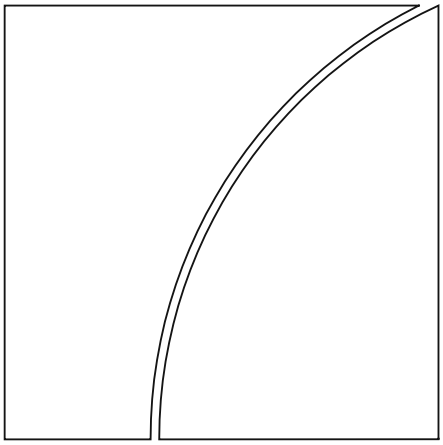
Basel Committee on Banking Supervision

Consultative Document



Standardised Measurement Approach for operational risk

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Contents

1. Introduction

1. Establishing consistency in the implementation of post-crisis regulatory reforms is an important focus of the Basel Committee. Consistent application of global bank standards will improve the resilience of the global banking system, promote public confidence in regulatory capital ratios and encourage a level playing field for internationally active banks. In October 2014, the Committee published for consultation a revised Standardised Approach for operational risk that sought to address weaknesses in the existing standardised approaches.[1] In conjunction with that proposal, the Committee embarked on a review of the costs and benefits of the framework's Advanced Measurement Approaches (AMA) for operational risk.

2. A key outcome from the Committee's analysis is that the combination of a simple standardised measure of operational risk and bank-specific loss data provides a sufficiently risk sensitive measure of operational risk. The Committee believes that this combination also meets its objectives of promoting comparability of risk-based capital measures and reducing model complexity.

3. Building on this finding, the Committee has developed the Standardised Measurement Approach (SMA), which provides a single non-model-based method for the estimation of operational risk capital. The SMA, which builds on the simplicity and comparability offered by a standardised approach, also incorporates the risk sensitivity of an advanced approach by combining in a standardised fashion the use of a bank's financial statement information and its internal loss experience.

4. Consistent with Part I (Scope of Application) of the Basel II framework,[2] the proposed SMA framework would be applied to internationally active banks on a consolidated basis. Supervisors retain discretion to apply the SMA framework to non-internationally active institutions.

2. Withdrawal of internal modelling for operational risk regulatory capital from the Basel Framework

5. Introduced as part of the Basel II framework in 2006, the AMA allows for the estimation of regulatory capital to be based on a diverse range of internal modelling practices subject to supervisory approval. Commensurate with the relative infancy of the field of operational risk measurement at the time, the AMA's principles-based framework was established with a significant degree of flexibility. This flexibility was expected to considerably narrow over time, and ultimately lead to the emergence of best practice.

6. A recent review of the measures related to banks' operational risk modelling practices and capital outcomes revealed that the Committee's expectations failed to materialise. Supervisory experience with the AMA has been mixed. The inherent complexity of the AMA and the lack of comparability arising from a wide range of internal modelling practices have exacerbated variability in risk-weighted asset calculations, and have eroded confidence in risk-weighted capital ratios. The Committee has therefore determined that the withdrawal of internal modelling approaches for operational risk regulatory capital from the Basel Framework is warranted.

[1] *Operational risk - Revisions to the simpler approaches*, October 2014, available at www.bis.org/publ/bcbs291.htm.

[2] *Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version*, June 2006, available at www.bis.org/publ/bcbs128.htm.

7. In the light of the Committee's findings, the estimation of regulatory capital for the entire operational risk framework has been standardised. The approach presented in this consultative document combines the main elements of the previously consulted standardised approach with banks' internal loss experience, which was a key component of the AMA. The Committee believes that, in addition to significantly improving the simplicity of the framework, the SMA embeds greater risk sensitivity in the standardised approach for operational risk and ensures greater comparability.

8. During the course of 2016, the Committee will provide further details on the timeline for the withdrawal of the AMA, and the implementation of the SMA.

3. Next steps

9. The Committee encourages market participants to engage in a constructive dialogue during the consultation period. Comments from the public are welcomed on all aspects of this consultative document; comments on the proposals should be uploaded by Friday 3 June 2016 using the following link: www.bis.org/bcbs/commentupload.htm. All comments will be published on the website of the Bank for International Settlements unless a respondent specifically requests confidential treatment.

