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Unofficial translation of the
Swiss Federal Banking Commission's
„Rundschreiben der Eidg. Bankenkommission:
Eigenmittelanforderungen für Operationelle Risiken
(Operationelle Risiken)"

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Swiss Federal Banking Commission Circular: Capital Adequacy for Operational Risks
(Operational Risks)
of 29 September 2006

Contents

Annex

Basel para	**I. Purpose of the Circular**	*Margin no (Rz):*
645	The circular details Art. 77-82 of the Capital Adequacy Ordinance (CAO). It specifies the determination of capital requirements for operational risk along the three approach options and the related requirements.	1
	II. Definition (Art. 77 CAO)	
644	Operational risk, accordingly to Art. 77 CAO, is defined as the risk of loss resulting from inadequate or failed internal processes, people or systems or from external events. This definition comprises legal risk including regulatory fines and settlements, but excludes strategic and reputation risk.	2
	III. The Basic Indicator Approach (BIA, Art. 80 CAO)	
649	Banks using the Basic Indicator Approach must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted alpha) of positive annual earnings indicator GI[1]. Figures for any year in which annual earnings indicator is negative or zero should be excluded from both the numerator and denominator when calculating the average.	3
n.a.	The previous three years as referred to in Rz 3 (resp. Rz 24) correspond to the three one-year periods prior to the effective date of the last published income statement. If the last published income statement is as of June 30, 2008, the three one-year periods to be considered correspond to the periods from July 1, 2005 till June 30, 2006, from July 1, 2006 till June 30, 2007 and from July 1, 2007 till June 30, 2008.	4
649	The capital charge K_{BIA} is calculated as follows: $$K_{BIA} = \alpha \cdot \sum_{j=1}^{3} \frac{\max[0, GI_j]}{\max[1, n]}$$ Where	5
649	α is uniformly set at 15%	6
649	GI_j = annual earnings indicator for the year j	7
649	n = number of the previous three years for which the earnings indicator is positive	8

[1] In the revised Basel Minimal Standards Framework *("International Convergence of Capital Measurement and Capital Standards – A revised Framework / Comprehensive Version")* of June 2006, the earnings indicator is denominated "Gross Income".

650	The earnings indicator GI is defined as the sum of the following positions according to Rz 103 ff. RRV-EBK:	9
650	- interest income (Rz 105-109 RRV-EBK)	10
650	- commission and fee income[2] (Rz 110-116 RRV-EBK)	11
650	- trading income (Rz 117 RRV-EBK)	12
650	- participation income (Rz 119f. RRV-EBK) from not consolidated participations	13
650	- real estate income (Rz 121f. RRV-EBK)	14
n.a.	The scope of consolidation for capital requirements constitutes the basis for the calculation of the earnings indicator GI on the consolidated level.	15
n.a.	The historical values of the earnings indicator GI are to be adjusted upwards in cases where the bank's structure or activities widen (e.g. following the take-over of a new business entity). Downward adjustments of the historical values of the earnings indicator GI (e.g. following the disposal of a business area) have to be approved by the supervisory authority.	16
n.a.	For the determination of the earnings indicator GI, in accordance to Art. 79 para 1 CAO, banks may use internationally recognized accounting standards in place of the Swiss accounting standards, subject to approval by the supervisory authority (cf Art. 79 para 4 CAO).	17
650	All incomes from outsourcing contracts, where the bank acts as outsourcing service provider, are to be included in the earnings indicator GI, in accordance to Art. 79 para 2 CAO.	18
650	Where a bank is recipient of outsourcing services, the relevant fees paid may be deducted from the earnings indicator GI only if the outsourcing occurs within the same banking group and is ultimately consolidated, in accordance to Art. 79 para 3 CAO.	19
651	Banks using the Basic Indicator Approach must comply with the qualitative requirements of Annex 1, if:	20
n.a.	• their capital charge K_{BIA} was above CHF 100 mn at least once over the past 3 years, or	21
n.a.	• they have foreign branches or units that have to be consolidated for the capital charge computation, which on an aggregated basis make up more than 5% of the total capital requirements for operational risks.	22
	IV. The Standardized Approach (Art. 81 CAO)	

[2] The consideration of the commission fee according to RRV-EBK Rz 114 is limited as described in Rz 18.

