all relevant types of secured or unsecured transactions with retail, small business or wholesale clients, apply to the amounts specified below, the respective inflow factors specified below, provided that-

(A) as stated hereinbefore, when considering any relevant loan payment, the bank shall only include inflows in respect of fully performing loans;

(B) in the case of relevant inflows from retail and small business customers, the bank shall assume that it will receive all fully performing contractual inflows, and at the same time continue to extend loans to retail and small business customers at a rate equal to fifty per cent of the relevant contractual inflow amount, that is, the bank shall in the case of retail and small business customers assume a net inflow of fifty per cent of the relevant aggregate contractual inflow amount;

(C) in the case of relevant inflows from wholesale clients, the bank shall assume-

(i) that it will receive all fully performing contractual wholesale cash inflows from financial institutions and continue to extend loans to financial institutions at a rate of zero per cent of the relevant aggregate inflow amount, that is, the bank shall assume a net inflow from financial institutions equal to one hundred per cent of the relevant aggregate contractual inflow amount;

(ii) that it will receive all fully performing contractual wholesale cash inflows from all relevant wholesale clients other than financial institutions, including clients such as non-financial corporates, sovereigns, central banks and public sector entities, and continue to extend loans to such clients at a rate of fifty per cent of the relevant aggregate inflow amount, that is, the bank shall assume a net inflow from wholesale clients other than financial institutions equal to fifty per cent of the relevant aggregate contractual inflow amount, Provided that the bank shall include all relevant inflows from maturing securities in the same category as inflows from financial institutions.

(vi) the bank shall apply an inflow factor of zero per cent in respect of any relevant deposits held at other financial institutions for operational purposes, as envisaged in paragraph (d)(vi) above, including all relevant deposits for clearing, custody, and cash management purposes;

(vii) the bank shall apply an inflow factor of zero per cent in respect of any relevant deposits held at a centralised institution in a cooperative banking network, which deposits shall be assumed to remain at that centralised institution, that is, the relevant depositing bank shall apply an inflow factor of zero per cent in respect of any relevant deposits held at a centralised institution in a cooperative banking network;

(viii) the bank shall apply an inflow factor of one hundred per cent in respect of any relevant net receivable amount related to derivative instruments, which amount shall also be net of any relevant level one or level two high-quality liquid assets serving as collateral, to the extent that the said collateral is not already included in the bank's portfolio of level one and level two high-quality liquid assets;

(ix) the bank shall apply such inflow factors in respect of such other relevant contractual cash inflows, and calculated and disclosed in such a manner, as may be directed in writing by the Registrar, which other contractual cash inflows shall exclude any relevant cash inflow related to any non-financial revenue.

(f) Formulae for the calculation of LCR

Based on the relevant requirements specified in this subregulation (12), a bank shall calculate its LCR in accordance with the formula specified below:

$$\text{LCR} = \frac{\text{Unencumbered level one and level two high-quality liquid assets}}{\text{Net cash outflow during the next 30 calendar days}} \times 100$$

Provided that:

(i) all relevant level one and level two high-quality liquid assets shall be included in the aforesaid formula at their respective market values, after all relevant haircuts have been applied;

(ii) the bank shall apply to the current market value of each relevant level two high-quality liquid asset a haircut of no less than 15 per cent, or such a higher haircut percentage as may be specified in writing by the Registrar;

(iii) the bank's total net cash outflows shall be calculated for a period of 30 consecutive calendar days in accordance with the relevant requirements specified in this subregulation (12);

(iv) whilst the bank is required to calculate and report its relevant LCR in Rand, in order to better manage and understand its potential currency mismatches, the bank shall also monitor its respective LCRs in each significant currency, for which purposes-

(A) a currency shall be deemed to be significant when the aggregate liabilities denominated in that currency amount to two per cent or more of the bank's total liabilities;

(B) all relevant cash flows shall be based on the relevant currency in which the counterparties are obliged to deliver or settle the contract;

(C) the bank shall calculate the relevant net foreign exchange cash outflow amount net of any relevant foreign exchange hedge contract;

(D) the bank shall continuously evaluate its ability to raise funds in foreign currency markets and transfer any liquidity surplus from one currency to another and across jurisdictions and legal entities;

(E) bank shall calculate its LCR in each significant currency through the application of the formula specified below:

$$\text{Foreign currency LCR} = \frac{\text{Unencumbered high-quality liquid assets in each significant currency}}{\text{Net cash outflow during the next 30 calendar days in each significant currency}} \times 100$$

(13) Available sources of stress funding and related matters

A bank-

(a) shall obtain the prior written approval of its board of directors or board approved committee in respect of any assumption made relating to the realisable value of assets under a forced sale scenario;

(b) shall on request submit to the Registrar all relevant board approved assumptions and reasoning applied in respect of the realisable value of assets under a forced sale scenario;

(c) shall ensure appropriate diversification in both the tenor and source of its funding;

(d) shall, notwithstanding the relevant requirements specified in regulation 27 relating to minimum liquid assets, maintain a liquidity cushion, made up of unencumbered liquid assets, to protect the bank against liquidity stress events, including potential losses of unsecured and typically available secured funding sources;

(e) shall ensure that its policies, processes, systems and procedures relating to liquidity risk management are sufficiently robust to effectively manage the bank's –

(i) ongoing liquidity needs, including any relevant intraday liquidity requirements;

(ii) collateral positions.

(14) Matters related to the calculation of a bank's net stable funding ratio (NSFR)

(a) Specified minimum requirements

As a minimum, in order to promote a bank's resilience over a one year time horison and ensure that the bank continuously maintains a specified minimum amount of stable sources of funding relative to the liquidity profile of the bank's assets and the potential for contingent liquidity needs arising from the bank's off-balance sheet commitments, and in order to limit a bank's potential over-reliance on short-term wholesale funding, a bank shall calculate a Net Stable Funding Ratio (NSFR) in accordance with and comply with the relevant requirements specified in this subregulation (14), provided that-

(i) in addition to the relevant requirements specified in this subregulation (14), a bank shall comply with such further or other conditions or requirements related to the NSFR as may be directed or specified in writing by the Registrar;

(ii) between 1 January 2013 and 31 December 2017 banks, controlling companies and the Registrar shall apply the relevant requirements specified in this subregulation (14) to monitor the readiness of relevant institutions to implement and fully comply with the said requirements and any subsequent amendments thereto as a minimum standard from 1 January 2018;

(iii) in all relevant cases, the requirements specified in this subregulation (14) shall apply on a solo and consolidated basis, provided that-

(A) in the case of consolidation or solo reporting of relevant entities, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank may apply the rules or regulations of relevant host supervisors in respect of the treatment of retail or small business deposits of relevant entities operating in those jurisdictions;

(iv) for purposes of this subregulation (14)-

(A) stable funding means the portion of those types and amounts of equity and liabilities expected to be reliable sources of funds over a one-year time horison under conditions of extended stress;

(B) the relevant required amount of funding is a function of the liquidity characteristics of various types of assets held by the bank, the bank's off-balance-sheet contingent exposures and/or the activities pursued by the bank;

(C) an extended bank-specific stress scenario means a scenario in which the bank encounters, and investors and customers become aware of-

(i) a significant decline in the bank's profitability or solvency arising from heightened credit risk, market risk or operational risk, and/or other risk exposures;

(ii) a potential downgrade in a debt, counterparty credit or deposit rating issued by an eligible institution; and/or

(iii) a material event that calls into question the reputation or credit quality of the bank;

(D) in order not to create an environment in which banks rely on the Reserve Bank or other relevant central bank as a source of funding, extended borrowing from central bank lending facilities, outside regular open market operations, falls outside the scope of this subregulation (14) and the calculation of the NSFR;

(E) unless specifically otherwise stated, the respective definitions applicable to the bank's calculation of LCR in terms of the provisions of subregulation (12) shall *mutatis mutandis* apply to the calculation of the bank's NSFR in terms of the provisions of this subregulation (14).

(b) *Matters related to the calculation of a bank's available amount of stable funding (ASF)*

Based on the relevant requirements specified in this subregulation (14), a bank shall continuously calculate its relevant available amount of stable funding (ASF), which available amount of stable funding-

(i) shall include-

(A) the relevant amounts related to the bank's capital sources;

(B) the bank's preferred securities with maturity equal to or longer than one year;

(C) the bank's liabilities with effective maturities of one year or longer;

(D) that portion of non-maturity deposits and/or term deposits with maturities of less than one year that the bank expects to remain with the bank for an extended period notwithstanding an idiosyncratic stress event, which assumptions and reasoning applied by the bank shall on request be submitted in writing to the Registrar; and

(E) that portion of wholesale funding with maturities of less than one year that the bank expects to remain with the bank for an extended period notwithstanding an idiosyncratic stress event, which assumptions and reasoning applied by the bank shall on request be submitted in writing to the Registrar;

(ii) shall be calculated by first assigning the respective carrying values of specified equity and liabilities to the relevant category specified in table 3 below, where-after the relevant assigned amounts shall be multiplied by the relevant ASF factors specified in table 3, and the bank's total ASF shall be the relevant sum of the respective weighted amounts:

Table 3

Components of Available Stable Funding and the associated ASF factors	
Components of ASF category	**ASF factor**
The total amount of capital after all relevant deductions, including common equity tier 1 capital and reserve funds, additional tier 1 capital and reserve funds and tier 2 capital and reserve funds The total amount of any preferred securities with an effective remaining maturity of one year or longer not included in secondary capital and reserve funds, taking into account any explicit or embedded options that would reduce the expected maturity to less than one year The total amount of secured and unsecured borrowings and liabilities, including term deposits, with effective remaining maturities of one year or longer, excluding any instruments with explicit or embedded options that would reduce the expected maturity to less than one year[1]	100%
Stable non-maturity (demand) deposits and/or term deposits with residual maturities of less than one year provided by retail customers and small business customers, as defined in subregulation (12) for the calculation of the bank's LCR	90%
Less stable non-maturity (demand) deposits and/or term deposits with residual maturities of less than one year provided by retail and small business customers, as defined in subregulation (12) for the calculation of the bank's LCR	80%
Unsecured wholesale funding, non-maturity deposits and/or term deposits with a residual maturity of less than one year provided by non-financial corporates, sovereigns, central banks, multilateral development banks and public-sector entities	50%
Stable deposits from cooperative banks that are required by law to be placed at the central organisation, and are legally constrained within the cooperative bank network as minimum deposit requirements	Specified in writing by the Registrar
All other liabilities and equity categories not included in the aforementioned categories	0%

1. **Including those options exercisable at the investor's discretion within the one-year horizon, provided that, when determining the maturity of an instrument, the bank shall assume that investors will redeem a call option at the earliest possible date.**

(c) *Matters related to the calculation of a bank's required amount of stable funding (RSF)*

Based on the relevant requirements specified in this subregulation (14), a bank shall continuously calculate its relevant required amount of stable funding (RSF),

(i) which required amount of stable funding shall be the relevant aggregate amount of-

(A) the sum of the value of the assets specified in table 4 below, multiplied by the relevant required stable funding (RSF) factor specified in table 4 and assigned to each relevant asset category;

Table 4

Details of asset categories and the associated RSF factors	
RSF category	**RSF factor**
Cash immediately available to meet obligations, not currently encumbered as collateral and not held for planned use as contingent collateral, salary payments, or any other reason Unencumbered short-term unsecured instruments and transactions with outstanding maturities of less than one year, such as short-term government and corporate bills, notes and obligations; commercial paper; negotiable certificates of deposits; reserves with the Reserve Bank; bankers acceptances; money market mutual funds; etc. Unencumbered securities with stated remaining maturities of less than one year with no embedded options that would increase the expected maturity to more than one year Unencumbered securities held where the bank or relevant institution has an offsetting reverse repurchase or resale transaction when the security on each transaction has the same unique identifier, such as ISIN number or CUSIP Unencumbered loans to financial entities with effective remaining maturities of less than one year that are not renewable and for which the lender has an irrevocable right to call	0%
Unencumbered marketable securities with residual maturities of one year or longer representing claims on or claims guaranteed by sovereigns, central banks, BIS, IMF, EC, non-central government public sector entities or multilateral development banks that are assigned a zero per cent risk-weight in terms of the provisions of the standardised approach specified in regulation 23(8) of these Regulations, provided that active repo or sale-markets exist for these securities	5%
Unencumbered corporate bonds or covered bonds (when allowed in the particular jurisdiction) rated AA- or higher with residual maturities of one year or longer satisfying all of the specified conditions for level two high-quality liquid assets in the calculation of a bank's LCR	20%

Details of asset categories and the associated RSF factors	
RSF category	**RSF factor**
Unencumbered marketable securities with residual maturities of one year or longer representing claims on or claims guaranteed by sovereigns, central banks, non-central government public sector entities that are assigned a twenty per cent risk-weight in terms of the provisions of the standardised approach specified in regulation 23(8) of these Regulations, provided that the securities meet all of the specified conditions for level two high-quality liquid assets in the calculation of a bank's LCR	
Unencumbered gold Unencumbered equity securities, not issued by financial institutions or their affiliates or associates, listed on a recognised exchange and included in a large cap market index Unencumbered corporate bonds and covered bonds (when allowed in the particular jurisdiction) that meet all of the following conditions: • Central bank eligibility for intraday liquidity needs and overnight liquidity shortages in relevant jurisdictions • Not issued by financial institutions or their affiliates or associates (except in the case of covered bonds when allowed in the particular jurisdiction) • Not issued by the respective bank or institution itself, or its affiliates or associates • Low credit risk, that is, assets with a credit assessment from an eligible institution of A+ to A-, or if not rated by an eligible institution, are internally rated with a PD corresponding to an eligible external credit assessment of A+ to A- • Traded in large, deep and active markets characterised by a low level of concentration Unencumbered loans to non-financial corporate clients, sovereigns, central banks and public-sector entities with a remaining maturity of less than one year	50%
Unencumbered residential mortgages of any maturity that qualify for a risk weight of thirty five per cent or lower in terms of the provisions of the standardised approach specified in regulation 23(8) of these Regulations Other unencumbered loans, excluding loans to financial institutions, with a remaining maturity of one year or longer, that qualify for a risk weight of thirty five per cent or lower in terms of the provisions of the standardised approach specified in regulation 23(8) of these Regulations	65%

Details of asset categories and the associated RSF factors	
RSF category	**RSF factor**
Unencumbered loans to retail customers, that is, natural persons, and small business customers as defined in subregulation (12) for the calculation of LCR, with a remaining maturity of less than one year, other than those assets that qualify for the aforesaid RSF factor of sixty five per cent	85%
All other assets not included elsewhere	100%

plus

(B) the sum of the specified off-balance-sheet or potential liquidity exposures, multiplied by the required stable funding (RSF) factor specified in table 5 and assigned to each relevant off-balance-sheet exposure category:

Table 5

Details of off-balance-sheet categories and associated RSF factors	
RSF category	**RSF factor**
Conditionally revocable and irrevocable credit and liquidity facilities to any client	5% of the currently undrawn portion
Other contingent funding obligations, including- • unconditionally revocable uncommitted credit and liquidity facilities • guarantees • letters of credit • other trade finance instruments • non-contractual obligations such as: o potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities o structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes o managed funds that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment funds	Specified in writing by the Registrar

(ii) which required amount of stable funding is based on the principle that-

(A) assets that are more liquid and more readily available to serve as a source of extended liquidity in a stressed environment are assigned lower RSF factors, and require less stable funding, than assets considered less liquid in such circumstances, and require more stable funding;

(B) RSF factors assigned to various types of assets serve as parameters approximating the amount of a particular asset that could not be monetised through sale or use as collateral in a secured borrowing on an extended basis during a liquidity event lasting one year, which amounts are expected to be supported by stable funding;

(C) since some off-balance-sheet exposures may cause significant liquidity drains during times of market or idiosyncratic stress, a bank shall establish and maintain a buffer of stable funding to protect the bank during a period of such market or idiosyncratic stress,

Provided that-

(i) in the case of secured funding arrangements against assets of the bank, which funding arrangements mature within the one-year horison, the bank shall look through the secured funding transaction to determine the asset to be used to settle the transaction at the maturity date, and use the corresponding RSF factor for that asset, that is, when the bank, for example, will receive cash, then the RSF of that transaction would be zero per cent, and when the bank will receive another asset, the bank shall use the RSF factor for that relevant asset;

(ii) the bank shall apply a RSF factor of one hundred per cent in respect of any encumbered asset on its balance sheet, unless the remaining time in the encumbrance period is less than one year, in which case the bank shall regard the assets as unencumbered;

(iii) in the case of amortising loans, the bank may allocate the portion that becomes due within the one-year horizon to the "less than a year" residual maturity category.

(d) *Formula for the calculation of the NSFR*

Based on the relevant requirements specified in this subregulation (14), a bank shall calculate its NSFR in accordance with the formula specified below:

$$\frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} \times 100$$

(15) *Matters relating to a bank's foreign exchange contractual maturity ladder*

In order for the Registrar to assess the reporting bank's foreign currency liquidity needs and the mismatch between foreign currency assets and foreign currency liabilities, the bank shall report to the Registrar separate information relating to its foreign currency contractual maturity ladder, provided that-

(a) when the bank's gross foreign exchange liability exposure exceeds 2.5 per cent of the bank's funding liabilities, which funding liabilities shall be calculated in accordance with the provisions of paragraph (b) below, the bank shall report to the Registrar the ZAR equivalent amount in respect of individual currencies at the month-end closing rate;

(b) in order to determine the said amount in respect of the bank's funding related liabilities, the bank shall base its calculation on the relevant amount reported in item 55 of the form BA 100, that is, deposits, current accounts and other creditors;

(c) in all cases, all relevant reported foreign currency amounts shall include the relevant amounts relating to the bank's forward exchange contracts, that is, FECs.

(16) Conditions subject to which negotiable certificates of deposit, promissory notes or instruments of similar characteristics may be issued

The issue of negotiable certificates of deposit, promissory notes or instruments of similar characteristics specified in a directive issued by the Registrar from time to time in terms of section 6(6) of the Act, and contemplated in section 79(1)(c) of the Act, shall be subject to the conditions specified below:

(a) The instruments shall not be issued for a period exceeding ten years, which period is the original maturity of the instrument, unless-

(i) the instruments are issued in accordance with conditions specified by the Registrar; or

(ii) on prior application, the Registrar has in writing authorised a deviation from the prescribed period.

(b) The total amount relating to such instruments issued by a bank for a period not exceeding 12 months, which period is the original maturity of the instrument, and not yet repaid at the reporting date, shall not exceed twenty per cent of the total amount of funding related liabilities to the public, determined in accordance with the requirements specified in subregulation (15)(b), as at the reporting date immediately preceding the current reporting date.

(c) Notwithstanding the provisions of paragraph (b) above, the total amount relating to such instruments issued by a bank and not yet repaid at the reporting date may not exceed thirty per cent of the total amount of funding related liabilities to the public, determined in accordance with the requirements specified in subregulation (15)(b), as at the reporting date immediately preceding the current reporting date.

(17) Instructions relating to the completion of the monthly return concerning liquidity risk are furnished with reference to the item descriptions and line item numbers appearing on the form BA 300, as follows:

Line item number

6 This item shall include the aggregate amount of deposits received that are unlikely to be withdrawn within a short period of time, excluding any amount relating to an item included in item 9.

7 This item shall include the aggregate amount of deposits received that may be withdrawn within a short period of time.

13 This item shall include the aggregate amount of liquidity facilities provided by the reporting bank to any off-balance sheet vehicle. For example, when the reporting bank acts as a liquidity provider in respect of a special-purpose institution in an asset-backed securitisation structure, the bank shall include in item 13 the aggregate amount relating to a liquidity facility provided by the reporting bank to the said special-purpose institution.

15 to 17 These items shall include the relevant required aggregate amounts in respect of irrevocable commitments granted by the reporting bank to provide funds, provided that no amount in respect of a commitment to provide funds, which commitment may unconditionally be cancelled by the reporting bank at any time, shall be included in any of the aforementioned items.

18 to 28 Based on the relevant directives specified above in respect of items 1 to 9, these items shall reflect the relevant required aggregate amounts relating to the maturity or run-off of assets and liabilities of the reporting bank under normal operating conditions, instead of being based on the contractual maturity profile of the relevant asset and liability items.

35 to 43 Based on the relevant directives specified above in respect of items 1 to 9, these items shall reflect the relevant required aggregate amounts relating to a bank-specific stress, as determined by way of factual experience or simulation or both, performed by the reporting bank in respect of all relevant asset and liability items under a bank-specific stress scenario.

The simulated stress mismatch shall include stress modification approved by the bank's board of directors or board-approved committee, or assumptions made by the reporting bank in respect of the business as usual mismatch, which simulated stress mismatch aims to provide an indication of the potential deterioration in the reporting bank's business as usual liquidity position under a bank specific stress scenario.

46 This item shall include any amount relating to a stress outflow that may arise from off-balance sheet exposures, such as liquidity calls in respect of off-balance sheet commitments relating to a special-purpose institution.

53 to 67 These items shall reflect the relevant required aggregate amounts in respect of funding sources available to the reporting bank under a bank-specific stress scenario, before taking into consideration any dispensation that may be granted by the Reserve Bank.

54 This item shall reflect, amongst others, the aggregate amount relating to long-term investments that may be realised by the reporting bank within the specified time intervals.

55 This item shall reflect the aggregate amount in respect of liquid marketable securities held for trading purposes, which securities shall be unencumbered, that is, this item shall not include any amount relating to a security held that is subject to further commitment or in terms of which agreement the security will be repurchased at a future date.

56 This item shall reflect the aggregate amount relating to assets available for sale in respect of securitisation vehicles, of which the capability to execute within the period specified on the form BA 300 is already in place, that is, this item shall reflect the aggregate amount relating to assets within already approved securitisation structures in respect of which issues or further issues can readily be made available to the market.

57 This item shall reflect the aggregate amount in respect of foreign exchange positions that may be executed by the reporting bank in order to obtain rand funding.

59 This item shall reflect the aggregate amount in respect of any liquid asset portfolio specifically maintained by the reporting bank for contingency liquidity risk management purposes, provided that this item-

(a) shall not include any instrument held in order to comply with the requirements specified in section 72 of the Act, which requirements relate to liquid assets required to be held by a bank;

(b) shall include the aggregate amount of securities or instruments used by the bank for accommodation purposes, and any unencumbered liquid asset designated by the bank for liquidity risk contingency funding.