10. In its 11 January 2016 press release,[3] the Committee's oversight body, the Group of Central Bank Governors and Heads of Supervision, noted the important work of the Committee to assess the quantitative impact of its proposed revisions to the regulatory framework. The results of the quantitative impact study (QIS) related to the proposals set out in this consultative document will be a key input to the final design and calibration of the operational risk framework. The QIS will help ensure that the framework produces capital requirements that are prudent and stable, while retaining risk-sensitivity. The objective of these proposals is to not significantly increase overall capital requirements. The impact, however, of the new operational risk framework will vary from bank to bank and may lead to an increase in minimum capital requirements for some banks. Once the Committee has reviewed responses to this second consultative document and the QIS results, it intends to publish the final standard within an appropriate timeframe and provide sufficient time for implementation. Before publication of the final standard, implementation arrangements (including the timetable) will be discussed by the Committee, taking into account the range of other reforms that have been, or are due to be, considered by the Committee.

[3] See www.bis.org/press/p160111.htm.

4. The Standardised Measurement Approach (SMA) for operational risk

11. The SMA combines the Business Indicator (BI), a simple financial statement proxy of operational risk exposure, with bank-specific operational loss data. Since the October 2014 consultation, the structure of the BI has been revised to avoid penalising certain business models, such as those based on the distribution of products bought from third parties, and those based on high interest margins. Adjustments have also been made to address issues related to the treatment of financial and operating leases.

12. The BI bucket thresholds and marginal coefficients shown in Table 2 below reflect updated data and changes to the methodology. The analysis undertaken by the Committee demonstrates that operational loss exposure increases more than proportionally with the BI, and thus the proposed calibration includes progressively increasing marginal coefficients for the BI.

13. Although the BI is stable and comparable across banks, business volume is only one factor that influences exposure to operational risk. Significant differences in the risk profile of medium to large banks cannot be fully accounted for by an approach that relies only on financial statement proxies. Other sources of information are therefore needed to increase risk sensitivity. Analysis conducted by the Committee supports the introduction of historical loss experience as a relevant risk indicator of future operational risk loss exposure.

14. The introduction of the Loss Component into the framework not only enhances the SMA's risk sensitivity, but also provides incentives for banks to improve operational risk management. Banks with more effective risk management and low operational risk losses will be required to hold a comparatively lower operational risk regulatory capital charge. The following sections describe each of the components necessary for SMA's the calculation.

4.1 The Business Indicator (BI)

15. As in the 2014 consultation, the BI is made up of almost the same P&L items that are found in the composition of Gross Income (GI). The main difference relates to how the items are combined. The BI uses positive values of its components, thereby avoiding counterintuitive negative contributions from some of the bank's businesses to the capital charge (eg negative P&L on the trading book), which is possible under the GI. In addition, the BI includes income statement items related to activities that produce operational risk that are omitted (eg P&L on the banking book) or netted (eg fee expenses, other operating expenses) in the GI. In particular, changing the impact of other operating expenses on capital requirements from negative (in GI) to positive (in the BI) is necessary to improve the coherence of the BI as a proxy indicator for operational loss exposure, as other operating expenses typically include operational losses, and thus an increase in other operating expenses should not result in a decrease in operational risk capital requirements.

16. In response to comments received during the first consultation, the Committee adjusted the structure of the BI to address the following issues:

(a) Asymmetric impact on the "distribute only" and the "originate to distribute" business models: since the previous "Services" component of the BI was defined as the sum of fee income, fee expenses, other operating income, and other operating expenses, banks that distribute products bought from third parties would include both the income and the expenses associated with these products in the BI, while banks which produce the products themselves would include only income. Therefore, the former banks would see higher capital charges than the latter, despite the two types of banks facing similar operational risks;

(b) Inconsistency in the treatment of dividend income: the treatment of dividend income in financial statements varies significantly across jurisdictions and can lead to inconsistency or arbitrage in the determination of the BI. For example, some jurisdictions account for dividend income in the "Interest" component, while others include it as a separate income statement item;

(c) Overcapitalisation of banks with a high net interest margin (NIM): business models with high NIM, defined as the net interest income divided by the interest-earning assets, have very high BI values. This may lead to regulatory capital that is too conservative relative to the operational risk faced by these banks;

(d) Overcapitalisation of banks with high fee revenues and expenses: banks with a high fee component in respect to the overall BI amount have a very high BI value which results in capital requirements that are too conservative relative to the operational risk faced by these banks; and

(e) Inconsistent treatment of leasing compared with credit: business models based on credit finance, financial leasing or operating leasing employ similar administrative and management processes, and thus face similar operational risks. Therefore, the contributions to the BI of the income and expenses from financial and operating lease should be consistent with the contribution of credit finance, irrespective of their accounting treatment.

