ANNEX II

ANNEX H-3

Standardised Approach

1. Capital requirement

The capital requirement for operational risk under the Standardised Approach is the simple sum of the capital requirements calculated for each of the business lines presented below.

The capital requirement for a given business line is equal to a certain percentage [beta factor] of a proxy indicator.

This proxy indicator is the income indicator calculated for each business line individually [using the same methodology as in Annex H-2 section 2, but at the level of each individual business line]. When the income indicator for any business line is negative, the capital requirement for operational risk for this business line shall be equal to zero.

Business line	Percentage ["beta factor"]
Corporate finance	18%
Trading and sales	18%
Retail brokerage	12%
Retail banking	12%
Commercial banking	15%
Payment and settlement	18%
Agency services (custody, corporate agency, corporate trust)	15%
Asset management	12%

At the request of an institution, the competent authorities may authorise this institution to calculate its capital requirement for operational risk using an alternative standardised approach, subject to the modalities and conditions set out in section 3 below.

2. Principles for business line mapping

Institutions must develop specific policies and have documented criteria for mapping the exposure indicator for current business lines and activities into the standardised framework. The criteria must be reviewed and adjusted for new or changing business activities and risks as appropriate. The principles for business line mapping are set out below.

(a) All activities must be mapped into the business lines in a mutually exclusive and jointly exhaustive manner;

(b) Any activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, 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 (e.g., proportional allocation of the indicators);

(c) When mapping the proxy exposure indicator, if an activity cannot be mapped into a particular business line then the business line yielding the highest charge must be used. The same business line equally applies to any associated ancillary activity.

(d) Institutions may use internal pricing methods to allocate the income indicator between business lines, provided that the sum of income indicators for the business lines equals the income indicator defined for the Basic indicator approach under Annex H-2.

(e) The mapping of activities into business lines for operational risk capital purposes must be consistent with the definitions of business lines used credit and market risks.

(f) The mapping process used must be clearly documented.

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

(h) Senior management is responsible for the mapping policy;

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

An indicative general mapping of activities, with further guidance for the mapping of investment services into the eight business lines framework is provided in the following two tables.

Comments are invited on the relevance of this suggested allocation of activities and on the extent to which such allocation should be included in the scope of the mandatory provisions of the EU capital adequacy framework, in complement to the overarching mapping principles set out above.

Level 1	Level 2	Activity Groups
Corporate Finance	Corporate Finance	Mergers and Acquisitions, Underwriting, Privatisations, Securitisation, Research, Debt (Government, High Yield), Equity, Syndications, IPO, Secondary Private Placements
	Government Finance	
	Merchant Banking	
	Advisory Services	
Trading & Sales	Sales	Fixed Income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage
	Market Making	
	Proprietary Positions	
	Treasury [1]	
Retail Banking	Retail Banking	Retail lending and deposits, banking services, trust and estates
	Private Banking	Private lending and deposits, banking services, trust and estates, investment advice
	Card Services	Merchant/Commercial/Corporate cards, private labels and retail
Commercial Banking	Commercial Banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lends, guarantees, bills of exchange
Payment and Settlement[154]	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	[see below]	
Retail Brokerage	Retail Brokerage	Execution and full service

[1] Unless treasury activities are allocated to other business lines as ancillary function (see mapping principle b) above.

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

Mapping of investment services into business lines		
Main	***Finer Business Lines***	***The Exposure Indicator Would Include Income From (2):***
Corporate Finance	***Underwriting and Placing under ISD)***	Underwriting, placing or other activities undertaken in agreement with the issuer of the instrument to assist the distribution of or subscription to public or private offers of financial instruments, when these activities imply firm commitment or subscription on the part of the institution.
	Municipal/government finance, Merchant banking, corporate finance, Advisory services	Mergers and Acquisitions, IPOs, privatisations and other similar transactions, corporate finance services, securitisations, syndications, and advice on note issuance.
Trading and Sales	***Dealing under ISD***	Dealing on own account under ISD including dividend or interest income on cash equities and other ISD instruments; net gains from changes in the fair value of principal positions held for dealing, Foreign exchange trading repos, reverse repos, stock lending and borrowing].
	Sales, market making, proprietary positions, treasury	Fixed income, equity, foreign exchanges, commodities, derivatives, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage in general
Retail Brokerage	***Execution of Orders under ISD***	Execution of orders on behalf of clients under ISD, Operation of Multilateral Trading Facilities under the ISD, Execution of orders on FX
	Retail brokerage	Execution and full service when not included under "Execution of orders under ISD"
	Other ISD services, when they are not ancillary to any of the other business lines	Reception and transmission of orders from clients in relation to one or more financial instruments or connected foreign exchange services under ISD, investment advice under ISD; placing or other activities undertaken in agreement with the issuer of the instrument to assist the distribution of or subscription to public or private offers of financial instruments when these activities do not imply firm commitment or subscription on the part of the institution under the ISD; advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to mergers and the purchase of undertakings under the ISD; investment research and financial analysis or other forms of general recommendation relating to transactions in financial instruments under the ISD

[2] Costs generated in one business line (for instance, fees paid for clearing and settlement) which are imputable to a different business line (for instance execution of orders) can be reallocated to the business line to which they pertain (in this case, execution of orders), for instance by using a treatment based on internal transfer costs between the two business lines.