	A. Mechanism	
652	Banks calculating the operational risk capital charge with the Standardized Approach, must be able to allocate all their activities to the following business lines: (Table 1) **Business Lines** / **Beta Factors (β_i)** Corporate finance / advisory (β_1): 18% Trading and sales (β_2): 18% Retail banking (β_3): 12% Commercial banking (β_4): 15% Payment and settlement (β_5): 18% Agency services (β_6): 15% Asset management (β_7): 12% Retail brokerage (β_8): 12%	23
654	For each individual business line i and each of the three preceding years, in accordance to Rz 4, an earnings indicator GI in accordance to Rz 9-18 has to be determined and to be multiplied by the relevant β_i from Table 1. The so obtained figures are first to be added for each individual year j. In doing so, negative figures of individual business lines can be deducted from positive figures. Secondly, the resulting sums for each individual year are to be added and divided by three. In doing so, negative sums for an individual year are to be set equal to zero (see Art. 81 para 1 CAO).	24
654	The capital charge in the Standardized Approach K_{sa} is calculated as follows: $K_{SA} = \frac{1}{3} \cdot \sum_{j=1}^{3} \max\left[0,\ \sum_{i=1}^{8} GI_{i,j} \cdot \beta_i\right]$ Where:	25
654	$GI_{i,j}$ = annual earnings indicator in year j, for business line i	26
654	β_i = a fixed percentage for business line i, a multiplier identical for all banks	27
	B. General requirements (Art. 81 para 3 CAO)	
651	All banks using the Standardized Approach must comply with the qualitative requirements of Annex 1.	28
662	Each bank must have principles, along Annex 2, for the allocation of business activities into standardised business lines as defined in Rz 23. For this purpose it must possess documented criteria. The criteria are to be reviewed periodically and must be adjusted to any changes in the activities of the bank.	29

	C. Additional requirements for banks with foreign representations	
663	The requirements of Rz 31-44 must be fulfilled by those banks having foreign branches or units that have to be consolidated for the capital charge computation.	30
663a)	The bank must possess a function in charge of the management of operational risks. This function is responsible for:	31
663a)	• the development of strategies for the identification, assessment, monitoring, control and mitigation of operational risks	32
663a)	• the establishment of bank-wide principles and processes for the management and control of operational risks	33
663a)	• the development and implementation of a method to assess operational risks	34
663a)	• the development and implementation of a reporting system for operational risks	35
663b)	As part of the Institute's operational risk assessment system, the bank must systematically collect the operational risk data relevant for its activities, including significant losses from individual business lines.	36
663b)	The assessment system must closely be integrated in the risk management processes of the bank.	37
663b)	The insights gained from this system must be an integral part of the process to monitor and control the bank's specific operational risk profile. E.g. this information must play a prominent role in the reporting to management and in the risk analysis.	38
663b)	The bank must possess incentive systems, which can contribute to the improvement of the management of operational risks.	39
663c)	The managers of the individual business lines, the executive board and the board of directors are to be informed regularly about the operational risk exposure and significant operational risk loss events. The bank must have processes to adequately react on relevant information.	40
663d)	The bank's system for the management of operational risks must be well documented.	41
663d)	The bank must have processes ensuring the adherence of documented internal principles, controls and processes for the management system of operational risks. This also includes principles for the handling of internal non-compliance issues.	42
663e)	The bank's processes for the management of operational risks and the corresponding assessment system must be subject to regular independent validation and review. The reviews must cover the activities of individual	43