17. To address item (a) above, the Services component is modified from "Fee Income + Fee Expense + Other Operating Income + Other Operating Expense" to "Max (Fee Income; Fee Expense) + Max (Other Operating Income; Other Operating Expense)". This solution still enhances the risk sensitivity of the SMA in respect to the current simple approaches because the "Fee" and "Other Operating" components are not netted. Thus banks with a large volume of services business but with a low margin are treated differently from banks with a small volume of services business, but the treatment is no longer overly punitive for banks with both high fee income and high expenses.

18. To address item (b), dividend income is included in the Interest component of the BI.

19. To address item (c), a linear normalisation ratio for high-margin banks, defined as those with NIM larger than 3.5%, is adopted. Under this approach, the BI´s interest component is adjusted by the ratio of the NIM cap, set to 3.5%, to the actual NIM.[4]

20. To address item (d), besides the modification of the Services component mentioned under (a), the BI structure for high fee banks (ie banks with the share of fees greater than 50% of the unadjusted BI) is modified by accounting for only 10% of fees in excess of 50% of the unadjusted BI (with the absolute value of net fee income as a floor to avoid unintended capital reductions).

21. The Services component of the BI for high fee banks is presented below:

$$\begin{aligned} &Services\ Component \\ &\quad = Max[Other\ operating\ income, Other\ operating\ expenses] \\ &\quad + Max[|Fee\ Income - Fee\ Expenses|, Min\{Max(Fee\ Income, Fee\ Expense), 0.5 \\ &\quad \cdot unadjusted\ BI + 0.1 \cdot (Max(Fee\ Income, Fee\ Expense) - 0.5 * unadjusted\ BI\ )\}] \end{aligned}$$

22. To address item (e) and guarantee consistency of treatment across banks and jurisdictions, all financial and operating lease income and expenses – including depreciation of the leased assets and gains/losses from the selling of leased assets – are netted and included in absolute value into the interest component.[5]

23. To compute the BI for year t, a bank must determine the three-year average of the BI, as the sum of the three-year average of its components:

[4] Only the income and expenses of the Interest component stemming from interest earning assets should be normalised. Therefore, lease income and expenses and dividend income are excluded from the NIM calculations.

[5] This issue already exists within the Basel II framework. The proposed solution addresses the issue and assures the same treatment across jurisdictions.

$$BI = ILDC_{Avg} + SC_{Avg} + FC_{Avg}$$

Where:

- Avg = Average of the items at the years: t, t-1 and t-2
- $ILDC_{Avg} = Min\left[Abs\left(II_{Avg} - IE_{Avg}\right); 0.035 * IEA_{Avg}\right] + Abs\left(LI_{Avg} - LE_{Avg}\right) + DI_{Avg}$
- $SC_{Avg} = Max\left(OOI_{Avg}; OOE_{Avg}\right) + Max\left\{Abs\left(FI_{Avg} - FE_{Avg}\right); Min\left[Max\left(FI_{Avg}; FE_{Avg}\right); 0.5 * uBI + 0.1 * \left(Max\left(FI_{Avg}; FE_{Avg}\right) - 0.5 * uBI\right)\right]\right\}$, where:

  $uBI = ILDC_{Avg} + Max\left(OOI_{Avg}; OOE_{Avg}\right) + Max\left(FI_{Avg}; FE_{Avg}\right) + FC_{Avg}$
- $FC_{Avg} = Abs\left(Net\ P\&L\ TB_{Avg}\right) + Abs\left(Net\ P\&L\ BB_{Avg}\right)$

Table 1. List of abbreviations

Abs	Absolute value of the items within the bracket
BB	Banking Book
BI	Business Indicator
DI	Dividend Income
FC	Financial Component
IEA	Interest Earning Assets
IE	Interest Expenses (except for financial and operating leases)
II	Interest Income (except for financial and operating leases)
ILDC	Interest, Lease and Dividend Component
LE	Lease Expenses
LI	Lease Income
Max	Maximum Value of the items in the bracket
Min	Minimum Value of the items in the bracket
OOE	Other Operating Expenses
OOI	Other Operating Income
P&L	Profit & Loss
SC	Services Component
TB	Trading Book
uBI	Unadjusted Business Indicator (ie with no high fees adjustment)

24. Definitions for each of the components of the revised BI are provided in Annex 1.

Q1. What are respondents' views on the revised structure and definition of the BI?