60 This item shall be equal to 25 per cent of the reporting bank's liquid assets held in terms of the provisions of section 72 of the Act.

61 This item shall reflect the aggregate amount in respect of the reporting bank's current utilisation in terms of the Reserve Bank's repo allotment.

62 This item shall reflect the estimated aggregate amount in respect of funds available to the reporting bank from the interbank market in terms of undrawn lines or interbank funding agreements.

63 This item shall reflect the aggregate amount in respect of uncommitted secured funding lines available to the reporting bank, such as bilateral funding lines derived from banking relationships.

64 This item shall reflect the aggregate amount in respect of committed funding lines available to the reporting bank, such as lines raised by the payment of commitment fees.

65 This item shall reflect the aggregate amount in respect of loans that will mature and which amount may be used by the reporting bank for funding purposes in the case of a liquidity stress event.

69 to 71 These items shall reflect the relevant required aggregate amounts relating to the ten largest depositors in respect of funding received from the relevant specified sectors, provided that the said aggregate amounts shall not include any amount in respect of negotiable certificates of deposits or other negotiable paper funding instruments issued by the reporting bank, which amounts shall be reported in item 72.

72 This item shall reflect the aggregate amount in respect of negotiable paper funding instruments issued by the reporting bank, including all relevant amounts relating to negotiable certificates of deposit, promissory notes or instruments of similar characteristic.

80 and 86 In the case of all ZAR cross currency swap contracts the reporting bank shall report the relevant ZAR legs relating to the said contracts in items 80 and 86.

88 to 97 Based on the bi-annual time buckets specified in the form BA 300, a bank shall estimate the expected change in its balance sheet during the 12 month period immediately following the reporting period, that is, for example, the reporting bank's expected incremental balance sheet growth during the two six month periods immediately following the current reporting date, which change shall exclude any rolling on maturity of existing products, that is, the bank shall only report the relevant change in its balance sheet.

89 to 91 In respect of the specified periods, based on the relevant directives specified in subregulation (7)(a), these items shall reflect the relevant required aggregate amounts in respect of the reporting bank's estimated change in business.

93 to 96 In respect of the specified periods, based on the relevant directives specified in subregulation (7)(b), these items shall reflect the relevant required aggregate amounts in respect of the reporting bank's estimated change in business.

MINIMUM RESERVE BALANCE AND LIQUID ASSETS

Page no.

MINIMUM RESERVE BALANCE AND LIQUID ASSETS **BA 310**
(Confidential and not available for inspection by the public) Monthly
Name of bank ……………………………………….
Month ended …………………………………..(yyyy-mm-dd)

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

Description of item	Line no.	Total	Average[1]	Directives and instructions	
		1	2	3	4
Total liabilities (item 79, column 3, of form BA 100)	1				
Less: funding received from head office or from other branches within the same group[2]	2			Refer to note 2 below	
Less: amounts **owing by** banks, branches and mutual banks in the Republic[3]	3			Refer to note 3 below	
Liabilities, as reduced[6] (item 1 less items 2 and 3)	4				
Less: funding received in terms of specified repurchase agreements [4]	5			Refer to note 4 below	
Less: liabilities relating to transactions in derivative instruments[5] (item 67, column 3, of form BA 100)	6			Refer to note 5 below	
Less: amounts owing by banks rated investment grade or better, which banks are located in other countries rated investment grade or better	7				
Add: funding received from head office or other branches within the same group[2] (item 2 above)	8				
Liabilities, as adjusted[6] (item 4 less items 5 to 7 plus item 8)	9				
Average daily minimum reserve balance to be held (item 9 column 2 multiplied by the prescribed percentage)	10			**Prescribed percentage[7]**	
Less: Average daily amount of Reserve Bank notes and subsidiary coin held during the reporting month	11				
Average daily minimum reserve balance to be held with the Reserve Bank (item 10 less item 11)	12				
Average daily reserve balance held up to fourteenth business day of the month following on the month to which this return relates	13				
Level one high-quality liquid assets required to be held (item 4 column 2 multiplied by the prescribed percentage specified in this item 14)	14			**Prescribed percentage** 5%	
Average daily amount of level one high-quality liquid assets held up to fourteenth business day of the month following the month to which this return relates (total of items 16 to 23) – refer to section 1 of the Act	15				
Reserve Bank notes and coin held during the preceding month (excluding such notes or coin taken into account opposite item 11 in the calculation of the minimum reserve balance)	16			***of which:* acquired under resale agreements[8]**	
Gold coin and bullion	17				
Central Bank reserves specified by the Governor (excluding any amount included in items 13)	18			**Total**	**Average[1]**
Treasury bills of the Republic	19				
Securities issued by virtue of section 66 of the Public Finance Management Act, 1999, to fund the Central Government	20				
Securities of the Reserve Bank	21				
Securities guaranteed by specified counterparties[9]	22				
Other (please specify)	23				

1. **Means the average amount calculated as the sum of the month-end balance relating to the reporting month and the month-end balances relating to the two months preceding the reporting month, divided by three, provided that in the case of items 10 to 13, 15 to 23, and 27 and 28 the average amount shall be the average daily amount calculated in accordance with the requirements specified in regulation 8 instead of the average amount calculated in accordance with the provisions of this footnote 1.**
2. **Relates only to branches of foreign institutions conducting the business of a bank in the Republic.**
3. **In order to eliminate any potential double counting of liabilities, provided that no amount relating to an amount owed to the reporting bank by the Reserve Bank shall be included in this item 3.**
4. **Not to include any amount in respect of a repurchase transaction concluded in respect of an instrument obtained in terms of a resale agreement already deducted in item 3.**
5. **Not to include any amount already deducted elsewhere on form BA 310.**
6. **Subject to a minimum amount of zero, that is, the relevant amount shall be a positive amount or zero.**
7. **Relates to the percentage determined in terms of section 10A(2) of the South African Reserve Bank Act, No. 90 of 1989.**
8. **Report under columns 3 and 4 the relevant required amounts included in column 2 that relate to instruments acquired in terms of a resale agreement.**
9. **Refer to section 1(1) of the Act read with regulation 26(12)(b).**

Memorandum items:	Line no.	**Total**	**Average**[1]
		1	**2**
Adjustment in respect of cash-management schemes – regulation 16	24		
Adjustment in respect of set-off in terms of financial reporting standards	25		
Amounts qualifying for set-off in terms of regulation 13	26		
Average daily amount of all level one high-quality liquid assets acquired under resale agreements	27		
Average daily amount of all level one high-quality liquid assets sold under repurchase agreements	28		
Total average vault cash	29		
Less: Vault cash utilised in item 11 (may not exceed item 10)	30		
Excess vault cash utilised in item 16 (item 29 less item 30)	31		
Hash total	32		

1. **Means the average amount calculated as the sum of the month-end balance relating to the reporting month and the month-end balances relating to the two months preceding the reporting month, divided by three, provided that in the case of items 10 to 13, 15 to 23, and 27 and 28 the average amount shall be the average daily amount calculated in accordance with the requirements specified in regulation 8 instead of the average amount calculated in accordance with the provisions of this footnote 1.**

27. Minimum reserve balance and liquid assets - Directives and interpretations for completion of monthly return concerning minimum reserve balance and liquid assets (Form BA 310)

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

(2) A bank shall comply with the provisions of any Notice issued by the Governor of the Reserve Bank under section 10A of the South African Reserve Bank Act, 1989 (Act No. 90 of 1989), regarding the determination of the minimum reserve balance to be held with the Reserve Bank, and the provisions of regulations 8(1) and 8(2) regarding the calculation of the average daily amount of Reserve Bank notes and subsidiary coin and level one high-quality liquid assets held during the reporting month.

(3) Minimum level one high-quality liquid assets

(a) For the purposes of complying with the provisions of section 72(1) of the Act, a bank shall during the period prescribed in subregulation (5) hold an average daily amount of level one high-quality liquid assets that shall not be less than an amount equal to 5 per cent of its liabilities as reduced as reported in item 4 column 2 of the latest monthly form BA 310 furnished to the Registrar in terms of the provisions of section 75(1)(a) of the Act, provided that-

(i) the minimum amount of level one high-quality liquid assets held by a bank at the close of business on any day during the period prescribed in subregulation (5) shall not be less than an amount equal to 75 per cent of the average daily amount of level one high-quality liquid assets required to be held by the bank in terms of the provisions of this subregulation (3);

(ii) the minimum amount of level one high-quality liquid assets held by the bank at any time during the day shall not be less than an amount equal to 50 per cent of the average daily amount of level one high-quality liquid assets required to be held by the bank in terms of the provisions of this subregulation (3);

(iii) at least 95 per cent of level one high-quality liquid assets required to be held by the bank in terms of the provisions of this subregulation (3) at the close of business on any day during the period prescribed in subregulation (5) shall be level one high-quality liquid assets owned outright by the said bank, that is, at least 95 per cent of level one high-quality liquid assets required to be held by the bank shall be level one high-quality liquid assets not subject to further commitment; and

(b) no instruments acquired in terms of a securities lending transaction shall qualify as level one high-quality liquid assets.

(4) The Registrar, in consultation with the Governor of the Reserve Bank, may amend the provisions of subregulation (3)(a) in respect of a particular bank or the banking sector as a whole should such provisions adversely affect the risk profile of the particular bank or the banking sector as a whole.

(5) *Period of maintenance of prescribed minimum reserve balance and liquid assets*

A bank shall maintain the minimum required amounts of prescribed minimum reserve balance and level one high-quality liquid assets during the period from the fifteenth business day of the month following the month or calendar quarter to which a particular return relates up to and including the fourteenth business day of the month following the month or calendar quarter in respect of which the next monthly or quarterly return, as the case may be, is to be furnished by the reporting bank.

(6) *Available unencumbered assets, including matters related to assets pledged or otherwise encumbered*

(a) Unless an exemption has been granted by the Registrar in terms of the proviso to section 72(3) of the Act, only assets not pledged or otherwise encumbered at the close of business on any day during the period prescribed in subregulation (5) shall qualify as level one high-quality liquid assets.

(b) Securities lodged with the Reserve Bank to secure facilities shall not be regarded as pledged except to the extent that such securities are required to secure facilities actually utilised at the close of business on any day.

(c) In order to determine the extent of a bank's available unencumbered assets that may be used as collateral to raise additional secured funding in secondary markets and/or may be eligible as collateral at the Reserve Bank or other relevant central banks, and as such may potentially be an additional source of liquidity when required, a bank shall report to the Registrar the amount, type and location of such available unencumbered assets-

(i) that may serve as collateral for secured borrowing in secondary markets at prearranged or current haircuts at reasonable costs;

(ii) that are eligible to obtain secured funding from the Reserve Bank or other relevant central banks at prearranged (when available) or current haircuts at reasonable costs for standing facilities, that is, excluding any emergency assistance arrangement,

(A) which information shall include collateral that has already been accepted at the Reserve Bank or other relevant central bank but remains unused;

(B) in respect of which assets the bank has in place operational procedures to monetise the relevant collateral when required;

Provided that-

(i) the bank shall separately report any collateral received that the bank is permitted to deliver or re-pledge, as well as the part of such collateral that is so delivered or re-pledged by the bank at each relevant reporting date;

(ii) as part of or in addition to the aforesaid information,

(A) the bank shall categorise the relevant assets according to significant currency, for which purposes a currency shall be regarded as significant when the aggregate stock of available unencumbered collateral denominated in that currency amounts to five per cent or more of the relevant total amount of unencumbered collateral available for secondary markets and/or relevant central banks;

(B) the bank shall report to the Registrar the haircut or estimated haircut that the secondary market and/or relevant central bank would require for each relevant asset, provided that in the case of a relevant central bank haircut, the bank shall report the haircut required by the relevant central bank for matching funding under normal circumstances, that is, for example, the Reserve Bank for rand-denominated funding under normal circumstances, the European Central Bank for euro-denominated funding under normal circumstances, and the Bank of Japan for yen funding under normal circumstances;

(C) the bank shall, instead of the relevant notional amounts, report to the Registrar the expected monetised value of the relevant collateral;

(D) the bank shall report to the Registrar the location where the respective assets are actually held, and the business units or lines that have access to those assets.

(7) Assets acquired in terms of a resale agreement

An asset acquired by a bank in terms of a resale agreement and which asset is a level one high-quality liquid asset as defined in section 1 of the Act shall for the purposes of section 72(1) of the Act rank as a level one high-quality liquid asset of the said bank having acquired the said asset in terms of the resale agreement, instead of the bank that sold the asset in terms of the repurchase agreement, provided that the asset has not been disposed of under a further repurchase agreement and has not been encumbered or lodged as security by the said bank.

(8) Valuation of securities that qualify as level one high-quality liquid assets

A bank shall value level one high-quality liquid assets held at the close of business on any day during the period prescribed in subregulation (5) for the purposes of complying with the provisions of section 72(1) of the Act based on the daily market yields published by the Reserve Bank on Reuters page SARB 20 and/or such other page as may be specified by the Reserve Bank from time to time for accommodation collateral purposes.

(9) Instructions relating to the completion of the form BA 310 are furnished with reference to certain item descriptions and line item numbers appearing on the form BA 310, as follows:

Line item number

3 **Amounts owing by banks, branches and mutual banks in the Republic**

This item shall reflect the relevant required aggregate amount relating to amounts **owed by** banks, branches and mutual banks in the Republic to the reporting bank, including any relevant amount related to a loan granted in terms of a resale agreement, provided that no amount relating to any amount owed to the reporting bank by the Reserve Bank shall be included in the aforesaid aggregate amount.

The purpose of the deduction is to avoid double reserving against liquidity risk in the South African banking system.

5 **Repurchase agreements**

This item shall reflect the relevant required aggregate amount relating to funding received in respect of repurchase agreements with a term of 31 days or shorter, with instruments such as Government securities, Treasury bills and Reserve Bank securities, qualifying as level one high-quality liquid assets, as underlying security.

10 **Minimum reserve balance required to be held, prior to any adjustment**

This item shall reflect the relevant required average daily minimum reserve balance to be held as from the fifteenth business day of the month following on the month to which the return relates, that is, item 9 column 2 multiplied by the required percentage.

12 **Minimum reserve balance required to be held with the Reserve Bank**

This item shall reflect the relevant required average daily minimum reserve balance to be held with the Reserve Bank as from the fifteenth business day of the month following on the month to which the return relates, that is, item 10 less item 11.

14 **Level one high-quality liquid assets required to be held**

This item shall reflect the relevant amount of level one high-quality liquid assets required to be held as from the fifteenth business day of the month following on the month to which the return relates, that is, item 4 column 2 multiplied by the prescribed percentage specified in item 14.

15 to 23 **Average daily amount of level one high-quality liquid assets held**

The reporting bank shall record in items 16 to 23 the average daily amount of its holdings during the prescribed period of the individual categories of level one high-quality liquid assets, valued in accordance with the requirements specified in section 72(4) of the Act.

The individual level one high-quality liquid asset items identified shall include the average daily amounts during the prescribed period of level one high-quality liquid assets acquired under resale agreements, but shall not include the average daily amounts of such assets sold under repurchase agreements.

24 to 31 **Memorandum items**

25 This item shall reflect the relevant required aggregate amounts relating to set-off or offsetting of balances or amounts in accordance with the relevant requirements for set-off or offsetting contained in Financial Reporting Standards issued from time to time.

26 This item shall reflect the relevant required aggregate amounts relating to set-off of balances or amounts in accordance with the relevant requirements specified in regulation 13.

27 and 28 The average daily amounts of all level one high-quality liquid assets acquired under resale agreements during the prescribed period and included in items 19 to 23, or sold under repurchase agreements, shall respectively be recorded in items 27 and 28.

MARKET RISK

Page no.

MARKET RISK **BA 320**

(Confidential and not available for inspection by the public) Monthly

Name of bank………………………………………………..

Month ended……………………………………………(yyyy-mm-dd)

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

Summary information	Line no.	Trading 1	Banking 2	Total 3
Standardised approach (total of items 2, 8, 14 and 19)	1			
Interest rate risk (total of items 3 to 7)	2			
Specific risk (item 35)	3			
General risk (item 53)	4			
Interest rate options - simplified method (item 95, col. 1)	5			
Interest rate options - delta-plus method: gamma and vega risk (item 96, col. 1)	6			
Interest rate options - scenario matrix approach (item 99, col 1)	7			
Equity position risk (total of items 9 to 13)	8			
Equity specific risk (item 69)	9			
Equity general risk (item 70)	10			
Equity options - simplified method (item 95, col. 2)	11			
Equity options - delta-plus method: gamma and vega risk (item 96, col. 2)	12			
Equity options - scenario matrix approach (item 99, col.2)	13			
Foreign exchange risk (total of items 15 to 18)	14			
Foreign exchange and gold (item 82)	15			
Foreign exchange and gold options - simplified method (item 95, col. 3)	16			
Foreign exchange and gold options - delta-plus method: gamma and vega risk (item 96, col. 3)	17			
Foreign exchange and gold options - scenario matrix approach (item 99, col. 3)	18			
Commodities risk (total of items 20 to 24)	19			
Simplified method (item 83, col 7)	20			
Maturity ladder method (item 86, col.7)	21			
Commodity options - simplified method (item 95, col. 4)	22			
Commodity options - delta-plus method: gamma and vega risk (item 96, col.4)	23			
Commodity options - scenario matrix approach (item 99, col. 4)	24			
		VaR 1	sVaR 2	Total 3
Internal models approach				
Current day[1]	25			
Previous day[1]	26			
60 day average, multiplied by the specified multiplication factor[1]	27			
Specific risk add-on[1]	28			
Incremental risk charge[1]	29			
Capital requirement (item 28 plus item 29 plus (the higher of item 26 or 27, col. 1) plus (the higher of item 26 or 27, col. 2))	30			
Total market risk requirement (total of items 32 to 34)	31			
Minimum prescribed (pillar 1) market risk requirement[2] (item 1 plus item 30)	32			
Systemic risk add-on (pillar 2a) market risk requirement[3]	33			
Additionally specified bank-specific (pillar 2b) market risk requirement[4]	34			

1. **Calculated in accordance with the relevant requirements specified in regulation 28(8).**
2. **Also refer to item 9 column 3 of the form BA 700.**
3. **Also refer to item 9 column 3 of the form BA 700.**
4. **Also refer to item 12 column 3 of the form BA 700.**

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

Interest rate risk	Line no.	Position	Risk weight	Required capital
		1	2	3
Specific risk (total of items 36 to 38, 42 to 45, and 49 to 52)	35			
SA central government or SA Reserve Bank	36		0.00%	
Other sovereign exposure rated AAA to AA-	37		0.00%	
Other sovereign exposure rated A+ to BBB- (total of items 39 to 41)	38			
Up to 6 months	39		0.25%	
More than 6 months but less than or equal to 24 months	40		1.00%	
More than 24 months	41		1.60%	
Other sovereign exposure rated BB+ to B-	42		8.00%	
Other sovereign exposure rated below B-	43		12.00%	
Unrated government exposure	44		8.00%	
Qualifying items (total of items 46 to 48)	45			
Up to 6 months	46		0.25%	
More than 6 months but less than or equal to 24 months	47		1.00%	
More than 24 months	48		1.60%	
Specified non-qualifying issuers[1]	49		Varied	
Other exposures rated BB+ to BB-	50		8.00%	
Other exposure rated below BB-	51		12.00%	
Unrated non-government exposure	52		8.00%	

	Line no.	Position	Required capital
		1	2
General risk (total of items 54 to 60)	53		
Base currency (ZAR)	54		
USD	55		
Euro	56		
GBP	57		
CHF	58		
JPY	59		
Other	60		

1. Includes instruments issued in respect of a securitization scheme, which securitization exposure constitutes a first-loss credit-enhancement facility, unrated liquidity facility or letter of credit.

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

Equity and equity indices risk	Line no.	Positions in RSA	Positions held in foreign operations	Total positions (total of col. 1 and 2)	Risk weight	Required capital
		1	2	3	4	5
Equity						
Specific risk (gross equity positions, long and short) (total of items 62 and 63)	61					
Less liquid[1]	62				12.00%	
Other	63				8.00%	
General risk (net equity positions, or difference between long and short)	64				8.00%	
Equity indices						
General risk (net equity positions, or difference between long and short)	65				8.00%	
Equity index add-on[2] (net long or short position) (total of items 67 and 68)	66					
Diversified indices	67				2.00%	
Other indices	68				4.00%	
Total specific equity risk and equity index add-on (total of items 61 and 66)	69					
Total general risk (total of items 64 and 65)	70					
Total equity risk (total of items 69 and 70)	71					

1. Refer to regulation 28(7)(c)(ii).
2. Refer to regulation 28(7)(c)(v)(B).

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

Foreign exchange and gold risk	Line no.	Trading book		Banking book		Total[1]	
		Long	Short	Long	Short	Long	Short
		1	2	3	4	5	6
Total foreign currency and gold position	72						
All foreign currencies (total of items 75 to 80)	73						
Gold	74						
Memorandum items: foreign currency positions							
USD	75						
Euro	76						
GBP	77						
CHF	78						
JPY	79						
Other	80						
Required capital and reserve funds							**Total**
							1
Total net open position[2]	81						
Total capital requirement for foreign currency and gold (8% of item 81)	82						

1. **Report as absolute amounts.**
2. **Calculated in accordance with the relevant requirements specified in regulation 28(7)(d)(iii), that is, the greater of the sum of the bank's relevant net short positions or the sum of the bank's relevant net long positions in foreign currency, plus the bank's net absolute position in gold, that is, the bank's net position in gold irrespective whether the said net position is a long or short position.**

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

Commodities risk	Line no.	Trading book		Banking book		Positions subject to capital requirement	Capital requirement	
		Long	Short	Long	Short		(%)	Total
		1	2	3	4	5	6	7
Simplified approach[1] (total of items 84 and 85)	83							
Net positions	84						15%	
Gross positions	85						3%	
Maturity ladder approach[2] (total of items 87 to 89)	86							
Matched long and short positions	87						1.50%	
Residual net positions carried between time bands	88						0.6%[2]	
Residual net open position	89						15%	
Memorandum items: commodity positions								
Precious metals	90							
Agricultural products	91							
Minerals	92							
Base metals	93							
Other	94							

1. Refer to regulation 28(7)(e)(ii).
2. Refer to regulation 28(7)(e)(iii).

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

Options risk **Simplified approach**	**Line no.**	**Interest rates**	**Equities**	**Foreign exchange and gold**	**Commodities**
		1	**2**	**3**	**4**
Capital requirement	95				
Delta-plus approach		**Interest rates**	**Equities**	**Foreign exchange and gold**	**Commodities**
		1	**2**	**3**	**4**
Capital requirement (total of items 97 and 98)	96				
Gamma impact	97				
Vega impact	98				
Scenario matrix approach		**Interest rates**[1]	**Equities**[2]	**Foreign exchange and gold**[3]	**Commodities**[4]
		1	**2**	**3**	**4**
Capital requirement	99				

1. Refer to regulation 28(7)(b) in respect of the treatment of different currencies and time bands.

2. Refer to regulation 28(7)(c) in respect of the treatment of positions in different markets and indices.

3. Refer to regulation 28(7)(d) in respect of the treatment of different currency pairs.

4. Refer to regulation 28(7)(e) in respect of the treatment of positions in different commodities.

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

Internal models approach	Line no.	Regulatory VaR amounts[1, 2]				Incremental risk charge[1, 6]	Internal VaR[3]		
		Min VaR	Ave VaR	Max VaR	sVaR		Max VaR	VaR limit	sVaR limit
		1	2	3	4	5	6	7	8
Position risk - VaR amounts[4, 5] and incremental risk amount	100								
Interest rate risk	101								
Equity risk	102								
Foreign exchange risk, including gold	103								
Commodity risk	104								
Other	105								
Memorandum items:									
Total VaR amounts[4, 5]	106								
Desk 1[5]	107								
Desk 2[5]	108								
Desk 3[5]	109								
Other desks[5]	110								

1. **Calculated in accordance with the relevant requirements specified in these Regulations.**
2. **Based on, amongst other things, a 99 per cent, one-tailed confidence interval, and a minimum holding period of ten trading days.**
3. **May be based on a confidence interval and/or minimum holding period that differs from the requirements specified in these Regulations.**
4. **May not be equal to the sum of individual requirements calculated in respect of the respective risk categories or trading desks due to, amongst others, diversification benefits.**
5. **Please separately submit in writing the relevant desk description and other relevant information.**
6. **Refer to regulation 28(8)(h)(i)(E).**

28. Market risk (position risk) - Directives and interpretations for completion of monthly return concerning market risk (Form BA 320)

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

(2) The purpose of the form BA 320, amongst other things, is to measure and report the reporting bank's exposure to market risk or position risk arising from the bank's trading activities and specified banking activities.