	business lines and the function responsible for the management of operational risks.	
663f)	The bank's system for the assessment of operational risks (including the internal validation processes) must be subject to regular review by an external auditor.	44
	V. Institute specific approaches (AMA, Art. 82 CAO)	
	A. Approval	
655	The Institute Specific Approaches (Advanced Measurement Approaches, AMA) allow banks, subject to meeting specific requirements, to quantify regulatory capital requirements based on AMA.	45
655	The use of AMA requires the approval by the supervisory authority.	46
659	The supervisory authority, before granting a final approval and for testing and comparison purposes, can request banks applying for an AMA to run calculations for a maximum period of two years.	47
648	A bank using an AMA can only fully or partially revert to the Basic Indicator or Standardized Approach upon request or consent of the supervisory authority.	48
n.a.	Expenses of the supervisory authority related to the approval process and the required reviews after approval has been granted will be charged to the bank.	49
	B. Qualitative requirements	
651	Banks applying an AMA must comply with the qualitative requirements of Annex 1.	50
664	In order to use the AMA for the calculation of regulatory capital requirements a bank must in addition satisfy the following qualitative requirements:	51
664b1	Its board of directors must be actively involved in the oversight of the approach.	52
664b1	Its senior management must be familiar with the Institute's specific quantification approach and be in a position to fulfil its related oversight function.	53
664b2	The bank has an operational risk management system that is conceptually sound, reliable and is implemented with integrity.	54
664b3	At all levels of the bank sufficient resources are available for the management, control and internal audit of the AMA.	55

666 a)	The bank must have an independent central operational risk management unit that is responsible for the design and implementation of the operational risk management framework. This unit is responsible for:	56
666 a)	• codifying firm-level policies and procedures concerning operational risk management and controls;	57
666 a)	• the design and implementation of the firm's operational risk measurement methodology;	58
666 a)	• the design and implementation of a risk-reporting system for operational risk; and	59
666 a)	• the development of strategies to identify, measure, monitor and control/mitigate operational risk.	60
666 b)	The institute specific operational risk measurement system must be closely integrated into the day-to-day risk management processes of the bank.	61
666 b)	The AMA output must be an integral part of the process of monitoring and controlling the bank's operational risk profile. For instance, this information must play a prominent role in reporting to management, internal capital allocation, and risk analysis.	62
666 b)	The bank must have techniques for allocating operational risk capital to major business lines and for creating incentives to improve the management of operational risk throughout the entire firm.	63
666 c) and d)	To secure internal information and documentation, the requirements of Rz 40-42 are to be complied with:	64
666 e)	Internal and external auditors must perform regular reviews of the operational risk management processes and the implementation of the AMA. The reviews must include both the activities of the business units and of the central operational risk management unit.	65
666 f)	The validation of the operational risk measurement system by external auditors must in particular include the following:	66
666 f)	• Verifying that the internal validation processes are operating in a satisfactory manner; and	67
666 f)	• Making sure that data flows and processes associated with the risk measurement system are transparent and accessible. In particular, it is necessary that internal audit, external auditors and the supervisory authority are in a position to have access, to the system's specifications and parameters.	68
	C. General quantitative requirements	

667	The supervisory authority, in line with the Basel minimal standards framework[3], is not specifying the approach to be used to generate regulatory capital, and instead leaves banks considerable freedom in this regard. This circular is therefore limited to spelling out the key requirements, which have to be met to qualify for the use of the AMA. The review of the detailed specifications of AMA is subject of the individual approval process. The latter is performed under the lead of the supervisory authority and involving the external auditor.	69
667	Independently of the concrete specification of the quantification approach, the bank must be able to demonstrate that its approach captures potentially severe low frequency loss events. The resulting operational risk regulatory capital measure should approximately correspond to the 99.9%-quantile of the distribution function of the respective aggregated operational risk losses over one year.	70
669a)	Any internal operational risk measurement system must be consistent with the definition of operational risk in Art. 77 CAO and Rz 2. In addition, it must allow a categorization of loss event types defined in Annex 3.	71
669b)	Capital requirements cover both expected and unexpected losses. The supervisory authority may allow capital requirement alleviations to a bank, if the bank has made appropriate provisions for expected future losses.	72
669d)	All explicit and implicit assumptions regarding dependencies across individual operational risk loss events and across used estimators must be plausible and justifiable.	73
669e)	Any operational risk measurement system must have certain key features. These in particular include meeting the requirement to integrate: • internal loss data (Rz 76-85); • relevant external loss data (Rz 86-88); • scenario analysis (Rz 89-91); and • business environment and internal control system factors (Rz 92-97).	74
669f)	A bank needs to have a reliable, transparent, well-documented and verifiable concept for the inclusion and determination of the relative importance of these four fundamental elements in its overall operational risk measurement system. The bank's operational risk measurement system must be internally consistent and in particular avoid the double counting of risk mitigating elements (e.g. business environment and the internal control system factors or insurance contracts).	75
	D. Internal loss data (Art. 82 para 2 CAO)	