4.2 The BI Component

25. SMA capital requirements are anchored by a bank's BI Component, which is an increasing function of the BI. The BI Component was calibrated using QIS data collected by the Committee in the second half of

2015. Due to its calibration reflecting the aggregate experience of QIS banks, the BI Component reflects the operational loss exposure of an average QIS bank of a given BI size.

26. Under the SMA, banks are divided into five buckets according to the size of their BI. For banks in bucket 1, capital is an increasing linear function of the BI and does not depend on internal losses. For banks in buckets 2 through 5, capital is calculated in two steps: (i) a baseline level of capital is calculated using the BI (the "BI Component"); and (ii) the portion of the BI Component above the threshold separating buckets 1 and 2 is multiplied up or down by a function that depends on the banks' internal losses in order to differentiate between banks with different risk profiles.

27. The BI Component increases linearly within buckets, but the marginal effect of the BI on the BI Component is greater for the higher buckets than for the lower ones. This progressive increase of the marginal impact of the BI is motivated by analysis which showed that operational loss exposure increases more than proportionally with the BI. The BI buckets in the BI Component are presented below:

Table 2. BI buckets in the BI Component

Bucket	BI Range	BI Component
1	€0 to €1 bn	0.11*BI
2	€1 bn to €3 bn	€110 m + 0.15(BI – €1 bn)
3	€3 bn to €10 bn	€410 m + 0.19(BI – €3 bn)
4	€10 bn to €30 bn	€1.74 bn + 0.23(BI – €10 bn)
5	€30 bn to +∞	€6.34 bn + 0.29(BI – €30 bn)

28. The marginal increase of the BI Component resulting from a one unit increase in the BI is 0.11 in bucket 1, 0.15 in bucket 2, 0.19 in bucket 3, 0.23 in bucket 4, and 0.29 in bucket 5. The constants added to the BI Component in buckets 2–5 are necessary to ensure that the BI Component is continuous as they reflect the value of the BI Component at the top of the range of the bucket directly below.

4.3 The Internal Loss Multiplier and Loss Component

29. The SMA builds on the assumption that the relationship between the BI and operational loss exposure is stable and similar for banks with similar values of the BI. However, business volume is not the only factor that influences operational loss exposure and, in some cases, there could be significant differences in operational exposure between banks of similar BI values. These differences may be due to, for example, banks' different business models. The addition of the Loss Component to the BI improves the risk sensitivity of the SMA.

30. To assess the feasibility of using banks' internal losses in the SMA, the Committee investigated the proportion of banks using an AMA, the Standardised Approach (TSA) or its variant, the Alternative Standardised Approach (ASA) in the QIS sample across different BI buckets. AMA, TSA and ASA banks are currently required to collect operational losses and, in many jurisdictions, they are also required to report these losses to supervisors. Therefore, these banks should be prepared to calculate the Loss Component of the SMA. The analysis showed that more than 80% of the banks with BI > €1 billion are non-BIA banks. Also, most banks in buckets 2–5 are medium to large banks with total assets above €20 billion. Thus, the Committee proposes that internal losses should be used by banks in buckets 2–5, but not by banks in bucket 1.

31. Internal loss experience is introduced to the SMA through the Internal Loss Multiplier. The formula of the Internal Loss Multiplier is presented below:

$$Internal\ Loss\ Multiplier\ =\ Ln\left(\exp(1)-1+\frac{Loss\ Component}{BI\ Component}\right)$$

Where:

$$\begin{aligned} Loss\ Component\ =\ & 7*Average\ Total\ Annual\ Loss \\ & +7*Average\ Total\ Annual\ Loss\ only\ including\ loss\ events\ above\ €10\ million \\ & +5*Average\ Total\ Annual\ Loss\ only\ including\ loss\ events\ above\ €100\ million \end{aligned}$$

32. The Loss Component reflects the operational loss exposure of a bank that can be inferred from its internal loss experience. The Loss Component distinguishes between loss events above €10 million and €100 million and smaller loss events to differentiate between banks with different loss distribution tails but similar average loss totals. Banks should use 10 years of good-quality loss data, as defined in Section 6, to calculate the averages used in the Loss Component. In the transition period, banks that do not have 10 years of good-quality loss data may use a minimum of five years of data to calculate the Loss Component;[6] as banks accumulate more years of good-quality loss data, the number of years used in the averages used in the Loss Component should increase until it reaches 10 years. Banks that do not have five years of good data must calculate the capital requirement based solely on the BI Component.