Retail Banking	***Retail Banking, Private Banking, Card Services***	Granting credits or loans to a non professional investor to allow him to carry out a transaction in one or more ISD instruments, where the firm granting the credit or loan is involved in the transaction. Lending[3], deposits and bank placements, retail credit card services, factoring, documentary credits, guarantees, bills of exchange, acceptances and endorsements and other contingent liabilities.
Commercial Banking	***Commercial Banking***	Granting credits or loans to a professional investor or counterparty to allow him to carry out a transaction in one or more ISD instruments, where the firm granting the credit or loan is involved in the transaction. Lending[4], deposits and bank placements, non-retail credit card services, factoring, documentary credits, guarantees, bills of exchange, acceptances and endorsements and other contingent liabilities.
P & S	***Payments and Settlements***	Payments, collection, fund transfer not related to banking; clearing and settlement services in ISD instruments.
Asset Manage ment	***Asset Management under ISD***	Managing portfolios in accordance with mandates given by clients on a discretionary, client-by-client basis where such portfolios include ISD financial instruments. This business line would notably include client-by-client retail and institutional fund management.
	Asset Management under UCITSD	Managing of UCITS in the form of unit trusts/common funds and/or investment companies (collective portfolio management of UCITS) as defined in Art.1, paragraph 2 of the UCITS Directive, including retail and institutional fund management.
	Other Asset Management	Asset management other than Asset Management under ISD or under UCITSD. This notably includes discretionary and non-discretionary asset management, on a client-by-client or collective basis, to retail, professional or other institutional investor, including closed and open-end fund management which does not fall under the previous two finer business lines.
Agency Services	***Depository Services under UCITSD***	Safekeeping, administration, and depository services according to the UCITSD.
	Custody under ISD	Safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management;
	Agency Services, Custody, Corporate Agency, Corporate trust	Escrow, Depository Receipts, Corporate actions, Safekeeping, administration, and safe custody other than those covered in the previous two finer business lines

[3] This may include export/ trade finance*, leasing*, credit lines, hire purchase contracts, revolving and standby facilities, loan originations, loan servicing, margin lending and project finance*.

[4] This may include export/ trade finance*, leasing*, credit lines, hire purchase contracts, revolving and standby facilities, loan originations, loan servicing, margin lending and project finance*.

3. Alternative standardised approach

3.1. Modalities

Under the alternative standardised approach, the capital requirement for operational risk capital is the same as for the Standardised Approach set out in section 1 except for the two following business lines: retail banking; commercial banking.

For these business lines, the proxy indicator is the three-year average of the total nominal amount of loans and advances multiplied by 0.035.

For the retail banking business line, the loans and advances shall consist of the total drawn amounts in the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables.

For the commercial banking business line, the loans and advances shall consist of the drawn amounts in the following credit portfolios: Corporate, Sovereign, Bank, Specialised Lending, SMEs treated as Corporate and Purchased Corporate Receivables. The securities held in banking book shall also be included.

3.2. Conditions

An individual institution may be allowed to calculate its capital requirement for operational risk using the alternative standardised approach if the following conditions are met:

- The institution is overwhelmingly active in retail and/or commercial banking activities, which shall account for at least 90% of its income indicator.

- The institution is able to demonstrate to the competent authorities that a significant proportion of its retail and/or commercial banking activities comprise loans associated with a high probability of default, and that the alternative standardised approach provides an improved basis for assessing the operational risk.

- The institution meets the qualifying criteria set out in section 4.

4. Qualifying criteria

To be eligible for the Standardised Approach, institutions must satisfy their competent authorities that they meet the following qualifying criteria listed below, in addition to the general risk management standards set out in Annex I:

(a) Institutions shall have a well-documented assessment and management system for operational risk. They shall identify their exposures to operational risk and track relevant operational risk data, including material loss data. This system shall be subject to regular independent review.

(b) Institutions shall implement a system of management reporting that provides operational risk reports to relevant functions within the institution. Institutions shall have procedures for taking appropriate action according to the information within the management reports.

<u>ANNEX H-4</u>

Advanced Measurement Approaches

1. Qualifying criteria

To be eligible for the Advanced Measurement Approaches, institutions must satisfy their competent authorities that they meet the qualifying criteria listed below, in addition to the general risk management standards for operational risk set out in Annex I:

1.1. Qualitative Standards

(a) The institution's internal operational risk measurement system shall be closely integrated into its day-to-day risk management processes.

(b) There must be regular reporting of operational risk exposures and loss experience. The institution shall have procedures for taking appropriate corrective action.

(c) The institution's risk management system must be well documented. The institution shall have a routine in place for ensuring compliance. This routine must include policies for the treatment of non-compliance issues.

(d) The operational risk management processes and measurement systems shall be subject to regular reviews performed by internal and/or external auditors.