[3] Cf. footnote 1, page 2

671	A bank must have documented procedures for assessing the on-going relevance of historical loss data. This includes in particular clearly defined internal rules how the consideration of internal data can be altered (e.g. full non-consideration due to lacking current relevance, scaling due to changed size, or other adjustments). The documented procedures are also to define who is authorized to make such alterations and to which level.	76
672	A bank must use an internal loss database. When the bank first moves to the AMA for regulatory purposes, this database must cover at least three-years historical data. At least two years after the first move to AMA the time window covered by the database must permanently be based on a minimum five-year observation period.[4]	77
673	The process for the creation of an internal operational risk losses database must meet the following standards:	78
673b1	• To assist in supervisory validation, a bank must be able to map its historical internal loss data along Rz 23 and into the supervisory categories defined in Annex 3. It must have documented, objective criteria for allocating losses to the specified business lines and event types.	79
673b2	• A bank's internal loss data must be captured comprehensively, based on a robust process that has integrity. They must capture all material activities and exposures, including all relevant sub-systems and geographic locations. A systematic collection of losses below a given gross loss threshold set by the supervisory authority is not required.	80
673b3	• For each loss event, the bank should collect the following information: gross loss amount, date of the event, any recoveries of gross loss amount (e.g. from insurance contracts). For loss events with a gross loss amount above CHF 1 mn, descriptive information about the causes of the loss event must also be collected.	81
673b4	• A bank must define principles for collecting loss event data. This also includes criteria for categorizing losses arising from an event in a central function (e.g., an information technology department) or an activity that spans over more than one business line. In addition it must be specified how to deal with series of related events.	82
673b5	Operational risk losses that are related to credit risk and have historically been included in banks' credit risk databases may continue to be treated exclusively as credit risk for the purposes of calculating minimum regulatory capital. However, if above a given threshold fixed by the supervisory authority, such losses must also be included in the operational risk loss database and be considered for the purposes of internal operational risk management. Similarly to other internal losses, such losses have to be captured, but in respect of operational risks they shall be	83

[4] For the two year parallel calculation phase of old (Basel I based) and new (Basel II based) capital requirement calculation according to Rz 47, the data window may be below the foreseen minimum time window.

	flagged as irrelevant for regulatory capital.	
673b6	For a loss due to operational risk, which is also reflected as a market risk loss, the relevant event is to be captured alike other operational risk loss events and included in the AMA quantification. A bank applying a risk aggregation model in accordance to Rz 228-365 of the EBK-circular 06/2 (Market risks) for the computation of its capital requirements for market risks may not exclude positions resulting from operational risk events from the value at risk calculation or the backtesting.	84
n.a.	Negative losses (e.g. gains from a wrongly bought stock position) may not result in regulatory capital reducing effect in the AMA.	85
	E. External loss data (Art. 82 para 2 CAO)	
674	A bank's operational risk measurement system must use relevant external loss data. This should ensure the consideration of infrequent, yet potentially severe loss events. Publicly available and/or pooled industry loss data can serve as sources for this relevant information.	86
674	The external loss data must include data on actual loss amounts, information on the scale of business operations where the event occurred, information on the causes and circumstances of the loss events, and information allowing assessing the relevance of the loss event for the own bank.	87
674	A bank must have a systematic and documented process for the use of external loss data. This particularly includes a clear methodology for the incorporation of the data into the AMA (e.g. scaling, qualitative adjustments, or influence on scenario analysis). The conditions and practices for external loss data use must be regularly reviewed, and be subject to periodic internal and external audit.	88
	F. Scenario analysis (Art. 82 para 2 CAO)	
675	The AMA must take into account results from scenario analyses.	89
675	The scenario analysis, building on expert opinion in conjunction with external data, must evaluate the bank's exposure to potential high-severity events.	90
675	The scenarios used for the scenario analysis and their associated parameters are to be reviewed to determine whether they are up-to-date and relevant in the event of a major change to the risk exposure or at least on an annual basis and if appropriate, adjusted. In case of major changes of the risk situation reviews are to be performed immediately.	91
	G. Business environment and internal control factors (Art. 82 para 2 CAO)	
676	As forward-looking element a bank's AMA must use predictive factors from its business environment and internal control system. These factors serve the purpose to specifically reflect the current features of the bank's risk profile (e.g. new activities, new IT solutions, changed processing flows) or	92