33. A bank with the Loss Component equal to the BI Component is a bank with exposure at the average of the industry and, thus, under the proposed formula its Internal Loss Multiplier is 1 and its SMA capital corresponds to the BI Component. Banks with loss experience above the industry average will have a Loss Component above the BI Component and their SMA capital will be above the BI Component. Similarly, banks with loss experience below the industry average will have a Loss Component below the BI Component and their SMA capital will be below the BI Component.

34. The Internal Loss Multiplier is bounded below by $Ln(exp(1)-1)\ \approx\ 0.541$. The logarithmic function used to calculate the Internal Loss Multiplier means that it increases at a decreasing rate with the Loss Component. The results of the QIS conducted by the Committee will help ensure that the combination of the Loss Component and the BI produces stable capital requirements. The Committee will carefully evaluate the efficacy of the logarithmic function and may consider alternative approaches to ensure a stable and risk sensitive framework. For example, a brief description of a possible alternative to the Internal Loss Multiplier is described in Annex 2. The Committee is open to considering alternative adjustments to the methodology that appropriately incorporate the impact of extreme loss events.

4.4 The SMA capital requirement

35. The operational risk capital requirement is determined as follows:

$$SMA\ Capital=\begin{cases} BI\ Component, if\ Bucket\ 1 \\ 110Mln+(BI\ Component-110Mln)\cdot Ln\left(\exp(1)-1+\frac{Loss\ Component}{BI\ Component}\right), if\ Buckets\ 2-5 \end{cases}$$

Where:

[6] This transitional treatment should be applied on an exceptional basis. It is not generally expected to be applicable to banks that currently use the more advanced methodologies for the regulatory capital calculation (such as the TSA and AMA).

$$BI\ Component = \begin{cases} 0.11 \cdot BI, if\ Bucket\ 1 \\ 110Mln + 0.15(BI - 1Bln), if\ Bucket\ 2 \\ 410Mln + 0.19(BI - 3Bln), if\ Bucket\ 3 \\ 1.74Bln + 0.23(BI - 10Bln), if\ Bucket\ 4 \\ 6.34Bln + 0.29(BI - 30Bln), if\ Bucket\ 5 \end{cases}$$

And:

$$\begin{aligned} Loss\ Component\ = & \ 7 * Average\ Total\ Annual\ Loss \\ & + 7 * Average\ Total\ Annual\ Loss\ only\ including\ loss\ events\ above\ €10\ million \\ & + 5 * Average\ Total\ Annual\ Loss\ only\ including\ loss\ events\ above\ €100\ million \end{aligned}$$

36. As shown above, capital for banks in bucket 1 corresponds solely to the BI Component. For banks in buckets 2 through 5, capital results from multiplying the BI Component by the Internal Loss Multiplier except that, for continuity of the capital requirement as banks move from bucket 1 to bucket 2, the portion of the BI Component relative to the first €1 billion of the BI (ie €110 million) is not multiplied by the Internal Loss Multiplier.

Q2. What are respondents' views on the inclusion of loss data into the SMA? Are there any modifications that the Committee should consider that would improve the methodology?

5. Application of the SMA within a group

37. At the consolidated level, SMA calculations use fully consolidated BI figures, which net all the intragroup income and expenses. SMA calculations at a subconsolidated level use BI figures for the banks consolidated at that particular sublevel. SMA calculations at the subsidiary level use the BI figures from the subsidiary.

38. Similar to bank holding companies, when BI figures for subconsolidated or subsidiary banks reach bucket 2, these banks use loss experience in SMA calculations. A subconsolidated bank or a subsidiary bank uses only the losses it has incurred in SMA calculations (and does not include losses incurred by other parts of the bank holding company).

39. In case that a subsidiary of a bank belonging to bucket 2 or higher does not meet the qualitative standards for the use of the Loss Component, this subsidiary calculates the SMA capital by applying 100% of the BI Component.

6. Minimum standards for the use of loss data under the SMA

40. As previously stated, under the SMA, medium to large banks are required to use loss data as a direct input to capital calculations. Therefore, the soundness of data collection and the quality and integrity of the data are crucial to generating SMA outcomes aligned with the bank's operational loss exposure.