(3) In respect of-

(a) the current market value of any interest rate related instrument held in the reporting bank's trading book;

(b) the current market value of any equity instrument held in the reporting bank's trading book;

(c) any foreign exchange instrument held in the reporting bank's banking book or trading book, that is, any foreign-currency position held by the bank;

(d) any commodity position held in the reporting bank's banking book or trading book, that is, any commodity position held by the bank,

the reporting bank shall calculate a capital requirement in accordance with the relevant requirements specified in this regulation 28, provided that-

(i) subject to such conditions as may be specified in writing by the Registrar, the Registrar may allow a bank to exclude from the said capital requirements such structural foreign exchange positions as may be specified in writing by the Registrar;

(ii) when the bank internally hedges a credit exposure held in the bank's banking book using a credit-derivative instrument held in the bank's trading book, the banking book exposure shall be deemed not to be hedged for purposes of calculating the bank's required amount of capital and reserve funds unless the bank purchased from an eligible third party protection provider a credit-derivative instrument that complies with the relevant requirements specified in regulations 23(9)(d)(xi)(B) and 23(9)(e), provided that when the bank purchased and recognises the third party protection as a hedge of the said banking book exposure as envisaged in this subparagraph (ii), neither the internal nor external credit derivative hedge shall be included in the bank's trading book for the purposes of these Regulations;

(iii) the bank shall in accordance with the relevant requirements specified in regulation 38(5) deduct from its capital and reserve funds any instrument held that qualifies as capital of the reporting bank, any other bank, any securities firm or other regulated institution, or that constitutes an intangible asset, provided that, subject to such conditions as may be specified in writing by the Registrar, the Registrar may in respect of instruments that qualify as capital of any other bank, securities firm or regulated institution grant approval for a bank that actively acts as a market maker in the said instruments to include the said instruments in its trading book and calculate a capital requirement in accordance with the relevant requirements specified in these Regulations instead of deducting the said amounts from the bank's capital and reserve funds;

(iv) the bank may include in its trading book any term trading related repo-style transaction that complies with the relevant requirements specified in these Regulations in respect of trading positions, provided that-

(A) both legs of the said transaction shall be in the form of cash or securities otherwise eligible for inclusion in the bank's trading book;

(B) regardless whether the said transaction is recorded in the bank's banking book or trading book, all repo-style transactions shall be subject to the relevant requirements relating to counterparty credit risk specified in regulations 23(15) to 23(19).

(v) based on the relevant requirements specified in regulations 23(15) to 23(20) read with the relevant risk weights envisaged in regulations 23(6), 23(8), 23(11) or 23(13) the bank shall, in addition to any relevant required amount of capital and reserve funds relating to specific risk or general risk calculated in accordance with the relevant requirements specified in this regulation 28, calculate the relevant required amount of capital and reserve funds relating to counterparty credit risk arising from any relevant OTC derivative instrument, repo-style transaction or other transaction held in the bank's trading book, including any relevant credit-derivative instrument, provided that the risk weights applied by the bank in respect of the relevant exposure to counterparty credit risk shall be consistent with the risk weights applied by the bank in respect of the bank's banking book credit exposure, that is-

(A) a bank that adopted the standardised approach in order to measure the bank's exposure to credit risk in respect of any banking book exposure shall apply the relevant risk weights envisaged in the said standardised approach in order to calculate the said required amount of capital and reserve funds relating to counterparty credit risk arising from any relevant OTC derivative instrument, repo-style transaction or other transaction held in the bank's trading book;

(B) a bank that adopted the IRB approach in order to measure the bank's exposure to credit risk in respect of any banking book exposure shall apply the relevant risk weights envisaged in the said IRB approach in order to calculate the said required amount of capital and reserve funds relating to counterparty credit risk arising from any relevant OTC derivative instrument, repo-style transaction or other transaction held in the bank's trading book;

(vi) in order to ultimately calculate the bank's required capital adequacy ratio the bank shall, based on the formula specified below, convert the bank's required amount of capital and reserve funds calculated in accordance with the relevant requirements specified in this regulation 28 to the required risk-weighted exposure amount.

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

where:

RWE is the required risk-weighted exposure amount

K is the required amount of capital and reserve funds calculated in accordance with the relevant requirements specified in this regulation 28.

(4) For the measurement of a bank's exposure to market risk (position risk) as envisaged in subregulation (3), the bank shall, at the discretion of the bank, use one of the alternative methodologies specified below.

(a) The standardised approach envisaged in subregulation (7) below, which standardised approach is based on a building-block method;

(b) Subject to the bank's compliance with specified conditions and the prior written approval of the Registrar, the internal models approach envisaged in subregulation (8) below; or

(c) Subject to the bank's compliance with the conditions specified in subregulation (5) below, the prior written approval of the Registrar and such further conditions as may be specified in writing by the Registrar, a combination of the said standardised approach and internal models approach.

Provided that when a bank is unable, unwilling or unprepared to comply with the qualifying criteria specified for a particular approach for the measurement of the bank's exposure to market risk, the Registrar may in writing direct the bank to apply a different specified approach, subject to such conditions as may be specified in writing by the Registrar.

(5) *Combination of the internal models approach and the standardised approach*

When a bank adopts the internal models approach for the measurement of one or more risk categories such as interest rates, foreign exchange rates that include gold, equity prices or commodity prices, which risk categories shall include all related option volatilities, the bank shall during the time period specified in writing by the Registrar develop and implement an integrated risk measurement system that captures and measures the bank's aggregate exposure to market risk arising from all the said categories of risk, provided that-

(a) unless specified otherwise in writing by the Registrar, once a bank developed and implemented one or more internal models for the measurement of-

(i) the bank's aggregate exposure to market risk; or

(ii) a particular category of risk such as interest rates or equity exposure,

the bank shall not revert to the standardised approach specified in subregulation (7) in order to measure the bank's aggregate exposure to market risk or exposure to the said particular category of risk;

(b) in exceptional circumstances the Registrar may allow a bank to continue applying the standardised approach in respect of an insignificant risk category, such as commodities;

(c) any relevant exposure to market risk not captured by the bank's internal models shall be subject to the standardised approach specified in subregulation (7);

(d) during the period when the bank uses a combination of approaches as envisaged in this subregulation (5)-

(i) the bank shall not use a combination of the said two approaches within a particular risk category or across the bank's different risk centres in respect of the same type of risk, that is, each risk category shall be assessed using either the internal models approach or the standardised approach;

(ii) the bank shall not modify the combination of the two approaches without the prior written approval of the Registrar;

(iii) the bank shall ensure that no element of market risk escapes the bank's measurement of risk, that is, all the relevant exposures arising from all the specified risk categories, whether calculated according to the standardised approach or internal models approach, shall be captured;

(e) as a minimum, subject to any relevant requirements relating to minimum required capital and reserve funds that may be specified in or in terms of the provisions of regulation 38 of these Regulations, the bank's aggregate required amount of capital and reserve funds relating to market risk shall be equal to the sum of the amounts calculated in accordance with the relevant requirements specified in respect of the standardised approach and/or the internal models approach.

(6) A bank-

(a) shall include in the monthly form BA 320 all relevant financial instruments and positions envisaged in subregulation (3);

(b) shall include in the daily form BA 325 all financial instruments held as an open position in the bank's trading book;

(c) shall include in the monthly form BA 330, amongst other things, all financial instruments held in the bank's banking book that expose the bank to interest-rate risk;

(d) shall include in the monthly form BA 340 all equity exposures held in the bank's banking book;

(e) shall include in the monthly form BA 350 all relevant derivative instruments held in the bank's banking book or trading book;

(f) shall in the calculation of the bank's exposure to market risk and the related required amount of capital and reserve funds, from the date on which the relevant transaction was entered into, include all relevant on-balance sheet and off-balance sheet transactions, including any forward sale or purchase transaction;

(g) shall manage its exposure to market risk arising from all relevant positions held in its trading book and/ or banking book in such a manner that the bank continuously complies, that is, at the close of each business day, with the relevant prescribed minimum required amount of capital and reserve funds relating to market risk;

(h) shall have in place robust risk management policies, procedures, processes and systems in order to ensure that the bank's intraday exposures to market risk are within the approved internal limits set by the bank;

(i) shall, in order to calculate the bank's adjusted exposure in respect of any collateral held in terms of a repurchase or resale agreement, which transaction is included in the bank's trading book, apply the comprehensive approach relating to collateral, prescribed in regulation 23(9)(b);

(j) shall have in place a written board approved policy, and procedures, which policy and procedures-

(i) shall duly specify the criteria for determining which on-balance sheet items and which off-balance sheet items, or activities of the bank, are classified as part of the bank's trading book or activities, and which of the said items or activities are classified as part of the bank's banking book or activities;

(ii) shall duly specify the bank's appetite for trading, including the nature and extent of the bank's trading activities;

(iii) shall take into account the bank's risk management capabilities and practices;

(iv) shall be sufficiently robust to ensure-

(A) that any transfer of instruments, items or assets between the bank's trading book and banking book is duly documented and subject to audit verification;

(B) the bank's continued compliance with the requirements of these Regulations, including compliance with minimum required capital and reserve funds, and compliance with all the relevant requirements specified in the said board-approved policy, which compliance, amongst other things, shall be duly documented and be subject to periodic internal audit;

(v) shall specify that any transfer of instruments, items or assets between the bank's trading book and banking book shall be recorded at arms-length prices;

(vi) shall be reviewed by the bank on a regular basis but not less frequently than once a year;

(vii) shall duly specify-

(A) the extent to which an exposure can be marked-to-market on a daily basis by reference to an active liquid two-way market;

(B) the extent to which the bank is able to and required to obtain or derive valuations for exposures, which valuation can be externally validated in a consistent manner;

(C) the extent to which legal restrictions or other operational requirements may impede the bank's ability to effect an immediate liquidation of relevant exposure;

(D) the extent to which the bank is required to and able to actively manage all relevant exposures within its trading operations;

(E) the extent to which the bank may transfer risk or exposures between the banking book and trading book, and criteria for the said transfers;

(viii) shall in the case of exposures that are marked-to-model, duly specify the extent to which the bank is able-

(A) to identify the material risks relating to the relevant exposures;

(B) to hedge the material risks arising from the said exposures and the extent to which any hedging instrument would have an active, liquid two-way market;

(C) to derive reliable estimates for the key assumptions and parameters used in the bank's model;

(k) shall, based on the relevant requirements relating to financial instruments in foreign exchange or commodity positions held in the bank's trading book, calculate and maintain capital and reserve funds in respect of such financial instruments or positions held in the bank's banking book;

(l) shall implement a robust risk management framework for the prudent valuation of positions held in the bank's trading book, which risk management framework, amongst other things, shall include the key elements specified in regulation 39(13);

(m) shall whenever relevant or required for reporting or calculation purposes, unless expressly stated otherwise in this regulation 28, convert all relevant gross or net foreign exchange or gold positions at the prevailing spot exchange rate.

(7) *Method 1: standardised approach*

(a) A bank that adopts the standardised approach for the measurement of the bank's exposure to market risk, which standardised approach is based on a building-block method-

(i) shall on a daily basis and in accordance with the relevant requirements specified in this subregulation (7) separately calculate its exposure to-

(A) specific risk and general market risk arising from all relevant debt and equity positions held in the bank's trading book;

(B) foreign exchange risk arising from all relevant foreign currency and gold positions held by the bank;

(C) commodity risk arising from all relevant commodity positions held by the bank;

(D) risks arising from all relevant positions in options.

(ii) shall in order to measure the bank's exposure to price risk arising from option positions implement the more sophisticated methods specified in paragraph (f) below when the bank engages in the writing of options or when the bank conducts business in exotic options, provided that in the longer term a bank that is a significant trader in options, that is, a bank that holds unexpired positions in excess of 10 per cent of the aggregate amount of unexpired positions in the market, shall adopt and implement comprehensive value-at-risk models and shall be subject to the full range of quantitative and qualitative requirements specified in subregulation (8) below, and such further quantitative and qualitative requirements as may be specified in writing by the Registrar.

(b) Matters relating to debt securities and other interest rate related instruments

(i) Based on the relevant requirements specified in this paragraph (b), in respect of any relevant position in a debt security or interest rate instrument held by the reporting bank in its trading book, including-

(A) any fixed-rate debt security or floating-rate debt security, or similar instrument;

(B) any non-convertible preference share; and

(C) any convertible debt instrument or preference share trading in a manner similar to a debt security,

the reporting bank shall separately calculate the relevant minimum required amount of capital and reserve funds relating to specific risk and general risk.

(ii) Matters relating to specific risk

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

(A) may in the calculation of the bank's risk position offset matching positions in respect of identical instruments, including any relevant position arising from a derivative instrument, that is, even when the issuer of instruments is the same, the bank shall not offset positions arising from different issues since, for example, differences in coupon rates, liquidity or call features may cause prices to diverge in the short-term;

(B) shall in respect of any relevant net short or long position relating to a government, qualifying, specified non-qualifying or other exposure calculate the bank's capital requirement relating to specific risk in accordance with the relevant requirements specified in table 1 below:

Table 1

<table>
<tr><th>Position in respect of-</th><th colspan="7">Description of position and specific risk capital requirement</th></tr>
<tr><td rowspan="5">Government[1, 2]</td><th colspan="6">External credit assessment</th><th rowspan="4">Unrated</th></tr>
<tr><th rowspan="3">AAA to AA-</th><th colspan="3">A+ to BBB-</th><th rowspan="3">BB+ to B-</th><th rowspan="3">Below B-</th></tr>
<tr><th colspan="3">Residual term to maturity of-</th></tr>
<tr><th>Up to 6 months</th><th>More than 6 months but less than or equal to 24 months</th><th>More than 24 months</th></tr>
<tr><td>0%</td><td>0.25%</td><td>1%</td><td>1.60%</td><td>8%</td><td>12%</td><td>8%</td></tr>
<tr><td>Central government or central bank of RSA[1, 2, 3]</td><td colspan="7">0%</td></tr>
<tr><td rowspan="3">Qualifying[4]</td><th colspan="7">Residual term to maturity of-</th></tr>
<tr><th colspan="2">Up to 6 months</th><th colspan="3">More than 6 months but less than or equal to 24 months</th><th colspan="2">More than 24 months</th></tr>
<tr><td colspan="2">0.25%</td><td colspan="3">1%</td><td colspan="2">1.60%</td></tr>
<tr><td>Specified non-qualifying issuers[5]</td><th colspan="7">Capital requirement calculated in accordance with the relevant requirements specified in item (C) below</th></tr>
<tr><td rowspan="3">Other</td><th colspan="6">External credit assessment</th><th rowspan="2">Unrated</th></tr>
<tr><th colspan="3">BB+ to BB-</th><th colspan="3">Below BB-</th></tr>
<tr><td colspan="3">8%</td><td colspan="3">12%</td><td>8%</td></tr>
</table>

1. Includes forms of government that qualify for a risk weight of zero per cent in terms of the provisions of regulation 23(6).
2. Includes instruments such as bonds and treasury bills and other short-term instruments.
3. Provided that the relevant instrument is denominated, and funded by the bank, in Rand.
4. Includes-
   (a) securities issued by public sector entities and multilateral development banks;
   (b) any instrument rated investment grade, that is, a rating of BBB- or an equivalent rating, or a better rating, which rating shall be issued in respect of the relevant instrument by no less than two eligible institutions;
   (c) any instrument rated investment grade, that is, a rating of BBB- or an equivalent rating, by one eligible institution, and not less than investment grade by another eligible institution;
   (d) any unrated instrument issued by any institution rated investment grade, that is, a rating of BBB- or an equivalent rating, or a better rating, provided that the said institution shall be subject to comparable supervisory and regulatory arrangements than banks in the RSA, including, in particular, risk-based capital requirements and regulation and supervision on a consolidated basis, and the bank has no reason to suspect that the said unrated instrument is of a lesser quality than investment grade;
   (e) subject to such conditions as may be specified in writing by the Registrar, any other unrated or other instrument specified in writing by the Registrar.
5. Includes instruments issued in respect of a securitization scheme, such as a first-loss credit-enhancement facility, an unrated liquidity facility or a letter of credit.

(C) shall in the case of a securitisation or resecuritisation exposure calculate the bank's specific risk capital requirement in accordance with the relevant requirements specified in regulation 23(6)(h), 23(8)(h), 23(11) or 23(13), as the case may be, provided that-

(i) in respect of the relevant net securitization or resecuritisation position held in the bank's trading book, a bank that adopted the standardized approach for the measurement of the bank's exposure to credit risk shall in the case of a securitization or resecuritisation exposure that is externally rated calculate its capital requirement relating to specific risk in accordance with the relevant requirements specified in table 2 below:

Table 2
Specific risk capital requirement based on external rating

External credit assessment[1]	**Long-term rating**[1]				
	AAA to AA-	**A+ to A-**	**BBB+ to BBB-**	**BB+ to BB-**	**Below BB- or unrated**
Securitisation exposure	1.6%	4%	8%	28%	100%[2]
Resecuritisation exposure	3.2%	8%	18%	52%	100%[2]

External credit assessment[1]	**Short-term rating**[1]			
	A-1/ P-1	**A-2/ P-2**	**A-3/ P3**	**Below A-3/ P-3 or unrated**
Securitisation exposure	1.6%	4%	8%	100%[2]
Resecuritisation exposure	3.2%	8%	18%	100%[2]

1. **The notations used in this table relate to the ratings applied by a particular credit assessment institution. The use of the rating scale of a particular credit assessment institution does not mean that any preference is given to a particular credit assessment institution, and the assessments/ rating scales of other external credit assessment institutions, recognised as eligible institutions in South Africa, may have been used instead.**
2. **Or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds.**

(ii) in respect of the relevant net securitization or resecuritisation position held in the bank's trading book, a bank that adopted the IRB approach for the measurement of the bank's exposure to credit risk shall in the case of a rated securitization or resecuritisation exposure calculate its capital requirement relating to specific risk in accordance with the relevant requirements specified in table 3 below:

Table 3
Specific risk capital requirement based on external rating

External long-term rating[1]	Securitisation exposure			Resecuritisation exposure	
	Senior, granular position[2, 3]	Non-senior, granular[5]	Non-granular [4]	Senior[6]	Non-senior
AAA	0.56%	0.96%	1.60%	1.60%	2.40%
AA	0.64%	1.20%	2.00%	2.00%	3.20%
A+	0.80%	1.44%		2.80%	4.00%
A	0.96%	1.60%	2.80%	3.20%	5.20%
A-	1.60%	2.80%		4.80%	8.00%
BBB+	2.80%	4.00%		8.00%	12.00%
BBB	4.80%	6.00%		12.00%	18.00%
BBB-	8.00%			16.00%	28.00%
BB+	20.00%			24.00%	40.00%
BB	34.00%			40.00%	52.00%
BB-	52.00%			60.00%	68.00%
Below BB-	100%, or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds				
External short-term rating[1]	Securitisation exposure			Resecuritisation exposure	
	Senior, granular position[2, 3]	Non-senior, granular[5]	Non-granular [4]	Senior[6]	Non-senior
A-1/P-1	0.56%	0.96%	1.60%	1.60%	2.40%
A-2/P-2	0.96%	1.60%	2.80%	3.20%	5.20%
A-3/P-3	4.80%	6.00%		12.00%	18.00%
Below A-3/P-3-	100%, or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds				

1. The notations used in this table relate to the ratings used by a particular credit assessment institution. The use of the rating scale of a particular credit assessment institution does not mean that any preference is given to a particular credit assessment institution. The assessments/ rating scales of other external credit assessment institutions, recognised as eligible institutions in the RSA, may have been used instead.
2. Relates to senior positions in a securitisation scheme that consists of an effective number of underlying exposures of no less than 6, which effective number of exposures shall be calculated in accordance with the relevant requirements specified in regulation 23(11)(n), and where senior position means an effective first claim in respect of the entire amount of the assets/exposures in the underlying securitised pool. For example, in the case of-
   (a) a synthetic securitisation scheme the "super-senior" tranche shall be treated as a senior position, provided that the bank complies with the relevant conditions specified in regulation 23(11)(f) to infer a rating from a lower tranche.
   (b) a traditional securitisation scheme, in which scheme all tranches above the first-loss position are rated, the highest rated position shall be treated as a senior position, provided that when several tranches share the same rating the most senior position in the waterfall of payment shall be treated as the senior position.
3. Including eligible senior exposures that comply with the relevant requirements specified in regulations 23(11)(g) and 23(11)(h) relating to the internal assessment approach.
4. Relates to a senior position in a securitisation scheme in which the effective number of underlying exposures, calculated in accordance with the relevant requirements specified in regulation 23(11)(n), is less than 6.
5. Relates to all positions other than a senior position, such as a position/facility that, in economic substance, constitutes a mezzanine position and not a senior position in respect of the underlying pool.
6. Means a resecuritisation exposure that is a senior position and none of the underlying exposures are resecuritisation exposures, that is, any resecuritisation exposure in respect of which the underlying exposure includes a resecuritisation exposure shall be categorised as a non-senior resecuritisation position or exposure.