	changes in its operating environment (e.g. security situation, changes in courts practice, exposure to IT viruses).	
676	To qualify for use in an AMA framework, the business environment and internal control system factors must meet the following standards:	93
676b1	• Each factor, based on experience and involving the judgment of the affected business areas, must be a relevant driver of risk. Ideally, the factor should be quantifiable and lend itself to verification.	94
676b2	• The sensitivity of a bank's risk estimates to changes in the factors and the relative importance of the various factors need to be justified and comprehensible. In addition to capturing changes in the risk profile due to improvements in risk controls, the framework must also capture potential increases in risk due to greater complexity of activities or increased business volume.	95
676b3	• The framework and choice and use of individual factors, including the principles for any adjustments to empirical estimates, must be documented. The documentation should be subject to independent review within the bank.	96
676b4	• The process, the outcomes and the undertaken adjustments are to be regularly validated through comparison to actual internal and external loss experience.	97
	H. Risk mitigation through insurances	
677	Under the AMA, a bank will be allowed to recognize the risk mitigating impact of insurance in the measurement of operational risk used for regulatory minimum capital requirements. The recognition of insurance mitigation will be limited to a maximum 20% reduction of the total operational risk capital charge calculated under the AMA.	98
678	An bank's ability to take advantage of such risk mitigation will depend on compliance with the following criteria:	99
678b1	• The insurance provider has a minimum credit rating of 3 (or better). The rating must stem from a rating agency recognized by the supervisory authority.	100
678b2	• The insurance policy must have an initial term of no less than one year. For policies with a residual term of less than one year, the bank must make appropriate linear haircuts reflecting the declining residual term of the policy, from 100 % (for policies with a residual term of at least 365 days) down to 0% haircut (for policies with a residual term of 90 days). Policies with a residual maturity of 90 days or less are not recognized for the determination of the capital requirements.	101
678b3	• The insurance policy has a minimum notice period for cancellation of no less than 90 days. The recognition of risk mitigation of insurance policies with a cancellation period below one year is to be linearly	102

679b2	haircut, from 100% (for policies with a cancellation period of at least 365 days) up to a 0% haircut for policies with a residual term of 90 days. The haircuts are to be applied on the eventually already reduced risk mitigation effect derived under Rz 101.	
678b4	• The insurance policy has no exclusions or limitations triggered by supervisory actions or, in the case of a default of the bank, that preclude the bank, receiver or liquidator from recovering for damages suffered or expenses incurred by the bank, except in respect of events occurring after the initiation of receivership or liquidation proceedings in respect of the bank.	103
678b5	• The risk mitigation calculation of the bank's insurance coverage must be transparent. It must be consistent with, the likelihood and severity of the potential loss event as used in the bank's AMA.	104
678b6	• The insurance is provided by a third party entity and may not be part of the same group owning the bank. In the case of insurance through captives and affiliates of the group the risk mitigation effect of insurance policies is only recognized if the insurance provider lays off the exposure to an independent third party entity (e.g. through re-insurance) that meets all the eligibility criteria.	105
678b7	• The framework for recognizing insurance must be based on the effective risk transfer. It must be well documented.	106
678b8	• The bank must disclose information on the use of insurance for the purpose of mitigating operational risk.	107
	VI. Partial use of approaches	
680	A bank will generally be permitted to use an AMA for some parts of its operations and the Basic Indicator Approach or Standardized Approach for the balance ("partial use"), provided that the following conditions are met:	108
680b1 680b2	• All operational risks of the bank are captured by one of the approaches described in this circular. In doing so the respective requirements for these approaches have to be met in the respective business lines.	109
680b3	• On the date of implementation of an AMA, a significant part of the bank's operational risks are captured by the AMA.	110
680b4	• The bank must have a timetable for the roll out of the AMA across all material legal entities and business lines.	111
680b4	• It is not permissible to maintain a Basic Indicator or Standardized Approach in selected material business lines for purposes of regulatory capital minimization.	112
681	A bank opting for partial use may determine which parts of its operations will use an AMA and which will use a Basic Indicator or Standardized Approach on the basis of business line, legal structure, geography, or other	113