41. To promote consistency in the implementation of the Loss Component and prevent gaming of loss data collection and reporting, the Committee proposes that banks using the SMA's Loss Component must adhere to minimum loss data standards under Pillar 1, split in general and specific criteria, and described in subsections 6.1 and 6.2 below. Supervisors should be comfortable with the quality of this data. For banks failing to meet these standards, capital would at a minimum equal 100% of the BI Component. Nevertheless,

banks with heavy losses could seek to arbitrage Pillar 1 capital by choosing not to meet the qualitative requirements. To address such cases, supervisors will ensure that such banks apply a multiplier to the BI Component which is also disclosed.

42. The Committee continues to encourage all banks, irrespective of the use of the Loss Component under the SMA, to comply with the Committee's *Principles for the sound management of operational risk*[7] (PSMOR) published in 2011 under Pillar 1, as it is currently done.

6.1 General criteria on loss data identification, collection and treatment

43. The proper identification, collection and treatment of internal loss event data are essential prerequisites to capital calculation under the SMA. Therefore, banks which use the Loss Component in the SMA must follow the general criteria set out in this subsection.

The general criteria for the use of the Loss Component in the SMA are as follows:

- Internally generated loss data calculations used for SMA regulatory capital purposes must be based on a 10-year observation period. When the bank first moves to the SMA, a five-year observation period is acceptable on an exceptional basis when good-quality data are unavailable for more than five years.
- Internal loss data are most relevant when clearly linked to a bank's current business activities, technological processes and risk management procedures. Therefore, a bank must have documented procedures and processes for the identification, collection and treatment of internal loss data.
- For risk management purposes, and to assist in supervisory validation and/or review, a bank must be able to map its historical internal loss data into the relevant Level 1 supervisory categories as defined in Annex 9 of the Basel II accord[8] and to provide this data to supervisors upon request. The bank must document criteria for allocating losses to the specified event types.
- A bank's internal loss data must be comprehensive and capture all material activities and exposures from all appropriate subsystems and geographic locations. A bank must have an appropriate de minimis gross loss threshold for internal loss data collection. While the de minimis gross loss threshold may vary somewhat between banks and within a bank across event types, it must not be higher than €10,000. When the bank first moves to the SMA, a de-minimis gross loss threshold of €20,000 is acceptable.[9]
- Aside from information on gross loss amounts, the bank must collect information about the reference dates of the operational risk event, including the date when the event happened or first began ("date of occurrence"), where available; the date on which the bank became aware of the event ("date of discovery"); and the date when a loss, reserve or provision against a loss was first recognised in the bank's profit and loss (P&L) accounts ("date of accounting"). In addition, the bank must collect information on recoveries of gross loss amounts as well as descriptive information about the drivers or causes of the loss event. The level of detail of any descriptive information should be commensurate with the size of the gross loss amount.

[7] Available at www.bis.org/publ/bcbs195.htm.

[8] See www.bis.org/publ/bcbs128.pdf, p 305.

[9] This transitional treatment does not generally apply to current TSA/AMA banks.

- A bank must develop specific criteria for assigning loss data arising from an event in a centralised function (eg an information technology department), and from common or related events over time ("grouped losses").
- Operational risk losses related to credit risk that have historically been included in banks' credit risk databases (eg collateral management failures) will continue to be treated as credit risk for the purposes of calculating minimum regulatory capital under this framework. Therefore, such losses will not be subject to the SMA regulatory capital.
- Operational risk losses related to market risk are treated as operational risk for the purposes of calculating minimum regulatory capital under this framework and will therefore be subject to the SMA regulatory capital.

6.2 Specific criteria on loss data identification, collection and treatment[10]

Building of the SMA loss data set

- The bank must have a policy that determines criteria for when a loss or an operational risk event recorded in the internal loss event database should be included in the loss data set for the calculation of SMA regulatory capital ("SMA loss data set"). This policy must provide a consistent treatment of loss data across the bank.
- Building a proper SMA loss data set from the available internal data requires that the bank develop policies and procedures to address its several features, including gross loss definition, reference date and grouped losses.

Gross loss, net loss, and recovery definitions

- Gross loss is a loss before recoveries of any type. Net loss is defined as the loss after taking into account the impact of recoveries. The recovery is an independent occurrence, related to the original loss event, separate in time, in which funds or inflows of economic benefits are received from a third party.[11]
- Banks must be able to discretely identify the gross loss amounts, non-insurance recoveries, and insurance recoveries for all operational loss events. Banks must not use losses net of insurance recoveries as an input for the SMA loss data set.

