



# Operational risk: Application to use an Advanced Measurement Approach

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## Contents

This document contains Finansinspektionen's requirements regarding the content and structure of an application for consent to use an advanced measurement approach.

## Background

On 1 February 2007 new EC directives on capital adequacy will come into force.

The new rules allow institutions, i.e. banks, credit market companies and investment firms, to apply for consent to use an advanced measurement approach in order to calculate the capital requirement for operational risk. This section of the directive enters into force with a delay of one year, 1 January 2008. An institution which wishes to use an advanced measurement approach, can submit its application to Finansinspektionen from 1 February 2007.

Companies that require more information regarding operational risk and how this can be controlled and managed are referred to the following documents:

- Finansinspektionen's general guidelines regarding the Governance and Control of Financial Undertakings (FFFS 2005:1) [www.fi.se](http://www.fi.se), which contains recommendations for risk management at a general level.
- The Basel Committee on Banking Supervision's "Sound practices for the management and supervision of operational risk" (February 2003), [www.bis.org](http://www.bis.org) which contains recommendations regarding the management, verification and supervision of operational risk.

## Who should submit the application

Groups of financial undertakings shall submit one application only covering both the consolidated level and the individual level for the institutions that are part of the group. In the text below we refer to the institution as the applicant, however, for institutions which belong to a group of financial undertakings, the application is submitted at group level.

## Formulation of the application

### *Format*

We would appreciate it if completed applications and supporting documents are submitted in an agreed electronic format wherever possible.

Responses should be formulated so that, together with references and supporting documents, they can be used by Finansinspektionen to assess the application.

### *Language*

The institution may respond to questions in Swedish or English. The regulations and questionnaire will be translated into English. This is being carried out to facilitate the assessment of applications covering foreign branch offices and subsidiaries and allow effective cooperation with foreign supervisory bodies in this assessment.

### *Supporting documents*

In several places the application requires supporting documents to demonstrate compliance with specific requirements. Naturally the institution shall only enclose a document once. If the institution is asked to enclose documents which have already been enclosed elsewhere, it need only refer to the relevant section in the previously submitted document. It is important that the institution refers to the exact section, when the answer can be found in an enclosed document.

### *Information about applicants*

As described above, a group of financial undertakings need only submit one application which covers the entire group at a consolidated and an individual level. The application shall indicate the legal entities that are part of the group of financial undertakings. This shall be indicated in the enclosed table or other suitable manner. In addition, the managing director of each legal entity and any group managing director shall sign the application. If there are not enough rows, the table can be copied or expanded.



# Questionnaire

Consent to calculate the capital requirement in accordance with an advanced measurement approach presupposes that the requirements contained in FFFS 2007: 1 have been met. The aim of the questions is to allow the institution to demonstrate how the relevant requirement has been met using its methodology. The following is the format after which the institution's application shall be structured.

## 1.1 Qualifying criteria

### 1.1.1 *General criteria*

Indicate whether the advanced measurement approach applied for is intended for the entire company or group of financial undertakings.

If the advanced approach is not intended to be used exclusively, indicate which other methods will be used within the company or group of financial undertakings covered by the application.

Describe the method used to allocate capital for the operational risk within the group of financial undertakings.

Show how the allocation has been carried out to cover all operational risk.

Show how the capture of substantial portions of the operational risk by the chosen advanced approach has been calculated.

The timetable for the introduction of the advanced measurement approach shall mean that a significant portion of the company or group of financial undertakings covered by the application use the advanced measurement approach.

Show the use of diversification effects and how these are taken into account when calculating capital requirements.

### ***1.1.2 Qualitative criteria***

Demonstrate that the institution has policy documents, laid down by the board, for managing and evaluating its exposure to operational risk, which also cover extreme events with a significant effect on the institution's activities. Also demonstrate that the policy documents, in addition to the definition applied by the institution of operational risk, indicate the forms of operational risk relevant to the activities of the institution.

Describe how the institution's advanced measurement approach to operational risk is closely integrated into its day-to-day risk management process. This description shall cover the reasons for, and the use of, the selected method. Show how the method for managing and measuring operational risk is developed on the basis of experience. Show how the method supports and develops the institution's risk management.

Describe the institution's independent risk management function for operational risk. Describe how this function ensures that the institution's risk measurement and risk management processes for operational risk works as intended.

Account for the reporting structure that ensures the regular reporting of exposure to operational risk and losses to the relevant functions within in the institution, including the board. Describe the procedures which ensure that appropriate measures are taken due to this reporting.

Describe how the institution makes sure that contingency and business-continuity plans, that ensure the institution's ability to maintain the operation and limit losses in the event of severe business disruption, exist, and how these are kept up to date.

Demonstrate how the institution's risk management system is documented. Also demonstrate the procedures in place to ensure the conformity of the documentation and risk management system and how exceptions are dealt with. This should also contain a description of the organisation and division of responsibility.

