

# **IMPLEMENTATION NOTE**

**Subject: 2007/2008 Approval of IRB Approaches for Institutions** 

Category: Capital

No: A-1 Date: January 2006

#### I. Introduction

This document outlines the key principles, requirements and steps for the approval of Internal Risk Rating Systems (Rating Systems) for the internal ratings-based (IRB) methodology and minimum regulatory capital calculation outlined in Chapter 5 of the *Capital Adequacy Requirements* (CAR) Guideline A-1. Approval requirements are outlined for Advanced and Foundation IRB<sup>1</sup> approaches, for both domestic institutions<sup>2</sup> and foreign bank subsidiaries.

This document elaborates on the CAR guidance by setting out the approval framework that will permit institutions to demonstrate their level of adherence to the IRB minimum requirements.

Particular emphasis is placed on those institutions wishing to use the IRB approach at the initial implementation date of the new Basel framework<sup>3</sup>. However, the approval framework may be generalized in future to support those institutions that subsequently apply for IRB approval after the implementation date of the new Basel framework.

<sup>&</sup>lt;sup>3</sup> International Convergence of Capital Measurement and Capital Standards, June 2004.





<sup>&</sup>lt;sup>1</sup> "AIRB" – Advanced Internal Ratings Based; "FIRB" – Foundation Internal Ratings Based.

<sup>&</sup>lt;sup>2</sup> Banks and bank holding companies to which the *Bank Act* applies and federally regulated trust or loan companies to which the *Trust and Loan Companies Act* applies are collectively referred to as "institutions".

# **Table of Contents**

I.	Introduction	1
II.	Background	3
III.	Approval Principles	3
IV.	Key Phases	4
V.	Additional Considerations	10
Appen	dix I: Approval Process Milestones	13

# II. Background

Chapter 5 of CAR Guideline A-1 sets out the minimum requirements for institutions to be eligible for the IRB approach. The Guideline also sets out expectations with respect to the implementation timetable and, in particular, the parallel reporting period.

OSFI recognizes that IRB approval work will require careful planning to leverage the limited time that exists prior to the implementation date of the new Basel framework. Consequently, the purpose of this document is to advise institutions on the nature of the approval process, including the key principles, the overall framework, and the key milestones and steps for IRB implementation.

# **III.** Approval Principles

OSFI proposes an approach that will support timely implementation of IRB by addressing the eight principles noted below.

The approval framework will:

- 1) Be based on an institution's self-assessment of compliance and should be performed on a consolidated basis (i.e., the framework should be consistent with OSFI's supervisory approach), subject to OSFI standards regarding the measurement of capital for material subsidiaries of institutions.
- 2) Promote a build-up of key information relating to Rating Systems throughout implementation and thereby avoid excessive 'loading' challenges, i.e., the framework will be comprehensive and will permit components of approval to be staggered over time.
- 3) Support initial approval and provide for the monitoring of ongoing compliance with the IRB minimum requirements, i.e., the framework will be dynamic.
- 4) Deliver an ultimate approval decision that is consistent with the findings and experience of the implementation process, i.e., the framework will produce a "no surprises" approval decision.
- 5) Promote feedback to institutions in order to support implementation efforts and, where applicable, contingency planning, i.e., the framework will support ongoing dialogue with institutions.
- 6) Be designed to address the many and varied institution-specific issues and, where applicable, support "defect and cure", i.e., the framework will be flexible.

- 7) Be designed to accommodate future approval applications, post implementation of the new Basel framework, i.e., the framework will be generally applicable.
- 8) Support the design and execution of a supervisory plan in coordination with applicable host-country supervisors and home-country supervisors for foreign bank subsidiaries, i.e., the framework will support the Basel Committee's cross-border principles for Basel II implementation<sup>4</sup> (particularly Principle 6).

# IV. Key Phases

The key date that anchors the approval process is November 1, 2007, which is the start date (the Implementation Date<sup>5</sup>) for final or 'live' capital reporting under Pillar 1 of the new Basel framework. While this date provides the overall approval timeline for institutions, OSFI recognizes that it will be important to provide institutions with other interim key dates for planning purposes. Please refer to Appendix I for details.

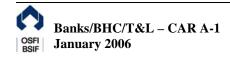
Given the approval principles and the targeted Implementation Date, OSFI will use an approval process that is broken down into five key phases as illustrated below:

**Table 1: Five Phases of the Approval Process** 

Phases	Description	Timelines for Institutions with a Oct. 31 Year-end	Timelines for Institutions with a Dec. 31 Year-end	
Phase 1	Monitoring of institutions' implementation efforts	November 1, 2004 to  January 31, 2006	N/A	
Phase 2	Formal application and preparation for 'meaningful' parallel reporting	February 1, 2006 to July 31, 2006	April 1, 2006 to September 30, 2006	
Phase 3	'Meaningful' parallel reporting and completion of OSFI review for approval	August 1, 2006 to July 31, 2007	October 1, 2006 to September 30, 2007	
Phase 4	Approval for Pillar 1 credit risk capital purposes	August 1, 2007 to December 31, 2007	October 1, 2007 to February 29, 2008	

<sup>&</sup>lt;sup>4</sup> High-level principles for the cross-border implementation of the New Accord, Basel Committee on Banking Supervision, August 2003.

<sup>&</sup>lt;sup>5</sup> For those institutions that have their fiscal year-ends aligned with calendar year-ends, the Implementation Date will be January 1, 2008.



Phase 5	Monitoring of ongoing compliance	From November 1, 2007	From January 1, 2008

The following provides further detail on the five phases illustrated in Table 1.