(iii) subject to any conditions specified in writing by the Registrar, in respect of an unrated position-

(aa) a bank that obtained the approval of the Registrar to apply the IRB approach for the relevant asset classes related to the underlying exposures, may apply the standard formula approach specified in regulation 23(11)(i), provided that, when estimating the relevant PDs and LGDs for the calculation of K_{IRB}, the bank shall comply with the relevant minimum requirements related to the IRB approach;

(bb) to the extent that the bank obtained the approval of the Registrar to apply the bank's internally developed VaR model that incorporates specific risk related to the underlying exposures, as envisaged in regulation 28(8)(h) of these Regulations, and the bank derives estimates for PDs and LGDs from the said internally developed VaR model, the bank may use the aforesaid estimates for the calculation of K_{IRB}, and consequently for applying the standard formula approach;

(cc) other than the unrated positions specifically referred to above, the bank shall calculate the relevant required amount of capital and reserve funds related to specific risk as follows:

(i) multiply the weighted average risk weight that would be applied to the securitised exposures under the standardised approach with eight per cent; and

(ii) multiply the aforesaid product, calculated in accordance with the provisions of sub-item (i) above, with a concentration ratio, which concentration ratio shall be calculated as the sum of the nominal or notional amounts of all the relevant tranches divided by the sum of the nominal or notional amounts of the tranches junior to or ranking *pari passu* with the tranche in which the position is held, including that tranche itself, provided that when the said concentration ratio is equal to 12.5, or higher, the bank shall assign to the relevant position a risk weight of 1250 per cent or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds;

Provided that the bank's required amount of capital and reserve funds related to specific risk in respect of an unrated position shall in no case be lower than the specific risk capital requirement related to a rated more senior tranche. When the bank is unable to determine the specific risk capital requirement as described hereinbefore or prefers not to apply the treatment specified above, the bank shall deduct from its common equity tier 1 capital and reserve funds the relevant amount of the unrated position.

(iv) during such transition period as may be directed by the Registrar in writing, in respect of any relevant securitisation position not included in the bank's correlation trading portfolio, a bank's required amount of capital and reserve funds for specific risk arising from securitisation positions held in the bank's trading book shall be calculated separately from the bank's relevant required amount of capital and reserve funds related to its correlation trading portfolio, and shall be the higher of-

(aa) the bank's total required amount of capital and reserve funds for specific risk arising from the bank's relevant net long securitisation positions held in the trading book; or

(bb) the bank's total required amount of capital and reserve funds for specific risk arising from the bank's relevant net short securitisation positions held in the trading book;

(v) any position risk weighted at 1250 per cent or such imputed percentage that will effectively result in an amount equivalent to a deduction against capital and reserve funds, or deducted from capital and reserve funds, in accordance with the provisions of subitems (i) to (iii) of this item (C), may be excluded from the bank's calculation of its required amount of capital and reserve funds for general market risk, irrespective whether the bank applies the standardised measurement method or internal models method;

(vi) in respect of the bank's correlation trading portfolio, the bank shall calculate its specific risk capital requirement in accordance with the relevant requirements specified in item (F) below;

(D) shall in respect of any relevant position hedged by a credit-derivative instrument, other than an n-th-to-default credit derivative instrument, calculate the bank's specific risk capital requirement in accordance with the relevant requirements specified in this item (D), provided that in the case of an n-th-to-default credit derivative instrument the bank shall calculate its specific risk capital requirement in accordance with the relevant requirements specified in item (E) below.

When-

(i) the values of the relevant long leg and short leg always move in opposite directions, and materially to the same extent, that is, when-

(aa) the two legs consist of identical instruments, or

(bb) a long cash position is hedged by a total return swap, or *vice versa*, and an exact match exists between the reference obligation and the underlying exposure, that is, the cash position, irrespective whether or not the maturity of the said swap contract differs from the maturity of the relevant underlying exposure,

the reporting bank may fully offset the two sides of the position, that is, the reporting bank shall be exempted from any specific risk capital requirement in respect of the said hedged position.

(ii) the values of the relevant long leg and short leg always move in opposite directions, but not to the same extent, that is, when a long cash position is hedged by a credit default swap or credit linked note, or *vice versa*, and in all cases an exact match exists in respect of the reference obligation, the maturity of the reference obligation and the credit derivative instrument, and the currency to the underlying exposure, the reporting bank may apply an eighty per cent specific risk offset in respect of the side of the transaction with the higher capital requirement, and a specific risk requirement of zero in respect of the other leg, provided that-

(aa) the key features of the credit derivative contract, such as the credit event definitions and settlement mechanism, shall not cause the price movement of the credit derivative instrument materially to deviate from the price movement of the cash position; and

(bb) based on matters such as restrictive payout provisions, such as fixed payouts and materiality thresholds, the transaction shall materially transfer risk.

(iii) the values of the relevant long leg and short leg usually move in the opposite direction, that is-

(aa) a long cash position is hedged by a total return swap, or *vice versa*, as envisaged in sub-item (i) above, but an asset mismatch exists between the reference obligation and the underlying exposure, and the requirements relating to an asset mismatch specified in regulation 23(9)(d)(xi)(B)(xviii) are met;

(bb) the relevant two legs relate to identical instruments as envisaged in sub-item (i) above but a currency or maturity mismatch exists between the credit protection and the underlying asset;

(cc) the relevant positions meet the relevant requirements specified in sub-item (ii) above except that a currency or maturity mismatch exists between the credit protection and the underlying asset; or

(dd) the relevant positions meet the relevant requirements specified in sub-item (ii) above but an asset mismatch exists between the cash position and the credit derivative instrument, and the underlying asset is included in the deliverable obligations in terms of the credit derivative documentation,

the reporting bank shall calculate and maintain a capital requirement only in respect of the side of the transaction with the highest capital requirement, that is, instead of adding the specific risk capital requirements for each side of the relevant transaction in respect of the credit protection and the underlying asset the reporting bank shall calculate and maintain a capital requirement only in respect of the side of the transaction that requires the highest capital requirement.

(iv) the relevant hedged position relates to a position other than the positions envisaged in sub-items (i) to (iii) above, the reporting bank shall calculate and maintain a capital requirement in respect of both sides of the relevant transaction;

(E) shall in the case of an n-th-to-default credit derivative instrument, that is, a contract or instrument in respect of which the payment or payoff is based on the n-th asset to default in the basket of underlying reference assets or instruments, calculate the bank's specific risk capital requirement in accordance with the relevant requirements specified in this item (E).

The bank's capital requirement for specific risk shall in the case of a first-to-default credit derivative instrument be the lesser of the sum of the specific risk capital requirements for the individual reference assets or credit instruments in the basket, or the maximum possible credit event payment in terms of the contract, provided that-

(i) when the bank has a risk position in one of the reference assets or credit instruments underlying the first-to-default credit derivative instrument, and the said credit derivative instrument hedges the bank's risk position, the bank may reduce both the capital requirement for specific risk for the relevant reference asset or credit instrument and that part of the capital requirement for specific risk for the credit derivative instrument that relates to the particular reference credit instrument, provided that when the bank has multiple risk positions in reference assets or credit instruments underlying a first-to-default credit derivative instrument the offset shall be allowed only in respect of the underlying asset or reference credit instrument with the lowest specific risk capital requirement;

(ii) when "n" is greater than one, the bank's capital requirement for specific risk shall be the lesser of the sum of the specific risk capital requirements for the individual reference assets or credit instruments in the basket, but disregarding the "n-1" obligations with the lowest specific risk capital requirement, or the maximum possible credit event payment in terms of the contract, provided that in the case of n-th-to-default credit derivative instruments where "n" is greater than 1 no offset of the capital requirement for specific risk with any underlying reference asset or credit instrument shall be allowed;

(iii) when a first or other n-th-to-default credit derivative instrument is externally rated, a bank that acts as a protection seller shall calculate its specific risk capital requirement based on the said rating issued in respect of the derivative instrument and the relevant securitisation risk weights specified in item (C) above;

(iv) the capital requirement shall apply in respect of each net n-th-to-default credit derivative position, irrespective whether the bank has a long position or short position, that is, irrespective whether the bank obtains or provides protection;

(F) shall in respect of the bank's correlation trading portfolio calculate its relevant required amount of capital and reserve funds for specific risk in accordance with the relevant requirements specified in this item (F).

The-

(i) bank shall separately calculate the relevant required amount of capital and reserve funds related to specific risk in respect of its net long positions, that is, based on its net long correlation trading exposures combined;

(ii) bank shall separately calculate the relevant required amount of capital and reserve funds related to specific risk in respect of its net short positions, that is, based on its net short correlation trading exposures combined;

(iii) bank's required amount of capital and reserve funds for specific risk in respect of its correlation trading portfolio shall be the higher amount of sub-item (i) or sub-item (ii), of this item (F).

Provided that a bank may limit the required amount of capital and reserve funds in respect of any relevant individual position in a credit derivative or securitisation instrument to the maximum possible loss, that is-

(A) a bank shall calculate a maximum possible loss amount for each relevant individual position;

(B) in the case of a short risk position the limit may be calculated as a change in value due to the underlying names immediately becoming default risk-free;

(C) in the case of a long risk position, the maximum possible loss amount may be calculated as the change in value in the event that all the underlying names were to default with a zero or no recovery.

(iii) Matters relating to general risk

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

(i) may in order to calculate the bank's general risk requirement, at the discretion of the bank, apply either the maturity method prescribed in item (B) below or duration method prescribed in item (C) below;

(ii) shall apply a separate maturity ladder in respect of each relevant currency, provided that subject to the approval of and such conditions as may be specified in writing by the Registrar the reporting bank may apply a single maturity ladder in respect of currencies in which the bank's business is insignificant in which case the reporting bank shall within each relevant time band-

(aa) assign the relevant net long or short position in respect of each relevant currency;

(bb) in order to calculate the bank's relevant gross position, irrespective whether or not a net position is long or short, aggregate the relevant net long positions and relevant net short positions;

(iii) shall in respect of each relevant currency separately calculate the bank's relevant required amount of capital and reserve funds;

(iv) shall, unless specifically otherwise provided in this regulation 28, base its calculation of the required amount of capital and reserve funds on the absolute amount of all relevant calculated positions, that is, unless specifically otherwise provided the reporting bank shall not apply offsetting between calculated positions or requirements of opposite sign, provided that in respect of any debt instrument with a high yield to redemption the Registrar may disallow offsetting of the relevant position against other relevant positions even when provision is otherwise made in terms of these Regulations for the bank to offset the said positions;

(v) shall in the case of a credit-default swap include any relevant periodic premium or interest payment due as a notional position in a government bond with the relevant fixed or floating rate;

(vi) shall in the case of a total return swap contract include the relevant interest rate legs of the contract as a notional short or long position, as the case may be;

(vii) shall in the case of a credit-linked note in terms of which the bank acts as a protection provider include in its measurement system the relevant coupon or interest rate exposure of the said note;

(viii) shall in accordance with the relevant requirements specified in items (B) or (C) below calculate and maintain a capital requirement in respect of general risk equal to the sum of the specified requirements relating to-

(aa) the relevant net short or long position in respect of the bank's entire trading book;

(bb) the relevant portion in respect of the specified offsetting positions within each relevant time-band;

(cc) the relevant portion in respect of the specified offsetting positions across different time-bands;

(dd) the relevant net requirement in respect of specified positions in options.

(B) Maturity method

A bank that adopted the maturity method for the measurement of the bank's exposure to general risk-

(i) shall assign to the relevant maturity band specified in the maturity ladder specified in table 4 below the relevant actual or notional amount relating to each relevant long or short position in a debt security or other instrument of interest rate exposure held in the reporting bank's trading book, including any relevant derivative instrument, provided that the bank may omit from the said interest rate maturity framework opposite positions of the same amount and in respect of the same issue, but not in respect of different issues by the same issuer.

Table 4
Maturity method: time bands and weights[1, 2]

Time zone	Coupon equal to or more than 3%	Coupon less than 3%[3]	Risk weight (%)	Assumed change in yield
	Maturity band			
1	0 ≤ 1 month	0 ≤ 1 month	0.00	1.00
	> 1 ≤ 3 months	> 1 ≤ 3 months	0.20	1.00
	> 3 ≤ 6 months	> 3 ≤ 6 months	0.40	1.00
	> 6 ≤ 12 months	> 6 ≤ 12 months	0.70	1.00
2	> 1 ≤ 2 years	> 1.0 ≤ 1.9 years	1.25	0.90
	> 2 ≤ 3 years	> 1.9 ≤ 2.8 years	1.75	0.80
	> 3 ≤ 4 years	> 2.8 ≤ 3.6 years	2.25	0.75
3	> 4 ≤ 5 years	> 3.6 ≤ 4.3 years	2.75	0.75
	> 5 ≤ 7 years	> 4.3 ≤ 5.7 years	3.25	0.70
	> 7 ≤ 10 years	> 5.7 ≤ 7.3 years	3.75	0.65
	> 10 ≤ 15 years	> 7.3 ≤ 9.3 years	4.50	0.60
	> 15 ≤ 20 years	> 9.3 ≤ 10.6 years	5.25	0.60
	> 20 years	> 10.6 ≤ 12.0 years	6.00	0.60
		> 12.0 ≤ 20.0 years	8.00	0.60
		> 20 years	12.50	0.60

1. **Based on the residual term to maturity the bank shall assign to the relevant time band the relevant position arising from any fixed rate instrument.**
2. **Based on the residual term to the next repricing date the bank shall assign to the relevant time band the relevant position arising from any floating-rate instrument.**
3. **Including any zero-coupon bond or deep-discount bond.**

(ii) shall, based on the relevant weights specified in table 4 above, which weights reflect the price sensitivity of all relevant positions to assumed changes in interest rates, weight all relevant positions assigned by the bank to the relevant maturity band;

(iii) shall in order to determine a single short or long position in respect of each specified maturity band offset the weighted long positions and weighted short positions within the said maturity band;

(iv) shall in respect of the lower aggregate amount of the relevant long or short positions in a particular maturity band calculate a 10 per cent capital requirement in order to reflect basis risk and gap risk since each relevant maturity band will include different instruments and different maturities. For example, when the sum of the weighted long positions in a particular time band is equal to R100 million and the sum of the weighted short positions in the said time band is equal to R90 million, the deemed amount in respect of vertical disallowance for the particular time band shall be equal to 10 per cent of R90 million, that is, R9.0 million;

(v) shall offset the relevant net positions **within** each of the relevant three time zones specified in table 4 above, and subsequently offset the relevant calculated net positions **between** the three different time zones specified in table 4 above, provided that the said offsetting of net positions shall be subject to a scale of disallowances, which disallowance factors are specified in table 5 below and are expressed as a fraction of the relevant calculated matched and unmatched positions, that is, the reporting bank shall offset the weighted long positions and weighted short positions **within** each of the three specified time zones and subsequently offset the residual net position in each relevant time zone against opposite positions in the other time zones, provided that the said offsetting of positions within and between the relevant time zones shall be subject to the disallowance factors specified in table 5 below, which disallowance factors shall constitute a separate component of the reporting bank's required amount of capital and reserve funds.

Table 5
Horizontal disallowances

Time zone[1]	Disallowance factor within the relevant time zone	Disallowance factor between adjacent time zone	Disallowance factor between time zones 1 and 3
1	40%		
		40%	
2	30%		100%
		40%	
3	30%		

1. Based on the maturity bands specified in table 4 above.

(vi) shall maintain a capital requirement equal to 100 per cent of any residual position not subject to any form of offsetting as envisaged in sub-items (iii) to (v) above, provided that subject to such conditions as may be specified in writing by the Registrar, the Registrar may for purposes of calculating a bank's exposure to general risk disallow the said reporting bank to offset certain positions relating to high yield instruments against any other debt instruments;

(vii) shall in the case of residual currencies as envisaged in item (A)(ii) above apply the risk weights specified in table 4 above in respect of the gross positions calculated in respect of each relevant time band, with no further offsets;

(viii) shall maintain an aggregate capital requirement in respect of the maturity method equal to the sum of the relevant amounts specified in this item (B).

(C) Duration method

A bank that wishes to adopt the duration method for the measurement of the bank's exposure to general risk, which method provides a more accurate measure of the bank's exposure to general risk than the maturity method due to the separate measurement of the price sensitivity of each relevant position-

(i) shall obtain the prior written approval of the Registrar and at all times, in addition to the relevant requirements specified in this paragraph (b), comply with such requirements as may be specified in writing by the Registrar;

(ii) shall, based on-

(aa) the maturity of each relevant instrument;

(bb) the relevant requirements specified in table 6 below; and

(cc) the relevant requirements specified in this item (C),

separately measure the price sensitivity of each relevant instrument in terms of a change in interest rates of between 0.6 and 1.0 percentage points.

Table 6
Duration method: time bands and assumed changes in yield

Time zone	Duration	Assumed change in yield
1	0 ≤ 1 month	1,00
	> 1 ≤ 3 months	1,00
	> 3 ≤ 6 months	1,00
	> 6 ≤ 12 months	1,00
2	> 1,0 ≤ 1,9 years	0,90
	> 1,9 ≤ 2,8 years	0,80
	> 2,8 ≤ 3,6 years	0,75
3	> 3,6 ≤ 4,3 years	0,75
	> 4,3 ≤ 5,7 years	0,70
	> 5,7 ≤ 7,3 years	0,65
	> 7,3 ≤ 9,3 years	0,60
	> 9,3 ≤ 10,6 years	0,60
	> 10,6 ≤ 12,0 years	0,60
	> 12,0 ≤ 20,0 years	0,60
	> 20 years	0,60

(iii) shall assign to the relevant time band specified in the duration-based ladder specified in table 6 above the calculated sensitivity measure of the relevant instrument or position;

(iv) shall in a manner similar to the method specified in item (B)(iv) above, in order to capture basis risk in respect of the relevant long positions and short position **within** each relevant time band, calculate and maintain a 5 per cent capital requirement, which capital requirement shall constitute the vertical disallowance component;

(v) shall subsequently carry forward the relevant net position in each relevant time band and offset the said net positions **within** and **between** the relevant time zones in accordance with and subject to the relevant requirements and horizontal disallowance factors specified in item (B)(v) and in table 5 above;

(vi) shall maintain a capital requirement equal to 100 per cent of any residual position not subject to any form of offsetting as envisaged in sub-items (iv) and (v) above, provided that subject to such conditions as may be specified in writing by the Registrar, the Registrar may for purposes of calculating a bank's exposure to general risk disallow the said reporting bank to offset certain positions relating to high yield instruments against any other debt instruments;

(vii) shall in the case of residual currencies as envisaged in item (A)(ii) above apply the assumed change in yield specified in table 6 above in respect of the gross positions calculated in respect of each relevant time band, with no further offsets.

(iv) Matters relating to interest rate derivative instruments

(A) Irrespective of the measurement system adopted by the reporting bank for the measurement of the bank's exposure to market risk the bank shall include in its calculation of market risk exposure all interest rate derivative instruments and off-balance sheet instruments that respond to changes in interest rates, which instruments are held by the bank in its trading book, including any forward rate agreement, any other forward contract, any bond future, any interest rate or cross-currency swap contract or any forward foreign exchange position, provided that the reporting bank-

(i) shall calculate all relevant positions in accordance with the relevant requirements specified in item (B) below;

(ii) shall calculate all relevant capital requirements relating to derivative instruments in accordance with the relevant requirements specified in item (C) below.

(B) Matters relating to the calculation of positions in interest rate derivative instruments

A bank that adopted the standardised method for the measurement of the bank's exposure to market risk shall convert all relevant transactions in derivative instruments into positions in the relevant underlying instrument and calculate the relevant specific risk and general risk requirements in accordance with the relevant requirements specified in this paragraph (b), provided that-

(i) the bank shall base all relevant calculations on the market value of the principal amount relating to the relevant underlying or notional underlying;

(ii) in the case of any instrument in respect of which the notional amount differs from the effective notional amount, the bank shall use the effective notional amount;

(iii) in the case of any future contract on a corporate bond index, the bank shall include the relevant positions at the market value of the notional underlying portfolio of securities;

(iv) in the case of any future or forward contract, including any forward rate agreement, the bank shall treat the contract as a combination of a long position and a short position in a notional government security, provided that the maturity of the said future or forward rate agreement shall be the period until delivery or exercise of the contract plus the life of the underlying instrument when relevant. For example, a long position in a June three month interest rate future, which contract is concluded in April, shall be reported as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months.

When a range of deliverable instruments may be delivered to fulfil the relevant requirements of a contract, the bank may decide which deliverable security should be included in the maturity or duration ladder, provided that the bank shall take into consideration any conversion factor defined by the relevant exchange.

(v) in the case of any swap contract the bank shall treat the relevant positions as two notional positions in government securities with relevant maturities. For example, an interest rate swap contract in terms of which the reporting bank receives floating rate interest and pays fixed interest shall be treated as a long position in a floating rate instrument of maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument of maturity equivalent to the residual life of the swap contract;

(vi) in the case of a swap contract that pays or receives a fixed or floating interest rate against some other reference price, such as a stock index, the bank shall include the interest rate component in the relevant repricing maturity category, with the equity component being included in the equity framework in accordance with the relevant requirements specified in paragraph (c) below;

(vii) in the case of a cross-currency swap contract the bank shall report the relevant separate legs of the contract in the relevant maturity ladders relating to the currencies concerned.