(e) The validation of the operational risk measurement system by the competent authorities shall include the following:

- Verifying that the internal validation processes are operating in a satisfactory manner; and
- Making sure that data flows and processes associated with the risk measurement system are transparent and accessible.

1.2. Quantitative Standards

1.2.1. Process

- Institutions shall calculate their capital requirement as the sum of expected loss and unexpected loss, unless they can demonstrate that expected loss is adequately captured in their internal business practices. The operational risk measure must capture potentially severe tail events, achieving a soundness standard comparable to a 99.9% confidence interval over a one year period.
- The risk measurement system shall capture the major drivers of risk affecting the shape of the tail of the loss estimates.
- Correlations in operational risk losses across individual operational risk estimates may be recognised only if institutions can demonstrate to a high degree of confidence that their systems for measuring correlations are sound, implemented with integrity, and take into account the uncertainty surrounding any such correlation estimates, particularly in periods of stress. The institution must validate its correlation assumptions.
- The risk measurement system shall be internally consistent and shall avoid the multiple counting of qualitative assessments or risk mitigants recognised in other areas of the capital adequacy framework.

1.2.2. Internal data

- Internally generated operational risk measures shall be based on a minimum historical observation period of five years. When an institution first moves to the AMA, a three-year historical observation period is acceptable.

- Institutions must be able to map their historical internal loss data into the business lines defined in Annex H-3 and into the event types defined in Annex H-8, and to provide these data to competent supervisory authorities upon request. There must be documented, objective criteria for allocating losses to the specified business lines and event types. The operational risk losses that are related to credit risk and have historically been included in the internal credit risk databases must be recorded in the operational risk databases and be separately identified. Such losses will not be subject to the operational risk charge, as long as they continue to be treated as credit risk for the purposes of calculating minimum capital requirements.

- The institution's internal loss data must be comprehensive in that it captures all material activities and exposures from all appropriate sub-systems and geographic locations. Institutions must be able to justify that any excluded activities or exposures, both individually and in combination, would not have a material impact on the overall risk estimates. An appropriate *de minimis* loss threshold for internal loss data collection must be defined.

- Aside from information on gross loss amounts, institutions shall collect information about the date of the event, any recoveries of gross loss amounts, as well as some descriptive information about the drivers or causes of the loss event.

- There shall be specific criteria for assigning loss data arising from an event in a centralised function or an activity that spans more than one business line, as well as from related events over time.

- Institutions must have documented procedures for assessing the on-going relevance of historical loss data, including those situations in which judgement overrides, scaling, or other adjustments may be used, to what extent they may be used and who is authorised to make such decisions.

1.2.3. External data

- The institution's operational risk measurement system shall use relevant external data, especially when there is reason to believe that the bank is exposed to infrequent, yet potentially severe, losses. An institution must have a systematic process for determining the situations for which external data must be used and the methodologies used to incorporate the data in its measurement system. The conditions and practices for external data use must be regularly reviewed, documented and subject to periodic independent review.

1.2.4. Scenario analysis

- The institution shall use scenario analysis of expert opinion in conjunction with external data to evaluate its exposure to high severity events. Over time, such assessments need to be validated and re-assessed through comparison to actual loss experience to ensure their reasonableness.

1.2.5. Business environment and internal control factors

- The institution's firm-wide risk assessment methodology must capture key business environment and internal control factors that can change its operational risk profile.

- The choice of each factor needs to be justified as a meaningful driver of risk, based on experience and involving the expert judgment of the affected business areas.

- The sensitivity of risk estimates to changes in the factors and the relative weighting of the various factors need to be well reasoned. In addition to capturing changes in risk 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.

- This framework must be documented and subject to independent review within the institution and by supervisors.

- Over time, the process and the outcomes need to be validated and re-assessed through comparison to actual internal loss experience, relevant external data.

2. Impact of insurance

Institutions will be able to recognise the impact of insurance subject to the conditions set out below.

- The provider is authorised to provide insurance or re-insurance

- The provider has a minimum claims paying ability rating of A (or equivalent);

- The insurance policy has a minimum initial term of one year. For policies with a residual term of less than one year but more than 90 days, appropriate haircuts are made to reflect the declining residual term of the policy. The policies with a residual term of 90 days or less shall be ignored.

- The insurance policy has a minimum notice period for cancellation and non-renewal [threshold to be determined]

- The insurance policy contains no exclusions or limitations based upon action by the competent authorities or in the context of reorganisation and winding-up procedures;

- The insurance coverage has been explicitly mapped to the actual operational risk loss exposure of the institution;

- The insurance is provided by a third party entity. In the case of insurance through captives and affiliates, the exposure has to be laid off to an independent third party entity, for example through re-insurance, that meets the eligibility criteria.

In addition, the methodology for recognising insurance shall capture the following elements through discounts or haircuts in the amount of insurance recognition:

- The residual term of a policy, where less than one year, as noted above;

- A policy's cancellation and non-renewal terms;

- Mismatches in coverage of insurance policies
- The uncertainty of payment

The capital alleviation arising from the recognition of insurance shall not exceed 20% of the capital requirement before the recognition of risk mitigation techniques.

The reduction of the capital requirement for operational risk due to insurance shall be disclosed.