The following items must be included in the gross loss computation of the SMA loss data set:

(a) Direct charges, including impairments and settlements, to the bank's P&L accounts and write-downs due to the operational risk event;

(b) Costs incurred as a consequence of the event including external expenses with a direct link to the operational risk event (eg legal expenses directly related to the event and fees paid to advisors, attorneys or suppliers) and costs of repair or replacement, incurred to restore the position that was prevailing before the operational risk event;

(c) Provisions or reserves accounted for in the P&L against the potential operational loss impact;

[10] The Committee intends to include additional criteria and/or refine these criteria as necessary to ensure a consistent definition of operational loss before finalising the standard.

[11] Examples of recoveries are payments received from insurers, repayments received from perpetrators of fraud, and recoveries of misdirected transfers.

(d) Losses stemming from operational risk events with a definitive financial impact, which are temporarily booked in transitory and/or suspense accounts and are not yet reflected in the P&L ("pending losses").[12] Material pending losses should be included in the SMA loss data set within a time period commensurate with the size and age of the pending item; and

(e) Negative economic impacts booked in a financial accounting period, due to operational risk events impacting the cash flows or financial statements of previous financial accounting periods (timing losses").[13] Material "timing losses" should be included in the SMA loss data set when they are due to operational risk events that span more than one financial accounting period and give rise to legal risk.

44. The following items must be excluded from the gross loss computation of the SMA loss data set (this list is not exhaustive):

(a) Costs of general maintenance contracts on property, plant or equipment;

(b) Internal or external expenditures to enhance the business after the operational risk event: upgrades, improvements, risk assessment initiatives and enhancements; and

(c) Insurance premiums.

45. In each reporting year of the SMA regulatory capital, gross losses in the SMA loss data set must include loss adjustments made within the reporting year (eg increase/decrease of provisions, additional losses, settlements) of operational risk events whose reference date is up to 10 years before that reporting year. In order to identify an operational loss event above €10 million or €100 million, the loss amount of the event must include the loss adjustments described above and the resulting figure should be compared with the €10 million and to the €100 million threshold.

Reference date

- The bank must use either the date of discovery or date of accounting for building the SMA loss data set. No other dates are acceptable.
- The bank must use a date no later than the date of accounting for including losses related to legal events in the SMA loss data set. For legal loss events, the date of accounting is the date when a legal reserve is established for the probable estimated loss in the P&L.

Grouped losses

- Losses caused by a common operational risk event or by related operational risk events over time must be grouped and entered into the SMA loss data set as a single loss.
- The bank's internal loss data policy should establish criteria for deciding the circumstances, types of data and methodology for grouping data as appropriate for its business, risk management and SMA regulatory capital calculation needs. The bank must also clarify and document individual judgments in applying these criteria.

[12] For instance, in some countries, the impact of some events (eg legal events, damage to physical assets) may be known and clearly identifiable before these events are recognised through the establishment of a reserve. Moreover, the way this reserve is established (eg the date of discovery) can vary across banks or countries.

[13] Timing impacts typically relate to the occurrence of operational risk events that result in the temporary distortion of an institution's financial accounts (eg revenue overstatement, accounting errors and mark-to-market errors). While these events do not represent a true financial impact on the institution (net impact over time is zero), if the error continues across more than one financial accounting period, it may represent a material misrepresentation of the institution's financial statements.

Annex 1

Business Indicator definitions

BI Component	P&L or balance sheet items	Description	Typical sub-items
Interest, operating lease and dividend	Interest income, except for financial and operating lease	Interest income from all financial assets and other interest income (interest income from financial and operating leases should be excluded)	• Interest income from loans and advances, assets available for sale, assets held to maturity, and trading assets • Interest income from hedge accounting derivatives • Other interest income
	Interest expenses, except for financial and operating lease	Interest expenses from all financial liabilities and other interest expenses (interest income from financial and operating leases should be excluded)	• Interest expenses from deposits • Interest expenses from debt securities issued • Interest expenses from hedge accounting derivatives • Other interest expenses
	Interest earning assets (balance sheet item, not P&L)	Total gross outstanding loans, advances, and interest bearing securities (including government bonds) measured at the end of each financial year	
	Financial and operating lease income	• Interest income from financial leases • Interest income from operating leases • Profits from leased assets	
	Financial and operating lease expenses	• Interest expenses from financial leases • Interest expenses from operating leases • Losses from leased assets • Depreciation and impairment of operating leased assets	
	Dividend income	Dividend income from investments in stocks and funds not consolidated in the bank's financial statements, including dividend income from non-consolidated subsidiaries, associates and joint ventures.	
Services	Fee and commission income	Income received from providing advice and services. Includes income received by the bank as an outsourcer of financial services.	Fee and commission income from: • Securities (issuance, origination, reception, transmission, execution of orders on behalf of customers) • Clearing and settlement • Asset management • Custody • Fiduciary transactions • Payment services • Structured finance • Servicing of securitisations • Loan commitments and guarantees given • Foreign transactions
	Fee and commission expenses	Expenses paid for receiving advice and services. Includes outsourcing fees paid by the bank for the supply of financial services, but not outsourcing	Fee and commission expenses from: • Clearing and settlement • Custody • Servicing of securitisations