(C) Matters relating to the calculation of capital requirements relating to positions in interest rate derivative instruments

In respect of specific risk and general risk a bank may exclude from the relevant interest rate maturity framework long positions and short positions, irrespective whether the said positions are actual or notional positions, in respect of identical instruments issued by the same issuer and which instruments have the same coupon and maturity and are denominated in the same currency, including any matched position in respect of a future or forward and its corresponding underlying, provided that-

(i) in the case of a future contract the bank shall report the relevant leg that represents the time to expiry of the said future contract;

(ii) when the future or forward contract comprises a range of deliverable instruments the reporting bank shall only offset positions in the said future or forward contract and its relevant underlying when a readily identifiable underlying security that is most profitable for the person with the short position to deliver, exists, the price of which security, often referred to as the "cheapest-to-deliver", and the price of the said future or forward contract are likely to move in close alignment;

(iii) the reporting bank shall in no case apply offsetting between positions in different currencies, that is, the reporting bank shall include in the relevant calculation of each currency the relevant separate legs relating to any cross-currency swap or forward foreign exchange contract, which legs shall be recorded as notional positions in the relevant instruments;

(iv) the reporting bank may fully offset opposite positions in the same category of instruments, including the relevant delta-equivalent value in respect of options, provided that the said positions shall relate to the same underlying instruments, be of the same nominal value and be denominated in the same currency, and in the case of-

(aa) any future contract the offsetting positions in the notional or underlying instruments to which the future contract relates shall be for identical products and mature within seven days of each other;

(bb) any floating rate position arising from a swap or FRA contract the reference rate shall be identical and the coupon shall be closely matched, that is, the coupon shall be within 15 basis points;

(cc) any swap, FRA or forward contract, the next interest fixing date or, in the case of any fixed coupon position or forward, the residual maturity-

(i) shall be the same day for positions less than one month hence;

(ii) shall be within seven days for positions between one month and one year hence;

(iii) shall be within thirty days for positions over one year hence;

(v) subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank with a large swap book may use alternative formulae in order to calculate the swap positions to be included in the relevant maturity or duration ladder specified in this paragraph (b), provided that-

(aa) all relevant positions shall be denominated in the same currency;

(bb) the calculated positions shall fully reflect the sensitivity of the cash flows to interest rate changes; and

(cc) the reporting bank shall capture all relevant calculated positions in the appropriate time bands.

For example, a bank may first convert the payments required by the swap into the respective present values by discounting each payment using zero coupon yields, in which case, based on the relevant requirements, general risk framework and time band specified above, the bank shall capture a single net amount relating to the present value of the cash flows in the appropriate time band by applying the relevant procedures that apply to zero or low coupon bonds. Alternatively the reporting bank may calculate the sensitivity of the net present value implied by the change in yield specified in the maturity or duration method and allocate the said sensitivity measures into the relevant time bands specified in this paragraph (b).

(vi) in the case of any interest rate or currency swap, FRA, forward foreign exchange contract, interest rate future or future on an interest rate index such as JIBAR, no specific risk requirement shall apply;

(vii) in the case of any future contract in respect of which the underlying instrument is a debt security, or an index representing a basket of debt securities, the reporting bank shall, based on the credit risk of the issuer and the relevant requirements specified in this paragraph (b), calculate the relevant specific risk requirement;

(viii) subject to the specific exemptions specified in this item (C), based on the relevant requirements specified in this paragraph (b), the reporting bank shall calculate a general risk requirement in respect of all relevant positions in derivative instruments, in a manner similar to any cash position.

(c) Matters relating to equity instruments and equity position risk

(i) Based on the relevant requirements specified in this paragraph (c), in respect of any relevant long or short equity position held by the reporting bank in its trading book-

(A) including-

(i) any instrument that exhibits market behaviour similar to equities;

(ii) any ordinary shares, irrespective whether or not the said shares have voting rights attached to them;

(iii) any commitment to buy or sell equity securities;

(iv) any convertible instrument that trades in a manner similar to an equity instrument,

(B) excluding non-convertible preference shares, which preference shares are subject to the requirements specified in paragraph (b) above,

the reporting bank shall separately calculate the relevant minimum required amount of capital and reserve funds relating to specific risk and general risk, provided that, unless specifically otherwise provided in this paragraph (c), the bank may report long positions and short positions in respect of the same issue on a net basis.

(ii) Matters relating to specific risk

In respect of a bank's gross equity positions, that is, the sum of all relevant long equity positions **and** all relevant short equity positions, held in the bank's trading book, a bank that adopted the standardised approach for the measurement of the bank's exposure to market risk shall on a market by market basis, that is, in respect of each relevant national market or currency in which the reporting bank holds equities, calculate and maintain a minimum required amount of capital and reserve funds relating to specific risk, which required amount of capital and reserve funds-

(A) shall in the case of a less liquid equity portfolio that complies with such requirements or criteria as may be specified in writing by the Registrar be equal to twelve per cent of the said gross equity position;

(B) shall in all other cases be equal to eight per cent of the said gross equity position.

(iii) Matters relating to general risk

In respect of a bank's net position in a specific equity market or equity index, that is, the **difference** between the sum of all relevant long equity positions and the sum of all relevant short equity positions in a particular national equity market or equity index, held in the bank's trading book, a bank that adopted the standardised approach for the measurement of the bank's exposure to market risk shall calculate and maintain a minimum required amount of capital and reserve funds relating to general risk equal to eight per cent of the said net equity position.

(iv) Matters relating to equity derivative instruments

A bank that adopted the standardised approach for the measurement of the bank's exposure to market risk shall include in its measurement system all equity derivative instruments and off-balance sheet positions that are affected by changes in equity prices, including any future or swap contract on individual equities or stock indices, provided that-

(A) the bank shall measure and report any equity position arising from an option contract in accordance with the relevant requirements specified in paragraph (f) below instead of in accordance with the requirements specified in this paragraph (c);

(B) the reporting bank shall convert all relevant derivative positions into notional equity positions in the relevant underlying instruments;

(C) when equities form part of a forward contract, a future contract or an option contract, irrespective whether equities are to be received or delivered, the reporting bank shall report the relevant leg of the contract that relates to any interest rate or foreign currency exposure in accordance with the relevant requirements specified in this subregulation (7);

(D) the reporting bank shall report any future or forward contract relating to an individual equity at the current market price;

(E) the reporting bank shall report futures relating to stock indices as the marked-to-market value of the relevant notional underlying equity portfolio;

(F) the reporting bank shall treat any equity swap contract as two notional positions.

For example, the bank shall treat an equity swap contract in terms of which the bank receives an amount based on the change in value of one particular equity or stock index and pays a different index as a long position in the former and a short position in the latter.

When one of the legs involves receiving/paying a fixed or floating interest rate, the bank shall report the relevant exposure in accordance with the relevant requirements for interest rate related instruments specified in paragraph (b) above.

(G) the reporting bank shall either “carve out” any equity option or stock index option with its associated underlying or, based on the relevant requirements of the delta-plus method specified in paragraph (f)(iii) below, incorporate the relevant position in the measure of general market risk.

(v) Matters relating to the calculation of minimum required capital and reserve funds

In calculating its minimum required amount of capital and reserve funds relating to specific risk and general risk, a bank that adopted the standardised approach for the measurement of the bank’s exposure to market risk may fully offset matched positions in respect of each identical equity or stock index in each relevant market in order to obtain a single net short or long position to which the bank shall apply the relevant requirements specified for specific risk and general market risk, that is, the bank, for example, may fully offset a future in a particular equity instrument against an opposite cash position in the same equity instrument, provided that-

(A) the bank shall report any related interest rate risk arising from a derivative contract in accordance with the relevant requirements specified in paragraph (b);

(B) the bank shall in respect of any relevant net long or short position relating to an index contract-

(i) comprising a well-diversified portfolio of equities that complies with such requirements and criteria as may be specified in writing by the Registrar, in addition to the relevant requirement relating to general market risk specified above, apply a further capital requirement equal to two per cent of the said net long or short position;

(ii) other than an index contract comprising a well-diversified portfolio of equities as envisaged in sub-item (i), in addition to the relevant requirement relating to general market risk, apply a further capital requirement equal to four per cent of the said net long or short position,

which capital requirement shall be deemed to make provision for factors such as execution risk,

(C) when the reporting bank implements a futures related arbitrage strategy, that is, when the bank-

(i) enters into an opposite position in exactly the same index at different dates, or in different market centres; or

(ii) established an opposite position in contracts at the same date in different but similar indices, and the two indices contain sufficient common components that justify offsetting,

the bank may apply the additional two per cent and four per cent capital requirements specified in item (B) only to one index, that is, the opposite position shall be exempted from a capital requirement;

(D) when the bank implements an arbitrage strategy, in terms of which strategy a futures contract on a broadly-based index matches a basket of instruments, the bank may "carve out" both positions from the standardised method and apply a minimum capital requirement equal to four per cent, that is, two per cent of the gross value of positions on each side in order to reflect divergence and execution risks, even when all instruments comprising the index are held in identical proportions, provided that-

(i) the bank shall deliberately enter into and separately control the relevant exposure;

(ii) the composition of the basket of instruments shall represent at least 90 per cent of the index when broken down into its notional components;

(iii) the bank shall treat any excess value of the instruments comprising the basket over the value of the futures contract or excess value of the futures contract over the value of the basket as an open long or short position;

(E) the bank also may offset the relevant position when the bank establishes a position in depository receipts against an opposite position in the underlying equity or identical equities in different markets, provided that the bank-

(i) shall fully take into account any relevant costs on conversion;

(ii) shall report any foreign exchange risk arising from the relevant positions in accordance with the relevant requirements specified in paragraph (d) below.

(d) Matters relating to foreign exchange risk, including gold

(i) Based on the relevant requirements specified in this paragraph (d), a bank that adopted the standardised approach for the measurement of the bank's exposure to market risk shall in the calculation of the bank's minimum required amount of capital and reserve funds relating to foreign exchange risk, including gold, separately calculate-

(A) the bank's exposure in respect of each relevant single foreign currency;

(B) the risks inherent in the bank's mix of all relevant long and short positions in different foreign currencies.

(ii) Matters relating to exposure in each single foreign currency

In respect of each relevant foreign currency, a bank that adopted the standardised approach for the measurement of the bank's exposure to market risk shall calculate its net open foreign-currency position as the sum of-

(A) the bank's net spot position, that is, all relevant asset items less all relevant liability items, including any relevant amount of accrued interest;

(B) the bank's net forward position, that is, all relevant amounts to be received less all relevant amounts to be paid in respect of any forward foreign exchange transaction or futures transaction, including any currency future and the principal amount relating to a currency swap not included in the spot position;

(C) any relevant guarantee or similar instrument that is certain to be called, and is likely to be irrecoverable;

(D) any net future income/expense not yet accrued but already fully hedged;

(E) any other relevant item representing a profit or loss in foreign currency;

(F) the net delta equivalent value relating to all relevant foreign currency and gold options, provided that the reporting bank shall either separately calculate the relevant minimum required amount of capital and reserve funds in respect of gamma risk and vega risk in accordance with the relevant requirements specified in the delta-plus approach in paragraph (f)(iii) below or calculate the relevant capital requirements relating to option contracts and their underlying instruments in accordance with one of the other methods and its related requirements specified in paragraph (f) below.

Provided that-

(i) the bank shall separately report all relevant positions in composite currencies, provided that, in order to measure the reporting banks' open foreign-currency position, the bank may either treat the said currencies as a currency in its own right or split the said currency into its component parts;

(ii) the bank shall separately report any relevant position in gold;

(iii) when gold forms part of a forward contract, the bank shall report any relevant interest rate or foreign currency exposure arising from the other leg of the contract in accordance with the relevant requirements specified in this subregulation (7);

(iv) the bank may treat as a single currency any currency pair that is subject to a legally enforceable inter-governmental agreement in terms of which the respective currencies are linked;

(v) the reporting bank shall include as a position any accrued interest, that is, interest earned but not yet received, or accrued expenses;

(vi) the reporting bank may exclude from its calculation any unearned but expected future interest and anticipated expenses unless the said amounts are certain and the bank has entered into a hedge in respect of the said interest or expense item, provided that when the bank includes in its calculation any future income or expense as envisaged in this sub-item (vi) the bank shall consistently include the said amounts in all relevant calculations and not selectively include only expected future flows that reduce the bank's foreign-currency position;

(vii) in respect of any relevant forward currency or gold position the reporting bank shall value the said position based on current spot market exchange rates instead of forward exchange rates, provided that when the bank reports in its management accounts the net present values of the said forward positions the bank shall use the said net present value in respect of each relevant forward or gold position, which positions shall be discounted using current interest rates and valued based on current spot rates in order to measure the bank's forward currency or gold position;

(viii) subject to the prior written approval of and such further conditions as may be specified in writing by the Registrar, the bank may exclude from the calculation of its net open foreign-currency positions any structural positions deliberately taken by the bank solely to hedge the bank's capital base against the adverse effects of exchange rate movements, provided that-

(aa) the said positions shall be of a structural nature, that is, of a non-trading nature;

(bb) during the remaining life of the relevant assets or other items, the bank shall treat the relevant hedge in a consistent manner;

(ix) the bank may exclude from its relevant calculation of minimum required capital and reserve funds relating to foreign exchange risk items such as investments in non-consolidated subsidiaries, which investments constitute impairments against the bank's capital and reserve funds;

(x) subject to the prior written approval of and such further conditions as may be specified in writing by the Registrar, the bank may exclude from its relevant calculation of minimum required capital and reserve funds relating to foreign exchange long-term participations denominated in foreign currency, which participations-

(aa) are reported in the bank's published accounts at historic cost;

(bb) shall be deemed to constitute a structural position.

(iii) Matters relating to a portfolio of foreign currency positions, and gold

In order to measure a bank's exposure to foreign exchange risk arising from a portfolio of foreign currency positions, and gold, the bank may either apply the shorthand method specified in this subparagraph (iii), in terms of which shorthand method all relevant currencies are treated in an equal manner, or the internal models approach specified in subregulation (8) below, which internal models approach, based on the composition of the bank's portfolio of foreign currency and gold positions, takes into account the bank's actual degree of foreign exchange risk, provided that-

(A) when the reporting bank adopts the shorthand method-

(i) the bank shall convert into Rand, at the relevant spot rates, the relevant nominal amount or net present value, as the case may be, of the net position calculated in respect of each relevant foreign currency, and gold;

(ii) the bank's overall net open foreign-currency position shall be deemed to be equal to-

(aa) the greater of the sum of the bank's net short positions or the sum of the bank's net long positions; **plus**

(bb) the bank's net absolute position in gold, that is, the bank's net position in gold irrespective whether the said net position is a long or short position;

(iii) the bank's required amount of capital and reserve funds shall be equal to eight per cent of the overall net open foreign-currency position calculated in accordance with the requirements specified in sub-item (ii) above;

(B) subject to the prior written approval of and such further conditions as may be specified in writing by the Registrar a bank doing negligible business in foreign currency and which does not take foreign exchange positions for its own account may be exempted from the capital requirements specified in this paragraph (d) in respect of the said foreign exchange positions, provided that-

(i) the sum of the bank's gross long positions and gross short positions in all relevant foreign currencies shall at no time exceed 100 per cent of the bank's allocated qualifying capital and reserve funds relating to market risk; and

(ii) the bank's overall net open foreign-currency position calculated in accordance with the requirements specified in item (A)(ii) above shall at no time exceed 2 per cent of the bank's allocated qualifying capital and reserve funds relating to market risk.

(e) Matters relating to commodity risk

(i) For the measurement of a bank's exposure to commodity position risk arising from commodity positions held in either the bank's banking book or trading book, which commodity position risk may arise from positions held in respect of precious metals, agricultural products, minerals, oil or base metals, but not gold, since gold is subject to the requirements specified in paragraph (d) above, a bank may-

(A) at the discretion of the bank, adopt the simplified approach specified in subparagraph (ii) below, which simplified approach shall be available for a bank that conducts only a limited amount of commodity business;

(B) at the discretion of the bank, adopt the maturity ladder approach specified in subparagraph (iii) below, which maturity ladder approach-

(i) separately captures forward gap and interest rate risk;

(ii) shall be available for a bank that conducts only a limited amount of commodity business;

(C) subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, adopt the internal models approach specified in subregulation (8) below, which internal models approach shall ultimately be adopted by a bank that conducts material business in commodities,

Provided that-

(i) the bank shall in the case of any spot or physical trading duly manage its exposure to directional risk that may arise from an adverse change in the spot price of open commodity positions;

(ii) when the bank applies a portfolio strategy that involves forward and derivative contracts the bank shall duly manage its exposure, amongst others-

(aa) to basis risk, that is, the risk that the relationship between the prices of similar but not identical commodities alters over time;

(bb) to interest rate risk, that is, the risk of an adverse change in the carrying cost for forward positions and options;

(cc) to forward gap risk, that is, the risk that the forward price may change due to reasons other than a change in interest rates;

(iii) in all cases the bank shall duly manage its exposure to counterparty credit risk in respect of all relevant over-the-counter derivative contracts;

(iv) the bank shall report any relevant interest rate or foreign exchange exposure arising from the bank's funding of commodity positions in accordance with the relevant requirements specified in this subregulation (7);

For example, when a commodity forms part of a forward contract, the bank shall report any interest rate exposure or foreign currency exposure that arises from the other leg of the contract in accordance with the relevant requirements specified in this subregulation (7).

(v) the bank may omit from its commodity risk calculation, positions that are purely stock financing, that is, when physical stock has been sold forward and the cost of funding has been locked in until the date of the forward sale, provided that the relevant position shall be subject to the relevant interest rate and counterparty risk requirements.

(ii) Matters relating to the simplified approach

A bank that adopted the simplified approach for the measurement of the bank's exposure to commodity risk arising from commodity positions held in either the bank's banking book or trading book-

(A) shall include in all relevant calculations all commodity derivative contracts and all off-balance sheet positions that are affected by changes in commodity prices, including any commodity future, any commodity swap contract, and options when the bank adopts the "delta plus" method specified in paragraph (f)(iii) below, provided that when the bank adopts an approach other than the delta-plus approach in order to measure the bank's exposure to options risk, the bank shall exclude from the simplified approach all relevant options and their associated underlying instruments;

(B) may in order to calculate the bank's open position in respect of a particular commodity, offset or net any relevant long position and short positions in the specific commodity;

(C) shall not in the calculation of the bank's open position in respect of a particular commodity offset or net positions in different commodities;

(D) shall express each relevant commodity position, that is, any relevant spot or forward position, in terms of the relevant standard unit of measurement, which standard unit of measurement, for example, may be barrels, kilograms or grams, and convert the relevant net position in the specific commodity into the reporting currency at current spot rates;

(E) shall calculate and maintain a capital requirement equal to 15 per cent of the relevant net position in the specific commodity, irrespective whether the net position is a long or short position;

(F) shall in order to protect the bank against basis risk, interest rate risk and forward gap risk, based on the current spot price of all relevant positions, calculate and maintain an additional capital requirement in respect of each relevant commodity equal to 3 per cent of the bank's gross positions, that is, the sum of the relevant long positions and short positions in respect of the particular commodity.

(iii) Matters relating to the maturity ladder approach

A bank that adopted the maturity ladder approach for the measurement of the bank's exposure to commodity risk arising from commodity positions held in either the bank's banking book or trading book-

(A) shall include in all relevant calculations all commodity derivative contracts and all off-balance sheet positions that are affected by changes in commodity prices, including any commodity future, any commodity swap contract, and options when the bank adopts the "delta plus" method specified in paragraph (f)(iii) below, provided that-

(i) when the bank adopts an approach other than the delta-plus approach in order to measure the bank's exposure to options risk, the bank shall exclude from the maturity ladder approach all relevant options and their associated underlying instruments;

(ii) in the case of any relevant future or forward contract relating to a particular commodity the bank shall incorporate into its measurement system the relevant notional amount of barrels, kilos or other standard unit, as the case may be, and shall, based on the relevant expiry date of the relevant contract, assign the said contract to the relevant time band;

(iii) in the case of any commodity swap contract in respect of which one leg is a fixed price and the other leg the current market price, the bank shall incorporate the said contract into its measurement system as a series of positions equal to the notional amount of the said contract, with one position corresponding with each payment on the swap and assigned to the relevant maturity ladder and relevant time band;

(iv) in the case of a commodity swap contract in respect of which the relevant legs are in different commodities, the bank shall incorporate the relevant commodity positions into the relevant maturity ladder for each relevant commodity, that is, the bank shall not apply offsetting between different commodity positions;

(B) may, in order to calculate the bank's open position in respect of a particular commodity, offset or net any relevant long position and short positions in the specific commodity;

(C) shall not in the calculation of the bank's open position in respect of a particular commodity offset or net positions in different commodities;

(D) shall express each relevant commodity position, that is, any relevant spot or forward position, in terms of the relevant standard unit of measurement, which standard unit of measurement may be barrels, kilograms or grams;

(E) shall convert any relevant net position in respect of each relevant commodity at current spot rates into the required reporting currency;

(F) shall in respect of each relevant commodity apply a separate maturity ladder in accordance with the relevant requirements specified in table 7 below, that is, based on the requirements specified in table 7 below, the bank shall capture all relevant positions relating to a particular commodity, provided that-

(i) the bank shall express any relevant position in the relevant standard unit of measurement for the said commodity;

(ii) the bank shall capture any physical stock in the first time band;

(iii) in order to capture forward gap and interest rate risk within a particular time band, which risks together are often referred to as curvature or spread risk, all relevant matched long positions and short positions in each relevant time band shall be subject to a specified capital requirement;

(iv) in respect of each relevant time band, the bank shall multiply the sum of short positions and long positions that are matched firstly with the relevant spot price for the particular commodity and secondly with the spread rate specified for the particular time band, as set out in table 7 below;

(v) the bank may subsequently carry forward and offset residual net positions from nearer time bands against exposures in time bands that are further out, provided that-

(aa) in order to recognise that hedging of positions across different time bands is imprecise the bank shall in respect of each specified time band apply a further capital requirement equal to 0.6 per cent of the residual net position carried forward;

(bb) based on the spread rates specified in table 7 below, the bank shall apply an additional capital requirement in respect of each matched amount created by carrying residual net positions forward;

(vi) in respect of the relevant residual long or short positions that remain at the end of the aforementioned process the bank shall apply a capital requirement equal to 15 per cent.