	internally clearly defined criteria.	
n.a.	Except for cases listed in Rz 108-113, it is not permitted to use different approaches for the calculation of capital requirements.	114
	VII. Adjustment to capital requirements (Art. 34 para 3 CAO)	
778, ftn 98, 99	The supervisory authority, under the supervision function provision of Pillar two of the Basel Accord, can increase the capital requirements for individual banks (Art. 34 ERV). Such individual increases of capital requirements will in particular be considered for the exclusive reliance on the Basic Indicator or Standardized Approach, if a low level of the earnings indicator GI leads to inappropriately low capital requirements.	115
	VIII. Entry in force	
	Date of entry in force: January 1, 2007	116
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	- CAO: Art. 77-82	
	- GebV: Art. 13 and 14	

Annex 1: Qualitative requirements

The following requirements apply at the latest as of January 1, 2008 for all banks, except those applying the Basic Indicator Approach *and* fulfilling none of the criteria of Rz 21 and 22. They correspond to the concrete Swiss implementation of the "*Sound Practices for the Management and Supervision of Operational Risk*" guidelines published by the Basel Committee on Banking Supervision in February 2003.

(1: SPP Princ 1) The board of directors must be aware of the bank's major operational risks. It must – directly or via a committee – approve and periodically review written principles for the management of operational risks. The principles should cover i.a. how operational risk is to be identified, assessed, monitored and controlled as well as mitigation measures.

(2: SPP Princ 2) The board of directors ensures that the principles for the management of operational risks are reviewed by internal audit. The internal audit function may not be directly responsible for the operational risk management.

(3: SPP Princ 3) Senior management has the responsibility for implementing the operational risk management principles. Senior management pays attention to a consistent implementation of the principles throughout the whole organisation and must ensure that all employees understand their responsibilities with respect to operational risk management. Senior management is also responsible for developing measures for the management of operational risks in all activities of the bank.

(4: SPP Princ 4) Banks must identify and assess the operational risks inherent in all their activities, products, processes and systems. Before changes of the structure of such activities, products, processes and systems, their inherent operational risk must be subject to adequate evaluation.

(5: SPP Princ 5) Banks must implement a process to systematically monitor their operational risk profile and material operational risks. Pertinent information must be reported to senior management and the board of directors to, if adequate, support derivation of proactive measures.

(6: SPP Princ 6) Banks must have procedures and concrete measures to monitor and/or mitigate material operational risks. These must be co-ordinated with the specific current situation of the bank.

(7: SPP Princ 7) Banks must have contingency or business continuity plans to ensure their ability to operate also under exceptional circumstances and to limit consequences of severe business disruptions.

Annex 2 (Basel Annex 8): Categorisation of business lines according to Art. 81 para 2 CAO

A. Overview

Table 2

Level 1	Level 2	Activity Groups
Corporate Finance / advisory	Corporate Finance / advisory	Mergers and acquisitions, underwriting, privatisations, securitisation, research, debt (government, high yield), equity; syndications, IPO, secondary private placements
	Municipal/Government Finance	
	Merchant Banking	
	Advisory Services	
Trading & Sales	Sales	Fixed income, equity; foreign exchanges, commodities, credit, derivatives, own position securities, stock lending and repos, brokerage (for non-retail-investor), debt, prime brokerage
	Market Making	
	Proprietary Positions	
	Treasury	
Retail Banking	Retail Banking	Retail lending and deposits, banking services, trust and estates
	Private Banking	Private lending and deposits, banking services, trust and estates, investment advice and other private banking services
	Card Services	Merchant/commercial/corporate cards, private labels and retail
Commercial Banking	Commercial Banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lends, guarantees, bills of exchange
Payment and Settlement[5]	External Clients	Payments and collections, funds transfer, clearing and settlement
Agency Services	Custody	Escrow, depository receipts, securities lending (customers) corporate actions
	Corporate Agency	Issuer and paying agents
	Corporate Trust	
Asset Management	Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open, private equity
	Non-Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open
Retail Brokerage	Retail Brokerage	Execution and full service

[5] Payment and settlement losses related to a bank's own activities would be incorporated in the loss experience of the affected business line.