		fees paid for the supply of non-financial services (eg logistical, IT, human resources)	• Loan commitments and guarantees received • Foreign transactions
	Other operating income	Income from ordinary banking operations not included in other BI items but of similar nature (income from operating leases should be excluded)	• Rental income from investment properties • Gains from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37)
	Other operating expenses	Expenses and losses from ordinary banking operations not included in other BI items but of similar nature and from operational loss events (expenses from operating leases should be excluded)	• Losses from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37) • Losses incurred as a consequence of operational loss events (eg fines, penalties, settlements, replacement cost of damaged assets), which have not been provisioned/reserved for in previous years • Expenses related to establishing provisions/reserves for operational loss events
Financial	Net profit (loss) on the trading book	• Net profit/loss on trading assets and trading liabilities (derivatives, debt securities, equity securities, loans and advances, short positions, other assets and liabilities) • Net profit/loss from hedge accounting • Net profit/loss from exchange differences	
	Net profit (loss) on the banking book	• Net profit/loss on financial assets and liabilities measured at fair value through profit and loss • Realised gains/losses on financial assets and liabilities not measured at fair value through profit and loss (loans and advances, assets available for sale, assets held to maturity, financial liabilities measured at amortised cost) • Net profit/loss from hedge accounting • Net profit/loss from exchange differences	

46. The following P&L items should not contribute to any of the items of the BI:

- Income and expenses from insurance or reinsurance businesses
- Premiums paid and reimbursements/payments received from insurance or reinsurance policies purchased
- Administrative expenses, including staff expenses, outsourcing fees paid for the supply of non-financial services (eg logistical, IT, human resources), and other administrative expenses (eg IT, utilities, telephone, travel, office supplies, postage)
- Recovery of administrative expenses including recovery of payments on behalf of customers (eg taxes debited to customers)
- Expenses of premises and fixed assets (except when these expenses result from operational loss events)
- Depreciation/amortisation of tangible and intangible assets (except depreciation related to operating lease assets, which should be included in financial and operating lease expenses)
- Provisions/reversal of provisions (eg on pensions, commitments and guarantees given) except for provisions related to operational loss events
- Expenses due to share capital repayable on demand
- Impairment/reversal of impairment (eg on financial assets, non-financial assets, investments in subsidiaries, joint ventures and associates)
- Changes in goodwill recognised in profit or loss
- Corporate income tax (tax based on profits including current tax and deferred tax).

Annex 2

Example of an alternative method to help ensure the stability of the SMA methodology

47. As noted in section 4.3, the Committee will consider the results of its QIS exercise and respondents' feedback as it reviews the design and calibration of the framework. The Committee may consider alternative methods to the logarithmic function described in section 4.3 that would help ensure that the combination of loss data and the BI produces stable capital requirements, while retaining risk-sensitivity. An example of such an alternative method is the incorporation of a maximum multiple for the Loss Component relative to BI Component. This would take the place of the logarithmic function.

48. This modification would set capital requirements at a maximum multiple of the BI Component (based on the calibration of the factor "m") and a lower bound on the BI Component. In particular, the Internal Loss Multiplier [ie ln(…)] that is incorporated in the formula in paragraph 35 would be replaced by the following formula:

$$\left(\frac{m\,LC + (m-1)BI\ Component}{LC + (2m-2)BI\ Component}\right)$$

Where:

m is a factor to be calibrated; and

BI Component is the Business Indicator Component and LC is the Loss Component.

49. By setting minimum and maximum multiples of the BI component, the proposed alternative also serves to decrease the variability of capital outcomes across banks and provide greater certainty about future capital outcomes.

Q3. What are respondents' views on this example of an alternative method to enhance the stability of the SMA methodology? Are there other alternatives that the Committee should consider?