Demonstrate how it is ensured that the operational risk management processes and measurement systems are subject to regular reviews performed by internal and/or external auditors.

### *1.1.3 Quantitative criteria*

Show whether account is taken of expected and unexpected losses when calculating capital requirements.

If expected losses are not included in the calculation, describe how these losses are taken into account.

Describe how the method of calculating the capital requirement meets the requirement for a 99.9 % confidence interval over a one year period.

Describe how the method captures crucial risk factors which control the loss estimates for potentially severe tail events.

If assumptions regarding correlations are used, these shall be described. Also show the background and reasons for the correlation assumptions used. In addition, show the validation of correlation assumptions and the quantitative or qualitative methods used. The capital requirement before and after correlation assumptions must be shown.

Describe how the risk management system used maintains the requirement consistent and avoids multiple counting of capital needs or takes account of risk mitigating measures counted in other areas.

The method for measuring operational risk shall contain several components.

1. internal data
2. external data
3. scenario analysis
4. business environment & internal control systems

Give an outline description of how these components are included in the method and which considerations have been critical to the choice of solution.

#### *Internal data*

Demonstrate how the requirement for at least an initial 3 year period of observation is met. Also describe how a 5 year period of observation will be applied.

Demonstrate how the allocation of internal losses to/into business lines and event types, in accordance with the regulations, is carried out.

Account for the policy documents and criteria that control the allocation of losses into business lines and event types. This must also show how losses, which have triggered a capital requirement for credit risk but that, are related to operational risk, are managed and reported. The management of corresponding losses related to market risk but which trigger a capital requirement for operational risk shall also be reported.

Describe how the method ensures that all internal losses are captured and why the level selected to report losses is appropriate. This description shall also show how the allocation of losses experienced out in central functions, or related to several business lines, is made.

Demonstrate how the method ensures that, in addition to the gross loss, the date of the event, potential recoveries and a description of the triggering factors or causes of the loss are captured and registered.

Describe in what way and with what support the method ensures that the classification of losses is made uniformly and in accordance with the prescribed internal rules for this. This description shall also show when there is a review of the classification of losses, the selected loss level or other changes to the method. Show how the independent risk management function for operational risk implements the above review.

#### *External data*

Describe the way external data are used in the method and the motivation for this.

Show how the use of external data is the object of regular review by the independent risk management function for operational risk.

#### *Scenario analysis*

Show the way in which expert opinions are used for the scenario analyses used in the method.

Show how the external data used in the scenario analysis is produced.

Describe how expert opinions together with external data are used to evaluate the institution's exposure to extreme events.

Show how the reasonableness of chosen scenario analyses is done against actual losses.

#### *Business environment & internal control systems*

Show how the institution's firm-wide risk assessment methodology captures the key business environment and internal control factors that can change its operational risk profile.

Describe how the choice of each risk factor has been made and why those selected affect the risk profile.

Show how the selected risk factors capture changes in risk, either through improved risk control, or as changes in the complexity of the operation or other changes to the operation.

Describe how an independent review is carried out of the regulations and how these are validated through comparison with internal losses and data on external relevant losses.

## **1.2 Insurance and other risk transfer mechanisms**

### ***1.2.1 Qualitative criteria***

Demonstrate the use of risk transfer by insurance and that this has a noticeable risk mitigation effect.

Demonstrate and describe other risk transfer mechanisms used.

Demonstrate that the insurer is authorised to provide insurance or reinsurance and that the insurer meets credit quality requirements in its claims adjustment.

### 1.2.2 *Quantitative rules*

Demonstrate how the insurance solution meets the following conditions.

1. The insurance policy has a term of at least one year. If the term of the insurance policy is shorter, then risk-reduction is reduced to a corresponding degree, down to no risk-reduction if the residual term is 90 days or less. Show how reduction of risk-reduction is carried out if term is less than one year.
2. The insurance policy shall have a minimum notice period for cancellation of the contract of 90 days. Demonstrate that this requirement is met.
3. The insurance policy shall meet the requirements regarding exceptions or limitations. Demonstrate that the insurance policy meets these requirements.
4. The calculation of the effect of the risk reducing measures shall weigh the insurance protection against the probability of losses and their effects when calculating a capital requirement for operational risk. Show how this is done.
5. The insurance shall be provided by a third party entity. Demonstrate how this requirement is met.
6. Demonstrate the reasons for which insurance is used and how this is documented.

The method for recognising insurance shall, through the application of deductions or reduction in the amount insured, take into account the following factors.

1. The term of the insurance policy, where less than one year.
2. The insurance policy's cancellation terms, where less than one year.
3. The uncertainty of payment as well as mismatches in coverage of insurance policies.

Demonstrate how these requirements are met.

Demonstrate that the alleviation of the capital requirement does not exceed 20 % of the capital requirement for operational risk before the use of the risk mitigation measures.