B. Principles for the allocation *(to business line)*

1 All activities must be mapped into the eight level 1 business lines of Table 2 in a mutually exclusive and jointly exhaustive manner.

2 Any banking or non-banking activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, must be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criteria must be used.

3 If an activity cannot be mapped into a particular business line based on objective criteria then it has to be mapped into the business line yielding the highest β-factor. The same applies to any associated ancillary activity.

4 Banks may use internal charging methods to allocate the earnings indicator GI between business lines provided that total earnings indicator for the bank (as would be recorded under the Basic Indicator Approach) still equals the sum of earnings indicator for the eight business lines.

5 The mapping of activities into business lines for operational risk capital purposes must be consistent with the delimitation criteria used for regulatory capital calculations in other risk categories, i.e. credit and market risk. Any deviations from this principle must be clearly justified and documented.

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

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

8 Senior management is responsible for the mapping policy. The latter is subject to the approval by the board of directors.

9 The mapping process to business lines must be subject to regular review by the external auditor.

Annex 3 (Basel Annex 9): Overview for the loss event type classification

Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/ discrimination events, which involves at least one internal party.	Unauthorised Activity	Transactions not reported (intentional) Trans type unauthorised (w/monetary loss) Mismarking of position (intentional)
		Theft and Fraud	Fraud / credit fraud / worthless deposits Theft / extortion / embezzlement / robbery Misappropriation of assets Malicious destruction of assets Forgery Check kiting Smuggling Account take-over / impersonation / etc. Tax non-compliance / evasion (wilful) Bribes / kickbacks Insider trading (not on firm's account)
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party	Theft and Fraud	Theft/Robbery Forgery Check kiting
		Systems Security	Hacking damage Theft of information (w/monetary loss)
Employment Practices and Workplace Safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity / discrimination events	Employee Relations	Compensation, benefit, termination issues Organised labour activity
		Safe Environment	General liability (slip and fall, etc.) Employee health & safety rules events Workers compensation
		Diversity & Discrimination	All discrimination types
Clients, Products & Business Practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.	Suitability, Disclosure & Fiduciary	Fiduciary breaches / guideline violations Suitability / disclosure issues (KYC, etc.) Retail customer disclosure violations Breach of privacy Aggressive sales Account churning Misuse of confidential information Lender liability

Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
		Improper Business or Market Practices	Antitrust Improper trade / market practices Market manipulation Insider trading (on firm's account) Unlicensed activity Money laundering
		Product Flaws	Product defects (unauthorised, etc.) Model errors
		Selection, Sponsorship & Exposure	Failure to investigate client per guidelines Exceeding client exposure limits
		Advisory Activities	Disputes over performance of advisory activities
Damage to Physical Assets	Losses arising from loss or damage to physical assets from natural disaster or other events.	Disasters and other events	Natural disaster losses Human losses from external sources (terrorism, vandalism)
Business disruption and system failures	Losses arising from disruption of business or system failures	Systems	Hardware Software Telecommunications Utility outage / disruptions
Execution, Delivery & Process Management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors	Transaction Capture, Execution & Maintenance	Miscommunication Data entry, maintenance or loading error Missed deadline or responsibility Model / system misoperation Accounting error / entity attribution error Other task misperformance Delivery failure Collateral management failure Reference Data Maintenance
		Monitoring and Reporting	Failed mandatory reporting obligation Inaccurate external report (loss incurred)
		Customer Intake and Documentation	Client permissions / disclaimers missing Legal documents missing / incomplete
		Customer / Client Account Management	Unapproved access given to accounts Incorrect client records (loss incurred) Negligent loss or damage of client assets
		Trade Counterparties	Non-client counterparty misperformance Misc. non-client counterparty disputes
		Vendors & Suppliers	Outsourcing Vendor disputes

Annex 4: Comparison between SFBC-circular and Basel Framework: Not included in the English translation as already reflected in the text.