Table 7
Time-bands and spread rates

Time band	Spread rate
0 ≤ 1 month	1,50%
> 1 ≤ 3 months	1,50%
> 3 ≤ 6 months	1,50%
> 6 ≤ 12 months	1,50%
> 1 ≤ 2 years	1,50%
> 2 ≤ 3 years	1,50%
> 3 years	1,50%

For example, assume that, based on the relevant requirements specified above, the positions in respect of a particular commodity are as follows:

Time band	Position	Spread rate	Capital calculation	Capital requirement
0 ≤ 1 month		1,50%		
> 1 ≤ 3 months		1,50%		
> 3 ≤ 6 months	Long = R800 Short = R1000	1,50%	Matched position is R800 long plus R800 short x 1,50% R200 short carried forward to the 1 to 2 year time band means- R200 x 2 x 0,6%	24,00 2,40
> 6 ≤ 12 months		1,50%		
> 1 ≤ 2 years	Long = R600	1,50%	Matched position is R200 long plus R200 short x 1,50% R400 long carried forward to the more than 3 year time-band means R400 x 2 x 0,6%	6,00 4,80
> 2 ≤ 3 years		1,50%		
> 3 years	Short = R600	1,50%	Matched position is R400 long plus R400 short x 1,50% Net residual position is R200 which means R200 x 15%	12,00 30,00

The bank's aggregate capital requirement in respect of the relevant commodity shall be equal to R79,20.

(iv) Matters relating to internal models

A bank that obtained the approval of the Registrar to adopt the internal models approach for the measurement of the bank's exposure to market risk arising from commodity positions held in either the bank's banking book or trading book-

(A) shall continuously comply with the relevant requirements specified in subregulation (8) below;

(B) may, based on empirical correlations that fall within a range specified in writing by the Registrar and subject to such conditions as may be specified in writing by the Registrar, offset all relevant long positions and short positions in different commodities;

(C) shall ensure that the bank's models duly capture and reflect the impact of all relevant market characteristics, including any relevant delivery dates and the scope provided to traders to close out positions.

(f) Matters relating to options

(i) For the measurement of a bank's exposure to price risk arising from option positions, a bank-

(A) that solely uses purchased options or hedges all written option positions with perfectly matched long positions in exactly the same options may adopt the simplified approach specified in subparagraph (ii) below;

(B) that also writes options shall adopt the delta-plus approach, scenario approach or comprehensive risk management model approach respectively specified in subparagraphs (iii) and (iv), and in subregulation (8) below,

provided that-

(i) the bank shall adopt the more sophisticated approaches specified in this paragraph (f) when the bank's trading activities in options become significant or when the bank conducts business in exotic options;

(ii) a bank that wishes to adopt the scenario approach or internal models approach shall obtain the prior written approval of the Registrar and shall comply with such conditions as may be specified in writing by the Registrar in addition to such conditions as may be specified in these Regulations.

(ii) Matters relating to the simplified approach

A bank that adopted the simplified approach for the measurement of the bank's exposure to price risk arising from option positions-

(A) shall "carve-out" the relevant option positions and their associated underlying, irrespective whether the said positions are cash or forward positions, and separately calculate the relevant capital requirements in respect of the said positions in accordance with the relevant requirements specified in this subparagraph (ii), which requirements incorporate both general risk and specific risk, that is, instead of applying the standardised methodology envisaged in this subregulation (7) the bank shall "carve-out" all relevant option positions and associated underlying positions and separately calculate the bank's capital requirements in respect of the said positions;

(B) shall add to the relevant capital requirements relating to the bank's relevant category of instruments or exposures the relevant capital requirements calculated in accordance with the relevant requirements specified in this subparagraph (ii), that is, for example, interest rate related instruments, equity instruments, foreign exchange or commodities, as the case may be, calculated in accordance with the relevant requirements specified in this subregulation (7);

(C) shall, based on the relevant requirements specified in table 8 below, calculate the bank's required amount of capital and reserve funds in respect of the said option positions.

Table 8
Simplified approach: capital requirements

Relevant position	Capital requirement
Long cash and long put or Short cash and long call	The bank's capital requirement shall be equal to the market value of the relevant underlying instrument[1,2] multiplied by the sum of specific risk and general risk for the said underlying instrument, less the extent to which the option is in the money[3]
Long call or Long put	The bank's capital requirement shall be equal to the lesser of: (i) the market value of the underlying instrument multiplied by the sum of the specific and general risk requirement relating to the said underlying instrument; or (ii) the market value of the option.

1. **When the market value of the underlying instrument may be zero, such as caps and floors, or swaptions, the bank shall use the relevant nominal value.**
2. **When it is unclear which side is the "relevant underlying instrument", such as in the case of foreign exchange, the bank shall base its calculation on the asset that will be received when the option is exercised.**
3. **In the case of options with a residual maturity of more than six months the bank shall compare the strike price with the forward price instead of the current price, otherwise the in-the-money amount shall be deemed to be equal to zero.**

For example, when a bank that holds 100 shares currently valued at R10 each has an equivalent put option with a strike price of R11, the bank's capital requirement shall be equal to R1,000 x 16 per cent, that is, 8 per cent specific risk plus 8 per cent general risk, which is equal to R160, less the amount the option is in the money, that is, (R11 - R10) x 100, which is equal to R100. Therefore the bank's aggregate capital requirement in respect of the said position is equal to R60.

(iii) Matters relating to the delta-plus approach

A bank that adopted the delta-plus approach for the measurement of the bank's exposure to price risk arising from option positions, which approach incorporates specified sensitivity parameters associated with options-

(A) shall incorporate the relevant delta-weighted position relating to each relevant option position, that is, the market value of the underlying instrument multiplied with the absolute value of the relevant delta, into the relevant standardised framework specified in this subregulation (7)-

(i) which standardized framework may relate to debt securities and other interest rate related instruments, equity instruments, foreign exchange risk which includes gold, or commodity risk;

(ii) which delta value measures the sensitivity of the value of the option with respect to a change in the price of the underlying asset or instrument;

(iii) which delta-equivalent amount, for example, shall be subject to the relevant general risk requirement;

(B) shall, based on the relevant requirements specified in this subparagraph (iii), in addition to the relevant requirements for delta risk and in respect of each relevant option position, separately calculate the bank's required amount of capital and reserve funds in respect of gamma sensitivity, which gamma sensitivity measures the relevant rate of change in the delta value, and vega sensitivity, which vega sensitivity measures the sensitivity of the value of the option with respect to a change in volatility, which sensitivity parameters are associated with each relevant option position and shall be calculated in the manner approved or specified in writing by the Registrar, provided that-

(i) in respect of the said calculation the bank shall treat the positions specified below as the same underlying:

(aa) In the case of interest rates and in respect of each relevant maturity ladder per currency, each relevant time band specified in table 4 in paragraph (b), provided that a bank that adopted the duration method shall use the relevant time bands specified in table 6 in paragraph (b).

(bb) In the case of equities and stock indices, each relevant national market sector.

(cc) In the case of foreign currencies and gold, each relevant currency pair and gold.

(dd) In the case of commodities, each relevant individual commodity.

(ii) in respect of the relevant options relating to the same underlying the bank shall aggregate the relevant gamma impact value calculated in respect of each relevant option, which value may be either positive or negative, in order to determine a net gamma impact for each relevant underlying, which net gamma impact may be either positive or negative, provided that in the calculation of the bank's required amount of capital and reserve funds-

(aa) the bank shall include only negative net gamma impacts;

(bb) the total gamma capital requirement shall be equal to the sum of the absolute value of the net negative gamma impacts calculated in accordance with the relevant requirements specified in this subparagraph (iii);

(iii) in respect of volatility risk the bank shall calculate its required amount of capital and reserve funds by firstly multiplying the sum of the relevant vega values for all options relating to the same underlying by a proportional shift in volatility of ± 25 per cent and then by aggregating the absolute value of the said individual capital requirements calculated for vega risk;

(C) shall separately calculate the bank's capital requirements in respect of specific risk by multiplying the relevant delta-equivalent amount of each relevant option position with the relevant specific risk weights specified in paragraphs (b) and (c) above;

(D) shall in the case of a delta-weighted position with a debt security or interest rate instrument as the underlying instrument include the said position in the relevant interest rate time band specified in paragraph (b) above in a manner similar to other derivative instruments, that is, based on a two legged approach, provided that the bank shall treat any floating rate instruments with caps or floors as a combination of floating rate instruments and a series of European-style options.

For example-

(i) in respect of the reporting month of April, based on the relevant delta-equivalent value, the bank shall report a bought call option on a June three-month interest-rate future as a long position with a maturity of five months and a short position with a maturity of two months, and a written option as a long position with a maturity of two months and a short position with a maturity of five months;

(ii) in respect of the reporting month of April, based on the relevant delta-equivalent value, the bank shall report a two months call option on a bond future in respect of which delivery of the bond takes place in September as a long position in respect of the bond and short a five months deposit;

(iii) when the bank holds a three-year floating rate bond indexed to six month JIBAR with a cap of 15 per cent, the bank shall report a debt security that reprices in six months' time and a series of five written call options on a FRA with a reference rate of 15 per cent, each with a negative sign at the time the underlying FRA takes effect and a positive sign at the time the underlying FRA matures.

(E) shall in the case of an option with an equity instrument as the underlying instrument, based on the relevant delta-weighted position, include the relevant position in the bank's measurement framework in accordance with the relevant requirements specified in paragraph (c) above, provided that the bank shall treat each relevant national market as a separate underlying;

(F) shall in the case of an option in respect of a foreign exchange or gold position, based on the relevant delta equivalent of the said foreign currency or gold option, include the said position in the measurement of the bank's exposure in respect of the relevant currency or gold position in accordance with the relevant requirements specified in paragraph (d) above;

(G) shall in the case of an option in respect of a commodity, based on the relevant requirements of the simplified or maturity ladder approach specified in paragraph (e) above, and the relevant delta-weighted position, include the said option position;

(H) shall in respect of each relevant option position separately calculate the gamma impact according to a Taylor series expansion as:

gamma impact = $\frac{1}{2}$ x gamma x VU^2

where:

VU is the variation in the price of the relevant underlying instrument of the option, which VU value-

(i) shall in the case of an interest rate option in respect of which the underlying instrument is a bond be calculated by multiplying the market value of the said underlying instrument with the relevant risk weight specified in table 4 in paragraph (b), provided that the bank shall do a similar calculation when the underlying is an interest rate, in which case the bank's calculation shall be based on the relevant assumed change in the yield specified in table 4 in paragraph (b);

(ii) shall in the case of an option in respect of an equity or equity index be calculated by multiplying the market value of the relevant underlying instrument with 8 per cent;

(iii) shall in the case of an option in respect of foreign exchange or gold be calculated by multiplying the market value of the relevant underlying instrument with 8 per cent;

(iv) shall in the case of an option in respect of a commodity be calculated by multiplying the market value of the said underlying instrument with 15 per cent.

(iv) Matters relating to the scenario approach

A bank that obtained the approval of the Registrar to adopt the scenario approach, which approach makes use of simulation techniques in order to calculate changes in the value of an options portfolio based on simultaneous changes in the relevant underlying rates or prices and the volatility of those rates or prices-

(A) shall separately calculate the bank's relevant capital requirements in respect of specific risk by multiplying the relevant delta-equivalent amount of each relevant option position with the relevant specific risk weights specified in paragraphs (b) and (c) above;

(B) shall in order to calculate the bank's relevant required amount of capital and reserve funds in respect of general risk arising from all relevant option positions develop a scenario grid, that is, a matrix that contains a specified combination of underlying price and volatility changes, provided that-

(i) based on the relevant requirements specified in the delta-plus approach, in subparagraph (iii)(B)(i) above, the bank-

(aa) shall duly define the relevant underlying positions, provided that, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank that conducts significant business in options may in respect of its interest rate options base the relevant required calculations on a minimum of six sets of time bands, provided that in no case shall the bank combine more than three of the relevant specified time bands;

(bb) shall develop a separate matrix for each relevant individual underlying;

(ii) in order to calculate the bank's relevant required amount of capital and reserve funds, the bank shall revalue the relevant option portfolio by making use of the said matrices for simultaneous changes in the option's underlying rate or price and the volatility of that rate or price;

(iii) the bank shall evaluate the relevant options and the related hedging positions over the ranges specified in this sub-item (iii),

(aa) which ranges are specified above and below the current value of the relevant underlying;

(bb) which range shall in the case of interest rates be consistent with the assumed changes in yield specified in table 4 in paragraph (b), provided that a bank that obtained the approval of the Registrar to combine time bands in respect of interest rate options shall in respect of each relevant combined time band apply the highest of the assumed changes in yield applicable to the relevant group to which the time band belongs.

For example, when the bank combines time bands 3 to 4 years, 4 to 5 years and 5 to 7 years the highest assumed change in yield of the said three bands shall be equal to 0.75.

(cc) which range shall in the case of equities be equal to ± 8 per cent;

(dd) which range shall in the case of foreign exchange and gold be equal to ± 8 per cent;

(ee) which range shall in the case of commodities be equal to ± 15 per cent,

Provided that for each relevant risk category, in order to divide the relevant total range into equally spaced intervals, the bank shall use the number of observations specified in writing by the Registrar, which number of observations shall in no case be less than seven observations or price points and shall include the relevant current observation.

(iv) in respect of the second dimension of each relevant matrix the bank shall apply a single change in the volatility of the underlying rate or price equal to +25 per cent and -25 per cent, provided that the Registrar may require a bank-

(aa) to apply a different change in volatility; and/or

(bb) to calculate intermediate points on the relevant grid;

(v) in respect of each relevant underlying the bank's capital requirement shall be equal to the largest loss contained in the relevant matrix, that is, after calculating the relevant amounts in respect of each relevant matrix each relevant cell in the matrix shall reflect the relevant net profit or loss of the option and the underlying hedge instrument, and the bank's capital requirement shall be equal to the largest loss contained in the relevant matrix;

(C) shall in addition to the risks specified in this paragraph (f) duly monitor all other relevant risks arising from option positions, such as rho, that is, the rate of change in the value of an option with respect to the interest rate, and theta, that is, the rate of change in the value of the option with respect to time;

(D) may in the calculation of the bank's minimum required amount of capital and reserve funds in respect of interest rate risk include rho.

(g) The reporting bank's total capital requirement in terms of the standardised approach for the measurement of the bank's exposure to market risk shall be equal to the sum of the respective capital requirements calculated in accordance with the relevant requirements and instruments specified in this subregulation (7).

(8) *Method 2: Internal models approach*

(a) A bank that wishes to adopt the internal models approach for the measurement of the bank's exposure to market risk arising, *inter alia*, from positions held in the bank's trading book-

(i) shall obtain the prior written approval of the Registrar;

(ii) shall at all times comply with the relevant conditions and requirements specified in this subregulation (8);

(iii) shall at all times comply with such additional conditions or requirements as may be specified in writing by the Registrar,

Provided that the Registrar-

(A) may specify a period of initial monitoring and testing of the bank's internal models before the models are used by the bank to calculate the bank's relevant required amount of capital and reserve funds;

(B) shall not grant approval for a bank to apply the internal models approach for the measurement of the bank's exposure to market risk unless-

(i) the Registrar is satisfied that the bank's risk management system is conceptually sound and implemented with integrity;

(ii) the bank has demonstrated to the satisfaction of the Registrar that the bank has a sufficient number of sufficiently skilled staff-

(aa) in the use of sophisticated models in the bank's trading area;

(bb) in risk control;

(cc) in audit; and

(dd) in all relevant back-office areas;

(iii) the bank has demonstrated to the satisfaction of the Registrar that its models have a proven track record of reasonable accuracy in the measurement of the bank's relevant risk exposures;

(iv) the bank has demonstrated to the satisfaction of the Registrar that the bank regularly conducts relevant stress tests in accordance with the relevant requirements specified in paragraph (f) below.

(b) A bank that obtained the approval of the Registrar to adopt the internal models approach for the measurement of the bank's exposure to market risk shall, based on the relevant requirements relating to the standardised approach specified in subregulation (7), separately calculate a capital requirement in respect of the bank's exposure to specific risk arising from specific issuers of debt securities or equities unless the bank complies with the requirements relating to specific risk specified in paragraph (h) below, in which case the bank may use its internal models in order to calculate the bank's exposure to specific risk and the related required amount of capital and reserve funds.

(c) Qualitative requirements

A bank that wishes to adopt the internal models approach for the measurement of the bank's exposure to market risk in respect of relevant positions held in the bank's trading book and/or banking book-

(i) shall have in place models and risk management systems that are conceptually sound and implemented with integrity;

(ii) as a minimum, shall continuously comply with the qualitative requirements specified in regulation 39(14)(b).

(d) Matters relating to the specification of relevant market risk factors

In order to sufficiently capture the risks inherent in a bank's portfolio of on-balance-sheet and off-balance-sheet trading positions, as part of the bank's internal market risk measurement system, the bank shall specify an appropriate set of market risk factors, that is, market rates and prices that affect the value of the bank's trading positions, provided that-

(i) any factor deemed relevant by the bank for pricing purposes shall be included as a risk factor in the bank's value-at-risk model.

When a risk factor is incorporated in the bank's pricing model but not in its value-at-risk model, the bank shall duly motivate, to the satisfaction of the Registrar, the omission of the said risk factor from the bank's value-at-risk model;

(ii) the bank's value-at-risk model shall duly capture-

(A) nonlinearities associated with options and other relevant products, such as mortgage-backed securities, tranched exposures or n-th-to-default credit derivative instruments;

(B) correlation risk and basis risk, for example, between credit default swaps and bonds;

(iii) the bank shall demonstrate to the satisfaction of the Registrar that any proxy used by the bank in its value-at-risk model has a good track record in respect of the actual position held by the bank, such as an equity index used for a position in an individual instrument;

(iv) in the case of interest rates-

(A) based on the nature of the bank's trading strategies, the bank shall specify an appropriate set of risk factors that correspond to the relevant interest rates in each relevant currency in which the bank holds interest-rate-sensitive on-balance-sheet or off-balance-sheet positions, that is, a bank with a portfolio of various types of security across many points of the yield curve and that engages in complex arbitrage strategies, for example, requires a greater number of risk factors to accurately capture the bank's exposure to interest rate risk;

(B) the bank's risk measurement system, amongst other things-

(i) shall model the yield curve, for example, by estimating forward rates of zero coupon yields;

(ii) shall incorporate separate risk factors to capture spread risk, for example, between bonds and swaps.

A bank may use a variety of approaches to capture the spread risk arising from less than perfectly correlated movements between government and other fixed-income interest rates.

For example, the bank may model a completely separate yield curve for non-government fixed-income instruments, such as swaps or municipal securities, or estimate the spread over government rates at various points along the yield curve.

(C) in order to capture variation in the volatility of rates along a yield curve, the bank shall divide the yield curve into appropriate maturity segments and specify no less than one risk factor corresponding to each relevant maturity segment;

(D) in respect of material exposure to interest rate movements in major currencies and markets, the bank shall model a yield curve using no less than six risk factors;

(v) in the case of exchange rates, which include gold-

(A) the bank shall, as a minimum, specify relevant risk factors in respect of the exchange rate between the domestic currency and each foreign currency in which the bank has a significant exposure;

(B) the bank's risk measurement system shall incorporate the said risk factors relating to the individual foreign currencies in which the bank's positions are denominated.

(vi) in the case of equities-

(A) the sophistication and nature of the bank's modelling technique for a particular market shall correspond-

(i) to the bank's exposure to the overall market; and

(ii) to the bank's concentration in individual equity issues in the said market;

(B) the bank shall, as a minimum, specify relevant risk factors in respect of each of the equity markets in which the bank holds significant positions, that is, based on the bank's exposure to the overall market and the bank's concentration in individual equity issues in the said market-

(i) the bank shall, as a minimum, specify a risk factor designed to capture market-wide movements in equity prices, such as a market index, and, for example, express positions in individual securities or in sector indices as "beta-equivalents" relative to the said market-wide index;

(ii) the bank shall specify risk factors in respect of the various sectors of the overall equity market, such as industry sectors or cyclical and non-cyclical sectors, and, for example, express positions in individual instruments within each sector as beta-equivalents relative to the sector index;

(iii) the bank shall specify risk factors relating to the volatility of individual equity issues.

(vii) in the case of commodities the bank shall specify relevant risk factors in respect of each relevant commodity market in which the bank holds significant positions, provided that-

(A) a bank with limited positions in commodity-based instruments may specify only one risk factor in respect of each commodity price to which the bank is exposed;

(B) a bank that actively trades in commodities shall duly take account of any variation in the convenience yield between derivatives positions, such as forwards and swaps, and cash positions in the commodity, which yield-

(i) reflects the benefits from direct ownership of a physical commodity, such as the ability to profit from temporary market shortages;

(ii) is affected by market conditions and factors such as physical storage cost;

(C) the bank shall duly manage its exposure to directional risk, forward gap and interest rate risk, and any relevant basis risk.

(e) Quantitative requirements relating to, among other things, minimum statistical parameters for the measurement of a bank's exposure to market risk

(i) A bank that obtained the approval of the Registrar to adopt the internal models approach for the measurement of the bank's exposure to market risk arising from relevant positions held in the bank's trading book and/or banking book-

(A) shall on a daily basis calculate the bank's value-at-risk ("VaR") amount, which VaR amount-

(i) shall be based on a 99^{th} percentile, one-tailed confidence interval;

(ii) shall be based on an instantaneous price shock equivalent to a ten day movement in market prices, that is, a minimum "holding period" of ten trading days, provided that when the bank is unable to determine the required value-at-risk amounts based on a ten day holding period, and the bank's VaR amount is based on a holding period of less than ten trading days, the bank shall scale up the relevant calculated VaR amounts to ten trading days by making use of, for example, the relevant square root of time formula for the treatment of options, provided that a bank that does make use of such square root of time formula to scale up its relevant calculated VaR amount to ten trading days shall periodically demonstrate to the satisfaction of the Registrar the continued reasonableness of the said calculation;

(iii) shall be based on a historical observation period or sample period of no less than one year, provided that-

(aa) the Registrar may require a bank to calculate its value-at-risk amount based on a shorter observation period when, in the opinion of the Registrar, the said calculation is justified by a significant upsurge in market price volatility;

(bb) a bank that uses a weighting scheme or other methods in respect of the historical observation period shall ensure that the "effective" observation period is no less than one year, that is, the weighted average time lag of the individual observations shall not be less than six months, or the method used by the bank shall result in a required amount of capital and reserve funds at least as conservative as the amount calculated in accordance with the requirement related to the aforesaid observation period;

(B) shall update its data sets no less frequently than once every month, provided that the bank shall reassess the relevant data sets whenever market prices are subject to material changes, that is, the bank's internal processes related to the updating of data sets shall be sufficiently flexible to allow for the frequent updating of all relevant data sets;

(C) may recognise empirical correlations **within** broad risk categories such as interest rates, exchange rates, equity prices and commodity prices, including related option volatilities in respect of each relevant risk-factor category, provided that, subject to the prior written approval of and such further conditions as may be specified in writing by the Registrar, a bank may also recognise empirical correlations **across** broad risk factor categories;

(D) shall have in place a robust risk measurement system, which risk-measurement system-

(i) among other things, shall duly capture the unique risks associated with options within each of the specified broad categories of risk, that is, the bank's model shall accurately capture the non-linear price characteristics associated with option positions, provided that-

(aa) ultimately the bank shall move towards the application of a full 10-day price shock to option positions or positions that display option-like characteristics;

(bb) the Registrar may require a bank to adjust its capital measure for option risk through the application of methods such as periodic simulations or stress testing, the results of which simulations or stress testing shall be duly documented;

(ii) shall contain a set of risk factors that captures the volatilities of the rates and prices underlying all relevant option positions, that is, vega risk, provided that a bank with large and/or complex option portfolios shall have in place detailed specifications of the relevant volatilities, that is, based on the relevant different maturities of the bank's option positions, the bank shall measure the relevant volatilities relating to all relevant option positions.

(E) shall, in addition to the aforesaid VaR calculation, calculate a stressed value-at-risk ("sVaR") measure, which sVaR-

(i) replicates a value-at-risk calculation that would be generated on the bank's current portfolio if the relevant market factors were subject to a period of significant stress;

(ii) shall be based on a 10-day, 99th percentile, one-tailed confidence interval value-at-risk measure of the bank's current portfolio, with model inputs calibrated to historical data from a continuous 12-month period of significant financial stress relevant to the bank's portfolio, such as a 12-month period relating to significant losses incurred during the 2007/2008 financial market crisis, which period shall regularly be reviewed by the bank;

(iii) shall be calculated at least once every week;

(iv) calculation and any related matter, including the relevant 12-month period of significant financial stress, shall be subject to such further conditions or requirements as may be specified in writing by the Registrar;

(ii) No particular type of model is prescribed, that is, a bank may, at the discretion of the bank, for example, use models based on variance-covariance matrices, historical simulations, or Monte Carlo simulations, provided that the model used by the bank shall capture all relevant material risks incurred by the bank.

(iii) On a daily basis, as a minimum, subject to any relevant requirement related to the calculation and/or maintenance of a minimum required amount of capital and reserve funds that may be specified in the form BA 700 or in regulation 38 of these Regulations, a bank that obtained the approval of the Registrar to adopt the internal models approach for the measurement of the bank's exposure to market risk shall maintain a capital requirement in respect of the said exposure, equal to the sum of-

(A) the higher of-

(i) the previous day's VaR amount, that is, VaR_{t-1}, measured in accordance with the relevant parameters and requirements specified in this subregulation (8); or

(ii) the average amount of the daily VaR amount, that is, VaR_{avg}, calculated in accordance with the relevant parameters and requirements specified in this subregulation (8), in respect of each of the preceding sixty business days, multiplied by the multiplication factor, m_c, envisaged in subparagraph (iv) below;

and, or plus-

(B) the higher of-

(i) the latest available sVaR amount, that is, $sVaR_{t-1}$, measured in accordance with the relevant parameters and requirements specified in this subregulation (8); or

(ii) the average amount of the sVaR amount, that is, $sVaR_{avg}$, calculated in accordance with the relevant parameters and requirements specified in this subregulation (8), in respect of the preceding sixty business days, multiplied by the multiplication factor, m_s, envisaged in subparagraph (iv) below;

that is, the bank's required amount of capital and reserve funds shall be equal to:

$$\max\{VaR_{t-1}; m_c \times VaR_{avg}\} + \max\{sVaR_{t-1}; m_s \times sVaR_{avg}\}$$

(iv) Based on, among other things, the Registrar's assessment of the quality of a bank's risk management system and related processes, the Registrar shall specify in writing the aforesaid multiplication factors, m_c and m_s, which multiplication factors shall in no case be less than three, and a "plus-factor", which plus-factor-

(A) shall directly relate to the ex-post performance of the bank's model, thereby providing a built-in incentive for the bank to maintain or improve the predictive quality of the model;

(B) based on the outcome of backtesting, may range between zero and one, that is, when the backtesting results of the relevant bank-

(i) are satisfactory, and the bank complies with all the qualitative standards specified in regulation 39(14)(b), the plus factor may be equal to zero; or

(ii) fall into the red zone specified by the Registrar from time to time, the multiplication factor applicable to the said bank's model shall automatically increase by one, to four.

(C) shall be based on the outcome of backtesting in respect of the bank's VaR amount, and not the bank's sVaR amount.

(f) Specific matters relating to stress testing

(i) A bank that obtained the approval of the Registrar to adopt the internal models approach for the measurement of the bank's exposure to market risk shall have in place a rigorous and comprehensive programme or process of stress testing-

(A) which programme or process of stress testing-

(i) shall be sufficiently robust to identify events or influences that may have a material impact on the bank's exposure to risk;

(ii) shall form an integral part of the bank's assessment of its capital adequacy;

(iii) shall duly make provision for stress scenarios that cover a range of factors that may cause extraordinary losses or gains in respect of the bank's trading positions and portfolios, or complicate the control of the relevant risks in the said portfolios-

(aa) which factors shall include low probability events in all major types of risk, including the various components of market risk, credit risk and operational risks;

(bb) which stress scenarios shall provide sufficient information relating to the impact of the said events on positions that display linear and/or non-linear price characteristics, that is, options and instruments with option-like characteristics;

(iv) shall be quantitative and qualitative in nature, incorporating, among other things, market risk and liquidity aspects of market disturbances-

(aa) which quantitative criteria shall identify plausible stress scenarios to which the bank may be exposed;

(bb) which qualitative criteria shall include-

(i) an evaluation of the capacity of the bank's capital and reserve funds to absorb potential material losses;

(ii) the identification of steps that the bank can take in order to reduce the bank's exposure to risk, or to conserve capital;

(v) shall be sufficiently robust to combine stress scenarios specified by the Registrar with stress tests developed by the bank in order to reflect the specific risk characteristics of the bank.

(B) the results of which stress testing-

(i) shall routinely be communicated to the bank's senior management and board of directors;

(ii) shall form an integral part of determining and evaluating the bank's management strategy;

(iii) shall be duly documented.

(ii) At the request of the Registrar, the reporting bank shall conduct the tests and provide the information relating to the matters specified below:

(A) Supervisory scenarios not requiring any simulation by the bank

For review by the Registrar, a bank shall have available detailed information relating to the largest losses experienced by the bank during a particular reporting period, which information-

(i) may be compared to the level of required and allocated capital and reserve funds calculated in terms of a bank's internal models;

(ii) shall be sufficient to indicate to the Registrar how many days of peak day losses would have been covered by a given value-at-risk estimate.

(B) Scenarios requiring simulation by the bank

At the request of the Registrar, the reporting bank-

(i) shall subject its portfolios to a series of simulated stress scenarios, which scenarios-

(aa) may include a test of the bank's current portfolio against previous periods of significant disturbance, such as the sharp fall in equity markets during 1987 or the 2007/2008 sub-prime and financial market crisis, incorporating large price movements and a sharp reduction in liquidity associated with such events;

(bb) may evaluate the sensitivity of the bank's market risk exposure to changes in the assumptions relating to volatilities and correlations. Application of this test would require an evaluation of the historical range of variation for volatilities and correlations and an evaluation of the bank's current positions against the extreme values associated with the said historical range;

(cc) may include or evaluate such other matters or assumptions as may be specified in writing by the Registrar;

(ii) shall in writing provide to the Registrar the results of the aforesaid simulated stress scenarios,

Provided that in respect of the aforesaid stress scenarios, the bank shall consider the impact of sharp variations that may have occurred in a matter of days during periods of significant market disturbance in the past. For example, at the height of some of the historic financial market stress events or scenarios, correlations within risk factors approached the extreme values of 1 or -1 for several days.

(C) Scenarios developed by the bank in order to capture the specific characteristics of its portfolio

In addition to the scenarios envisaged in items (A) and (B) above, based on the characteristics of the bank's relevant portfolio, the reporting bank shall develop its own stress tests and scenarios identified by the bank to be most adverse, which scenarios, for example, may include problems experienced in a key region of the world combined with a sharp change in oil prices or prices of other commodities traded in the particular region, provided that-

(i) the bank shall in writing provide the Registrar with a description of the methodology used by the bank to identify and conduct the aforesaid scenarios, and a description of the results;

(ii) the results of the aforesaid stress tests and scenarios shall regularly be reviewed by the senior management of the bank and shall be duly reflected in the relevant policies approved and limits set by the bank's senior management and board of directors.

Provided that when the aforesaid results reveal particular vulnerability to a particular set of circumstances, the bank shall take prompt actions in order to appropriately manage the relevant risks, which actions may include hedging against or reducing the extent of the bank's exposure to market risk.

(g) Matters relating to external validation

From time to time the Registrar may require that a process of external validation be conducted in respect of the accuracy of the models of a bank that obtained the approval of the Registrar to adopt the internal models approach for the measurement of the bank's exposure to market risk, which external validation-

(i) may be conducted by external consultants, external auditors, the Registrar or such other person as may be specified in writing by the Registrar;

(ii) as a minimum, shall provide reasonable assurance to the Registrar that-

(A) the internal validation processes envisaged in regulation 39(14)(b) are duly functioning;

(B) the formulae used-

(i) in the calculation of the bank's risk exposure and required amount of capital and reserve funds; and

(ii) in the pricing of options and other complex instruments,

are regularly validated by a qualified unit, which unit shall in all cases be independent from the relevant trading areas;

(C) the structure of the said internal models is adequate in relation to the bank's activities and geographical coverage;

(D) based on the results of, amongst other things, the backtesting process of the bank's internal measurement system, during which process the bank's value-at-risk estimates are compared to actual profits and losses, it is concluded that the models provide a reliable measure of potential losses that may be suffered by the bank over time, for which purposes, when requested, the bank shall make available the results of and the underlying inputs to its value-at-risk calculations;

(E) data flows and processes associated with the bank's risk-measurement system are transparent and accessible, that is, whenever necessary and provided that the appropriate procedures have been followed, the bank shall ensure easy access to the specifications and parameters of the relevant models.

(h) Matters specifically related to the treatment of specific risk

(i) A bank that has in place a VaR model that measures and incorporates specific risk arising from equity positions, debt securities or other interest rate related instruments, other than securitisation or resecuritisation exposures and n-th-to-default credit derivative instruments, held in the bank's trading book, which model, in addition to the relevant requirements specified in this paragraph (h) and in regulation 39(14)(c) of these Regulations, to the satisfaction of the Registrar, meets all the relevant qualitative and quantitative requirements relating to general market risk models envisaged or specified in paragraphs (c) to (e) of this subregulation (8), may, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, base the bank's required amount of capital and reserve funds relating to specific risk on the bank's modelled estimate of specific risk, provided that-

(A) a bank that is unable to comply with the additional criteria and requirements specified in this paragraph (h) shall calculate its relevant required amount of capital and reserve funds relating to specific risk in accordance with the relevant requirements specified in the standardised method, in subregulation (7);

(B) unless specifically otherwise provided in this paragraph (h), in the case of securitisation or resecuritisation exposure and n-th-to-default credit derivative instruments, the bank shall calculate its relevant required amount of capital and reserve funds relating to specific risk in accordance with the relevant requirements specified in the standardised method, in subregulation (7);

(C) as a minimum, the bank's model-

(i) shall capture all relevant material components of price risk;

(ii) shall be responsive to relevant changes in market conditions and compositions of portfolios;

(iii) shall duly explain the historical price variation in the portfolio by way of, for example, the application of "goodness-of-fit" measures such as an R-squared measure from regression methodology, or such measure as may be approved in writing by the Registrar;

(iv) shall duly capture concentrations that include magnitude and changes in composition, that is, the bank shall demonstrate to the satisfaction of the Registrar that the model is sensitive to changes in portfolio construction and reflects higher capital requirements in respect of portfolios with increasing concentrations relating to particular names or sectors;

(v) shall be sufficiently robust to an adverse environment, that is, the bank shall demonstrate to the satisfaction of the Registrar that the model signals rising risk in an adverse environment, which, for example, may be achieved by incorporating in the historical estimation period of the model at least one full credit cycle and ensuring that the model duly reflects the impact of the downward portion of the cycle;

(vi) shall duly capture name-related basis risk, that is, the bank shall demonstrate to the satisfaction of the Registrar that the model is sensitive to material idiosyncratic differences between similar but not identical positions such as, for example, debt positions with different levels of subordination or maturity mismatches, or credit derivative instruments that specify different default events;

(vii) shall duly capture event risk which, in the case of debt positions, shall include migration risk, and, for example, in the case of equity positions, events that are reflected in large changes or jumps in prices, such as merger break-ups or takeovers;

(viii) shall be validated through relevant and robust backtesting;

(ix) shall conservatively assess risk arising from less liquid positions and/or positions with limited price transparency under realistic market scenarios;

(x) shall only make use of proxies when available data is insufficient or not reflective of the actual volatility of a position or portfolio, and only when the said proxies are appropriately conservative;

(D) when the bank is exposed to event risk that is not duly reflected in the bank's estimate of VaR due to the event, for example, being beyond the 10-day holding period or 99^{th} per cent confidence interval, that is, low probability and high severity events, the bank shall factor into its internal assessment of economic capital the said impact, for example, through stress testing;

(E) in the case of interest rate related instruments or positions, that is, instruments or positions subject to specific interest rate risk, other than securitisation or resecuritisation exposures and n-th-to-default credit derivative instruments, the bank's internally developed approach shall duly capture incremental default and migration risks, that is, risks that are incremental to the relevant risks specified in item (C) above, provided that-

(i) the bank's incremental risk requirement (IRC) shall as a minimum estimate-

(aa) the default risk, that is, the potential for direct loss due to an obligor's default as well as the potential for indirect losses that may arise from a default event, including losses caused by broader market-wide events affecting multiple issues or issuers; and

(bb) the migration risks, that is, the potential for direct loss due to an internal or external rating downgrade or upgrade as well as the potential for indirect losses that may arise from a credit migration event,

of all relevant unsecuritised credit products over a one-year capital horizon at a confidence level of 99.9 per cent, taking into account the liquidity horizons of all relevant positions or sets of positions;

(ii) the bank's approach and models used to capture incremental risks shall meet a soundness standard comparable to the standard specified in respect of the IRB approach for credit risk, specified in regulation 23 of these Regulations, under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging, and optionality;

(iii) as stated hereinbefore, for each IRC-covered position, the bank's model shall capture the impact of rebalancing positions at the end of their liquidity horizons so as to achieve a constant level of risk over a one-year capital horizon, that is-

(aa) the bank shall rebalance or roll over the relevant positions over the one-year capital horizon in a manner that maintains the initial risk level, as indicated by a metric such as VaR or the profile of exposure by credit rating and concentration.

Rebalancing positions does not imply, as the IRB approach for the banking book does, that the same positions will be maintained throughout the capital horizon. Particularly for more liquid and more highly rated positions, this provides a benefit relative to the treatment under the IRB framework.

However, a bank may use a one-year constant position assumption, as long as it does so consistently across all relevant portfolios.

(bb) the bank shall incorporate the effect of replacing positions of which the credit characteristics have improved or deteriorated over the liquidity horizon with positions that have risk characteristics equivalent to those that the original position had at the start of the liquidity horizon;

Provided that the frequency of the aforesaid assumed rebalancing shall be governed by the liquidity horizon for a given position;

(iv) the liquidity horizon-

(aa) shall represent the time required to sell the relevant position or hedge all material risks covered by the IRC model in a stressed market;

(bb) shall be measured under conservative assumptions, and shall be sufficiently long that the act of selling or hedging, in itself, does not materially affect market prices;

(cc) shall be subject to a floor of three months for any relevant position or set of positions;

(dd) shall be greater for positions that are concentrated-

(i) to reflect the longer period needed to liquidate such positions; and

(ii) to provide adequate capital against two types of concentration, namely issuer concentration and market concentration.

Provided that a bank may assess liquidity by position or on an aggregated basis ("in buckets").

When an aggregated basis is used, such as investment-grade corporate exposures not part of a core CDS index, the aggregation criteria shall be defined in a way that meaningfully reflect differences in liquidity.

(v) the bank's incremental risk requirement shall include the impact of correlations between default and migration events among obligors since dependence among obligors may cause a clustering of default and migration events;

(vi) consistent with the principle contained in these Regulations not to allow any diversification benefit when combining capital requirements for credit risk and market risk, the bank's incremental risk requirement shall not incorporate or reflect any diversification benefit between default or migration events and other market variables, that is, the capital requirement for incremental default and migration risk shall be added to the bank's VaR-based capital requirement for market risk;

(vii) the bank's incremental risk requirement shall appropriately reflect issuer and market concentrations, including concentrations that can arise within and across product classes under stressed conditions.

Therefore, other things being equal, a concentrated portfolio shall attract a higher incremental risk capital requirement than a more granular portfolio.

(viii) within the bank's IRC model, consistent with the principle relating to gross balances, contained in these Regulations, exposure amounts shall be captured on a gross basis, provided that long and short positions that relate to the same financial instrument may be netted, that is, hedging or diversification effects associated with long and short positions involving different instruments or different securities of the same obligor ("intra-obligor hedges"), as well as long and short positions in different issuers ("inter-obligor hedges"), shall not be recognised through the netting of exposure amounts;

(ix) the bank's incremental risk requirement shall duly reflect significant basis risks by product, seniority in the capital structure, internal or external rating, maturity, vintage for offsetting positions as well as differences between offsetting instruments, such as different payout triggers and procedures;

(x) for trading book risk positions that are hedged via dynamic hedging strategies, the bank may recognize a rebalancing of the hedge within the liquidity horizon of the hedged position, provided that-

(aa) the bank shall model the rebalancing of the hedge consistently over the relevant set of trading book risk positions;

(bb) the bank shall demonstrate to the satisfaction of the Registrar-

(i) that the said inclusion of rebalancing results in a better risk measurement;

(ii) that the markets for the instruments serving as a hedge are liquid enough to allow for this kind of rebalancing, even during periods of stress;

(iii) that any residual risks resulting from the bank's dynamic hedging strategies are duly incorporated into the bank's capital requirement;

(xi) the bank's IRC model shall reflect the impact of optionality, that is, the bank's models shall include the nonlinear impact of options and other positions with material nonlinear behavior with respect to price changes, and the bank shall duly consider and evaluate the model risk inherent in the valuation and estimation of price risks associated with such products;

(xii) the bank's model may incorporate correlation effects among the modelled risk factors, subject to the validation standards specified in regulation 39(14)(c);

(xiii) the bank's internally developed approach to capture incremental default and migration risks shall comply with the relevant additional qualitative requirements specified in regulation 39(14)(c);

(xiv) the bank may choose to consistently include all listed equity and derivative positions based on listed equity in its incremental risk model when such inclusion is consistent with how the bank internally measures and manages this risk at the trading desk level, provided that when equity securities are included in the computation of incremental risk, default shall be deemed to occur when the related debt defaults;

(xv) when computing the bank's incremental risk requirement, the bank shall in no case incorporate into its IRC model any securitisation positions, even when securitisation positions are regarded by the bank as hedging underlying credit instruments held in the bank's trading book;

(xvi) the bank's internally developed approach and IRC model shall be subject to the "use test", that is, the bank's approach and model shall be consistent with the bank's internal risk management policies, processes, procedures and methodologies for identifying, measuring, and managing its trading risks;

(xvii) a bank that does not capture the said incremental risks through its internal models shall calculate the relevant required amount of capital and reserve funds for specific risk in accordance with the relevant requirements specified in subregulation (7) above;

(F) the bank's correlation trading portfolio shall be subject to the further conditions and requirements specified in subparagraph (ii) below;

(G) the bank shall regularly conduct backtesting specifically aimed at assessing whether or not specific risk is duly captured, that is, the bank shall conduct separate backtests in respect of each relevant sub-portfolio approved by the Registrar using daily data in respect of the said sub-portfolio subject to specific risk;

(H) the bank shall have in place a robust process in order to analyse exceptions identified through the backtesting of specific risk, which process, among other things, shall serve as a basis for correcting the bank's model for specific risk when the model becomes inaccurate.

(ii) Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank may incorporate in its internally developed approach and models, the bank's correlation trading portfolio, provided that-

(A) the bank shall demonstrate to the satisfaction of the Registrar-

(i) that the bank complies with the qualitative requirements specified or referred to in this paragraph (h);

(ii) that the bank has sufficient market data to ensure that it fully captures the salient risks of all relevant exposures;

(iii) that the bank's risk measures can appropriately explain, for example through backtesting, the historical price variation of the relevant instruments or products;

(iv) that the bank is able to separate the instruments or positions for which it obtained approval to incorporate them in the bank's comprehensive risk measure from the instruments or positions for which the bank did not obtain the said approval;

(v) that the bank regularly applies a set of specific predetermined stress scenarios-

(aa) which stress scenarios shall be applied at least weekly;

(bb) the results of which stress scenarios, including comparisons with the capital requirements implied by the banks' internal model for estimating comprehensive risks as envisaged in this subparagraph (ii), shall be reported in writing to the Registrar on a frequent basis, but not less frequently than once a quarter;

Provided that any instances where the stress tests indicate a material shortfall of the comprehensive risk measure shall immediately be reported in writing to the Registrar.

(cc) which stress scenarios, as a minimum, shall examine the implications of stresses-

(i) to default rates;

(ii) to recovery rates;

(iii) to credit spreads;

(iv) to correlations on the correlation trading desk's profit and loss;

(dd) based on which stress testing results, the Registrar may impose a supplemental capital requirement against the bank's correlation trading portfolio, which requirement shall be in addition to the bank's relevant internally calculated capital requirement;

(B) the said approach and models shall duly capture not only incremental default and migration risks as stated hereinbefore, but all relevant components of price risk, that is, the bank shall have in place a comprehensive risk measurement approach in respect of its correlation trading portfolio that captures all relevant components of price risk that impact the value of the relevant instruments or products, including-

(i) the cumulative risk arising from multiple defaults, including the ordering of defaults, in tranched products;

(ii) credit spread risk, including the relevant gamma and cross-gamma effects;

(iii) volatility of implied correlations, including the relevant cross effect between spreads and correlations;

(iv) basis risk, including both-

(aa) the basis between the spread of an index and those of its constituent single names; and

(bb) the basis between the implied correlation of an index and that of bespoke portfolios;

(v) recovery rate volatility, as it relates to the propensity for recovery rates to affect tranche prices; and

(vi) to the extent that the comprehensive risk measure incorporates the benefits from dynamic hedging, the risk of hedge slippage and the potential cost of rebalancing such hedges.

(C) this exception shall be available only to banks that actively buy and sell the relevant instruments or products;

(D) the bank's required amount of capital and reserve funds relating to exposures included in the bank's internally developed approach and models shall not be less than eight per cent of the specific risk requirement calculated in accordance with the relevant requirements specified in subregulation (7);

(E) the relevant exposures shall be incorporated into both the value-at-risk and stressed value-at-risk measures of the bank;

(F) the bank shall at least weekly, or more frequently when directed in writing by the Registrar, calculate the incremental risk measure according to the relevant requirements specified in subparagraph (i)(E) above, and the comprehensive risk measure according to the requirements specified in this subparagraph (ii);

(G) the bank's capital requirement-

(i) for incremental risk shall be equal to the higher of-

(aa) the average of the incremental risk measures over 12 weeks; and

(bb) the most recent incremental risk measure,

multiplied by a scaling factor of 1.0.

(ii) for comprehensive risk shall be equal to the higher of-

(aa) the average of the comprehensive risk measures over 12 weeks; and

(bb) the most recent comprehensive risk measure,

multiplied by a scaling factor of 1.0.

(iii) shall be the sum of the aforesaid two amounts, calculated in accordance with the requirements specified in sub-items (i) and (ii) of this item (F).

Provided that for the purposes of these Regulations no adjustment shall be made in respect of any potential double counting between the comprehensive risk measure and any other relevant risk measure.

(iii) For the purposes of these Regulations the presumption shall be that models that incorporate specific risk are not eligible for approval when the stress-testing and backtesting results of the model, at sub-portfolio level, produce a number of exceptions commensurate with the red zones specified in writing by the Registrar in respect stress-testing and backtesting from time to time.

DAILY RETURN: SELECTED RISK EXPOSURE

DAILY REPORT: SELECTED RISK EXPOSURE **BA325**
(Confidential and not available for inspection by the public) Daily
Name of bank……………………………………………………..
Date…………………………………………….(yyyy-mm-dd)

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

Summary of selected information	Line no.	Total
		1
Market risk requirement (total of items 2 to 4)	1	
Minimum prescribed pillar 1 market risk requirement[1] (item 18, column 1, plus item 24, columns 1 to 4)	2	
Systemic risk add-on (pillar 2a) market risk requirement[2]	3	
Additionally specified bank-specific (pillar 2b) market risk requirement[3]	4	
Allocated capital and reserve funds for market risk	5	
Surplus/ (deficit) (item 5 less item 1)	6	
Memorandum items:		
Counterparty risk requirement arising from trading book positions (items 8 to 10)	7	
OTC	8	
SFT	9	
Credit-derivative instruments	10	
Liquidity risk		
SARB repo participation	11	
Liquid assets		
Held on preceding day	12	
Month to date average held	13	
Requirement (item 14 of form BA 310)	14	
Liquidity coverage ratio[4] (LCR)		
High quality liquid assets	15	
Net cash outflow	16	
LCR (item 15 divided by item 16, multiplied with 100)	17	

1. **Based on the minimum percentage requirement specified in item 9 column 3 of the form BA 700.**
2. **Based on the add-on percentage requirement specified in item 9 column 3 of the form BA 700.**
3. **Based on the add-on percentage requirement or amount reported in item 12 column 3 of the form BA 700.**
4. **Refer to regulation 26(12).**

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

Standardised approach **Position risk requirement**	Line no.	Total	*of which:* Specific risk	General risk
		1	2	3
Total (of items 19 to 23)	18			
Interest rate risk	19			
Equity risk	20			
Foreign exchange risk, including gold	21			
Commodity risk	22			
Options ("carved-out" positions)	23			

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

Internal models approach Position risk requirement	Line no.	Regulatory VaR amounts[1, 2]			Incremental risk charge[1, 7]	Internal VaR[3]		Backtesting[4]	
		VaR[2]	VaR S (specific risk surcharge)	sVaR[2] (stressed VaR)		VaR amount	VaR limit	Hypothetical	Actual
		1	2	3	4	5	6	7	8
Total VaR amounts[5] and incremental risk amount	24								
Interest rate risk	25								
Equity risk	26								
Foreign exchange risk, including gold	27								
Commodity risk	28								
Other	29								
Diversification benefit	30								
Memorandum items:									
Total VaR amount[5, 6]	31								
Desk 1[6]	32								
Desk 2[6]	33								
Desk 3[6]	34								
Other desks[6]	35								

1. Calculated in accordance with the relevant requirements specified in these Regulations.

2. Based on, amongst other things, a 99 per cent, one-tailed confidence interval, and a minimum holding period of ten trading days.

3. May be based on a confidence interval and/or minimum holding period that differs from the requirements specified in these Regulations.

4. Number of exceptions recorded during the previous 250 days.

5. May not be equal to the sum of individual requirements calculated in respect of the respective risk categories or trading desks due to, amongst others, diversification benefits.

6. Please separately submit in writing the relevant desk description and other relevant information.

7. Refer to regulation 28(8)(h)(I)(E).

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

Foreign-currency exposure	Line no.	USD	Euro	GBP	CHF	JPY	Other	Total
		1	2	3	4	5	6	7
Total foreign-currency assets (net of infrastructural investments) (total of items 37 and 42)	36							
Non-residents (total of items 38 to 41)	37							
Foreign currency placed with non-residents	38							
Foreign currency placed in respect of securities borrowing	39							
Foreign currency on-lent to non-residents (line 40 equals line 55)	40							
Other foreign currency	41							
Residents (total of items 43 to 49)	42							
Customer foreign-currency accounts (CFC)	43							
Foreign currency placed in respect of securities borrowing	44							
Foreign currency placements with authorised dealers	45							
Foreign currency placements with S A Reserve Bank	46							
Foreign currency placed with residents, not specified above	47							
Gold coin and bullion	48							
Other foreign currency	49							
Total foreign-currency liabilities (total of items 51 and 56)	50							
Non-residents (total of items 52 to 55)	51							
Foreign-currency funding (loans received)	52							
Foreign-currency deposits attracted	53							
Foreign-currency deposits held in respect of securities lending	54							
Liability in respect of foreign-currency borrowings on-lent to non-residents	55							
Residents (total of items 57 to 60)	56							
Customer foreign-currency accounts (CFC)	57							
Foreign-currency accounts (CFA)	58							
Foreign-currency deposits held in respect of securities lending	59							
Foreign-currency placements from authorised dealers	60							
Commitments[1] to purchase foreign currency (total of items 62 and 67)	61							
Commitments[1] to purchase foreign currency against rand	62							
Residents	63							
Non-residents	64							
Authorised dealers	65							
S A Reserve Bank	66							
Commitments[1] to purchase foreign currency against foreign currency	67							
Commitments[1] to sell foreign currency (total of items 69 and 74)	68							
Commitments[1] to sell foreign currency against rand	69							
Residents	70							
Non-residents	71							
Authorised dealers	72							
S A Reserve Bank	73							
Commitments[1] to sell foreign currency against foreign currency	74							
Effective net open foreign-currency position(s) of reporting bank[1] (item 36 plus 61) less (50 plus 68) in each foreign currency and in all foreign currencies taken together	75							
Limit specified by the Registrar	76							
Internal overnight limits set by the bank's board of directors or senior management (in respect of each individual currency and in the aggregate)	77							

1. **Include all unsettled transactions, including spot, forward, options, futures and interest flows.**

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

Summary of selected interbank information	Line no.	Overnight			Longer than overnight		
		Amount at the repo rate	Amount at other rates	Weighted average rate	Amount at the repo rate	Amount at other rates	Weighted average rate
		1	2	3	4	5	6
Total loans to or deposits with other domestic banks	78						
Specify (per institution)	79						
Total loans from or deposits by other domestic banks	80						
Specify (per institution)	81						
Hash total	82						

29. Daily return - Directives, definitions and interpretations for completion of daily return concerning selected risk exposure (Form BA 325)

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

(2) The purpose of the form BA 325, amongst other things-

(a) is to determine on a daily basis the nature and extent of the reporting bank's exposure to and the related capital requirements in respect of-

(i) market risk or position risk; and

(ii) counterparty risk arising from positions held in the bank's trading book;

(b) is to obtain selected liquidity related information from banks that submit daily information in respect of their exposure to market risk;

(c) is to obtain selected information in respect of the bank's exposure to currency risk arising from positions held in the bank's banking book and trading book.

(3) The aggregate effective net open foreign currency position of the reporting bank in the Republic, together with its foreign operations, calculated in the manner prescribed in this form BA 325, in any one foreign currency and in all foreign currencies taken together, shall not at the close of business on any day exceed an amount specified in writing by the Registrar.

(4) Instructions relating to the completion of the daily return concerning selected risk exposure are furnished with reference to the item descriptions and line item numbers appearing on form BA 325, as follows:

Line item

1, 18 to 23 and 24 to 35 **Market or position risk requirement**

Based on, amongst other things, the relevant directives and requirements specified in regulation 28 and in the form BA 320, these items shall reflect the reporting bank's respective required amounts of capital and reserve funds in respect of market risk or position risk.

5 **Allocated capital and reserve funds for market risk**

This item shall reflect the relevant amount of allocated capital and reserve funds in order to provide for the risks pertaining to or arising from the bank's exposure to market risk.

7 to 10 **Counterparty risk**

Based on, amongst other things, the relevant directives and requirements specified in regulation 23 and in the form BA 200, these items shall reflect the respective required amounts of capital and reserve funds relating to counterparty credit risk incurred by the reporting bank in respect of transactions, agreements, contracts or instruments held in its trading book.

11 **SARB repo participation**

Based on, amongst other things, the relevant information reported to the bank's senior management and board of directors, this item shall reflect the relevant required amount relating to the bank's participation in the repo-market activity of the Reserve Bank.

12 to 14 **Liquid assets**

Based on, among other things, the relevant information reported to the bank's senior management and board of directors, and the relevant directives specified in regulation 27 and in the form BA 310, these items shall reflect the respective required amounts relating to the bank's statutory liquid asset portfolio, including information relating to the daily balance of liquid assets held, the month-to-date average of liquid assets held and the bank's liquid asset requirement.

24 to 35 **VaR amounts**

A bank that adopted the internal models approach for the measurement of the bank's exposure to position risk or market risk shall report in items 24 to 35 the relevant required information relating to, amongst other things, the bank's VaR amount calculated in accordance with the relevant directives and requirements specified in regulation 28(8) and in the form BA 320, and the specified information relating to the bank's internal VaR amount and backtesting results.

30 **Diversification benefit**

Based on the previous day's VaR amount and the respective specified risk categories and/or trading desks, a bank shall report the relevant diversification benefit in line item 30.

36 to 77 **Foreign-currency exposure**

Items 36 to 75 shall reflect the foreign-currency positions in selected currencies and in all currencies taken together in respect of the reporting bank in the Republic.

37 A non-resident is an individual, institution or branch of an authorised dealer domiciled outside the Republic of South Africa.

40 Foreign currency on-lent to a non-resident represents advances on-lent to the off-shore office or branch of a South African institution, in terms of the rules, regulations or arrangements issued by the Financial Surveillance Department of the South African Reserve Bank from time to time. (Refer to line item 55 below.)

42 A resident is an individual or institution domiciled in the Republic of South Africa.

43 A customer foreign-currency account (CFC), as an asset account, is a foreign-currency account of a South African institution with an authorised dealer, in terms of the rules, regulations or arrangements issued by the Financial Surveillance Department of the South African Reserve Bank from time to time.

45 An authorised dealer is an institution domiciled in the Republic of South Africa that has been authorised to deal in foreign currency.

52 Foreign-currency funding represents loans obtained by the reporting bank, at the bank's own initiative.

53 Foreign-currency deposits are deposits placed with the reporting bank by non-residents.

54 Foreign-currency deposits held in respect of securities lending represent deposits placed with the reporting bank in respect of securities-lending transactions, in terms of the rules, regulations or arrangements issued by the Financial Surveillance Department of the South African Reserve Bank from time to time.

55 Foreign-currency borrowing on-lent to non-residents represents deposits obtained from the parent company of a foreign institution and on-lent to the off-shore office or branch of a South African institution, in terms of the rules, regulations or arrangements issued by the Financial Surveillance Department of the South African Reserve Bank from time to time.

57 Customer foreign-currency accounts (CFC), as a liability, reflect foreign-currency accounts of South African institutions in terms of the CFC rules, regulations or arrangements issued by the Financial Surveillance Department of the South African Reserve Bank from time to time.

58 Foreign-currency accounts (CFA) reflect resident foreign-currency accounts held with the reporting bank, in terms of the rules, regulations or arrangements issued by the Financial Surveillance Department of the South African Reserve Bank from time to time.

61 Commitments to purchase foreign currency include all unsettled transactions with a commitment to purchase foreign exchange, that is, spot, forward, options, futures and interest flows, etc., at close of business on the reporting date.

68 Commitments to sell foreign currency include all unsettled transactions with a commitment to sell foreign exchange, that is, spot, forward, options, futures and interest flow, etc., at close of business on the reporting date.

62 to 73 For purposes of the completion of items 62 to 73, all transaction between the reporting bank and-

- import and/or export companies, individuals, parastatals and other financial and non-financial companies resident in the Republic, excluding the South African Reserve Bank and other authorised dealers, shall be reported as transactions with **residents**;

- any institution, individual, government, an authorised dealer in foreign exchange resident outside the Republic, etc. shall be reported as transactions with **non-residents**;

- other authorised dealers resident in the Republic shall be reported as transactions with **authorised dealers**;

- the South African Reserve Bank shall be reported as transactions with the **S A Reserve Bank**.

INTEREST-RATE RISK: BANKING BOOK

Page no.

INTEREST RATE RISK: BANKING BOOK
(Confidential and not available for inspection by the public)
Name of bank...
Month ended... (yyyy-mm-dd)

BA 330
Monthly

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

Static repricing gap	Line no.	Up to 1 month	More than 1 month to 3 months	More than 3 months to 6 months	More than 6 months to 12 months	More than 12 months to 3 years	More than 3 years to 5 years	More than 5 years to 10 years	More than 10 years	Non-rate sensitive items	Total
		1	2	3	4	5	6	7	8	9	10
Assets (total of items 2 to 6)	1										
Variable rate items	2										
Adjustable rate items	3										
Discretionary/ administered rate items	4										
Fixed rate items	5										
Non rate sensitive items[1]	6										
Liabilities and capital and reserve funds (total of items 8 to 12)	7										
Variable rate items	8										
Adjustable rate items	9										
Discretionary/ administered rate items	10										
Fixed rate items	11										
Non rate sensitive items[1]	12										
Net funding to / (from) trading desk	13										
Net funding to / (from) ZAR banking book[2]	14										
Net static gap, excluding derivative instruments (item 1 minus item 7 plus items 13 and 14)	15										
Net impact of derivative instruments held in the banking book (total of items 17 and 20)	16										
Swaps and FRAs (total of items 18 and 19)	17										
of which: pay fixed and receive floating	18										
of which: receive fixed and pay floating	19										
Other	20										
Net static gap, including derivative instruments (item 15 and 16)	21										
Cumulative static gap, including derivative instruments	22										

1. Including the aggregate amount of all relevant fair value adjustments. Refer to regulation 30(3)(a).

2. Relates only to the completion of the form BA 330 on a legal entity basis that includes any relevant activity/ exposure of a foreign branch.

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

Interest rate sensitivity: banking book Impact on Net Interest Income (NII)	Line no.	Up to 1 month	More than 1 month to 2 months	More than 2 months to 3 months	More than 3 months to 6 months	More than 6 months to 12 months	Cumulative total for 12 months
		1	2	3	4	5	6
Impact of a parallel rate shock, excluding derivative instruments							
Interest rate increase	23						
Interest rate decrease	24						
Impact of a parallel rate shock, including derivative instruments							
Interest rate increase	25						
Interest rate decrease	26						
Percentage impact of a parallel rate shock on qualifying capital and reserve funds relating to risks other than market risk							
Interest rate increase	27						
Interest rate decrease	28						
Percentage impact of a parallel rate shock on forecast NII							
Interest rate increase	29						
Interest rate decrease	30						
Impact of adverse change in specified key rates							
Adverse impact	31						

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

Interest rate sensitivity: banking book	Line no.	Up to 1 month	More than 1 month to 2 months	More than 2 months to 3 months	More than 3 months to 6 months	More than 6 months to 12 months	Cumulative total for 12 months
		1	2	3	4	5	6
Adverse correlated risk shock							
NII impact: bank specific shock with assumptions	32						
NII impact: bank specific shock - % of 12 month forecast NII	33						
Net Income impact: bank specific shock - % of 12 month forecast net income[1, 2]	34						
							Total
							1
Change in the economic value of equity							
Interest rate increase	35						
Interest rate decrease	36						

1. Relates only to a bank that calculates the relationship between interest rate movements or shocks and non-interest income, bad debts and other relevant variables.
2. Please separately provide information relating to the manner of calculation and any relevant assumptions applied in the said calculation.

30. Interest-rate risk – Directives, definitions and interpretations for completion of monthly return concerning interest-rate risk (Form BA 330)

(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 determine the repricing gap between the reporting bank's assets and liabilities, before and after the impact of derivative instruments are taken into consideration;

(b) to determine the expected cumulative impact on or sensitivity of the reporting bank's net interest income resulting from a two hundred basis points or such other percentage or basis points as may be specified in writing by the Registrar, change in interest rates from expected rates in respect of the reporting bank's expected or forecasted balance sheet relating to banking activities.

***Note*:** For the purpose of these Regulations the risk of changes in the capital value of instruments resulting from changes in interest rates shall be deemed to constitute market risk (position risk), and shall be reported in the form BA 320.

(3) Unless specifically otherwise provided in this regulation 30-

(a) the relevant required information in the form BA 330 shall be reported in Rand and completed on the basis of nominal or notional amounts, provided that subject to the prior written approval of and such conditions as may be specified in writing by the Registrar a bank may complete the form BA 330 on a fair value basis;

(b) subject to the provisions of paragraph (a) above, all relevant amounts shall be calculated and reported on an accrual basis;

(c) all on-balance sheet items and all off-balance sheet items relating to banking activities, which items affect the exposure of the reporting bank to interest-rate risk, shall be included in the form BA 330, including-

(i) any interest-bearing asset or liability instrument or item;

(ii) any security or instrument valued on a discounted basis;

(iii) any zero coupon bond;

(iv) any variable rate instrument that may reprice on a daily or monthly basis, such as call deposits or prime linked instruments;

(v) any adjustable rate instrument with a known reset date, such as a 3 month JIBAR linked product, which instrument-

(A) is linked to a regular base rate;

(B) shall be reported based on its next known reset date;

(vi) any discretionary or administered rate instrument, such as a savings or current account-

(A) the relevant rate of which instrument may or may not change in line with a regular base rate;

(B) the relevant rate of which instrument may be varied at the discretion of the reporting bank;

(C) which instrument shall be reported on the basis of the earliest adjustable interest-rate date;

(vii) any fixed rate instrument, such as a 12 month fixed deposit, which instrument has a predefined fixed interest rate until maturity and shall be reported on the basis of the instrument's relevant residual maturity;

(viii) any relevant derivative instrument,

the relevant values of which instruments or items are influenced by and sensitive to changes in interest rates, irrespective whether or not-

(A) formal interest payments are/were made in respect of the said item or instrument;

(B) the said item or instrument is denominated in Rand or a foreign currency.

(d) any instrument not sensitive to or directly impacted by changes in interest rates, that is, instruments the relevant values of which are indifferent to changes in interest rates, such as capital and reserve funds, shall be included in the form BA 330 as non rate sensitive items;

(e) in order to prevent a net negative interest rate from being applied to interest rate sensitive items, whenever the reporting bank simulates the impact of a rate shock or change on its net interest income, any relevant downward rate shock or change shall be limited to a minimum of zero per cent interest.

(4) A bank-

(a) shall obtain the prior written approval of its board of directors or board-approved committee in respect of any behavioural assumptions or adjustments made in respect of the bank's exposure to interest-rate risk, which assumptions or adjustments might include matters relating to-

(i) business volume;

(ii) business growth; or

(iii) product mix,

provided that-

(A) no bank shall without the prior written approval of and subject to such conditions as may be specified in writing by the Registrar apply any behavioural assumption or adjustment when the bank completes items 1 to 31 of the form BA 330;

(B) the bank may in the completion of items 32 to 34 of the form BA 330 include all relevant assumptions or adjustment approved by the bank's board of directors or board-approved committee in respect of the bank's exposure to interest-rate risk;

(C) the bank shall duly document any behavioural adjustments or assumptions made in respect of the bank's exposure to interest-rate risk;

(D) on prior written request, the bank shall in writing provide to the Registrar any relevant information relating to the assumptions or adjustment approved by the bank's board of directors or board-approved committee in respect of the bank's exposure to interest-rate risk;

(b) shall maintain an appropriate audit trail in respect of the data underlying the base models used for the completion of the form BA 330, which audit trail-

(i) shall include a comprehensive reconciliation between the relevant amounts of assets and liabilities included in the bank's management and board reports and the relevant assets and liabilities relating to banking activities respectively included in the forms BA 330 and BA 100;

(ii) shall duly explain any relevant reconciliation differences;

(iii) on prior written request, shall be submitted in writing to the Registrar.

(c) shall, based on the earliest date of the next interest rate reset date or the maturity of any item, report all relevant positions in the relevant time bands specified in the form BA 330;

CONTINUES ON PAGE 642—PART 5