# **Phase 1: Monitoring of Institutions' Implementation Efforts**

The objective of Phase 1 is similar for both domestic institutions and foreign bank subsidiaries; namely, it is the initial monitoring of institutions' implementation efforts. The means of achieving this objective is different depending on whether or not the institution is a foreign bank subsidiary. This distinction is designed to reflect the Basel Committee's cross-border principles. (Please refer to Section V of this implementation note for approval steps required for foreign bank subsidiaries during Phase 1.)

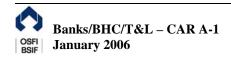
Phase 1 commences when an institution submits an initial self-assessment (gap analysis) against the applicable IRB minimum requirements. This phase is the initial stage of the approval process and involves various activities that are the 'ground-clearing' work necessary for implementation of the IRB approach. Consequently, institutions are in the design and initial execution of implementation plans during this phase. The objective of this phase is for institutions to develop rating systems that are broadly consistent with the IRB minimum requirements.

As set out in Chapter 5 of the CAR Guideline A-1, institutions should have a sufficient track record in 'using' internal rating systems that are broadly consistent<sup>6</sup> with the IRB minimum requirements for three years prior to the Implementation Date (see Appendix 1 for details). However, OSFI will exercise its national discretion and take a pragmatic view of this requirement in the near term during the transition period by reducing this requirement by one year, to two years, i.e., institutions should be broadly in line with the IRB minimum requirements by November 1, 2005.

Institutions are expected to perform sufficient analysis for project planning and execution purposes during Phase 1. Further, institutions should demonstrate that they have undertaken key project planning tasks, and have commenced execution of project plans that require sufficient lead times. Consequently, Phase 1 can be broken down into two parts:

Part 1A: Institution initial self-assessment (gap analysis) and associated project planning

<sup>&</sup>lt;sup>6</sup> While OSFI will review adherence to all areas of the IRB minimum requirements for the purposes of the "broadly consistent" requirement, it will place particular emphasis on those requirements set out in the Rating System Design and Operations sections of the minimum requirements (i.e., Sections 5.8.3 and 5.8.4 of the CAR Guideline A-1).



To prepare for IRB implementation, an institution is required to conduct an initial assessment of its adherence to the IRB minimum requirements (Gap Analysis #1)<sup>7</sup>. The institution should submit this assessment to OSFI for review. (Following an institution's submission, OSFI will schedule regular meetings to facilitate monitoring of implementation efforts through to the Implementation Date of the new Basel framework).

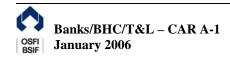
## Part 1B: Institution proposed rollout plan for IRB implementation

In line with the new Basel framework, OSFI recognizes that it will not likely be practical to implement the IRB approach across all material asset classes and business units at the same time. OSFI will therefore permit institutions to adopt a phased rollout of the IRB approach across the banking group, subject to the submission of an appropriately designed plan by the Rollout Plan Date (i.e., November 1, 2004).

In order for the rollout plan submission to be meaningful, OSFI believes it should meet certain *de minimus* standards and be performed on a consolidated basis. Consequently, institutions should ensure that the following information is included as part of the overall rollout plan:

- (a) The adoption plan, specifying to what extent and when the institution intends to roll out IRB across the following dimensions:
  - (i) asset classes within the same business unit (or, in the case of retail exposure, across individual sub-classes);
  - (ii) business units in the same banking group; and
  - (iii) applicable legal entities.
- (b) In the context of (a)(i) through (iii) above, the number of rating systems employed and their respective applications.
- (c) In the context of (a)(i) through (iii) above, the measures of materiality assumed, including a measure of "Qualifying Assets" and a list of waivers and exemptions 10.

For the specific application of the "waiver mechanism", refer to the following extract from the July 14, 2003 letter from OSFI to the CBA on the implementation of the new Basel framework. Essentially, waivers only apply to those material portfolios that are expected to be AIRB-compliant by the start date of the new Basel framework: "Over and above this, OSFI recognizes that there may be some limited circumstances where certain exclusions from IRB rollout continue to be warranted. For example, where it can be demonstrated that for asset classes and/or business units operating in jurisdictions where the reliability of the legal framework for collection of defaulted debts does not support the development of robust data for credit risk estimates, OSFI will consider these exemptions, thereby ensuring that a DTI's status is not otherwise obviated. Consequently, OSFI will create a "limited waiver mechanism" to permit DTIs to come forward with proposed exceptions of this type, which will then be considered on a case-by-case basis, including an assessment of materiality, with OSFI retaining the right to approve such waivers in its sole discretion."



<sup>&</sup>lt;sup>7</sup> The assessment should be performed against Section 5.8.2 of the CAR Guideline A-1 and other cross-referenced sections.

<sup>8</sup> For the purposes of the rollout plan, "Qualifying Assets" should be measured in terms of Basel I credit risk-weighted assets.

- (d) Key milestones and timelines for IRB implementation throughout the transition period (and, where applicable, beyond the transition period).
- (e) Key assumptions, including project management requirements, such as budget and resource plans.

Following plan submissions, OSFI will review and discuss rollout plans with institutions to ensure they are robust and aggressive, yet realistic and that "waiver" applications are clearly defined and appropriate in the overall context of IRB rollout.

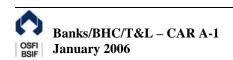
Part 1A and Part 1B should be consistent, i.e., the implementation efforts and project planning should be consistent with the rollout plan proposal. When taken together to form Phase 1, the associated implementation effort should prepare the institution for IRB implementation by the Implementation Date of the new Basel framework (i.e., November 1, 2007<sup>11</sup>). Consequently, where an institution has completed Phase 1 satisfactorily, it will proceed to the next phase.

# Phase 2: Formal Application and Preparation for 'Meaningful' Parallel Reporting

Phase 2 is the formal application phase of the approval process. To commence Phase 2, institutions will submit an application package to OSFI by the Formal Application Date (i.e., February 1, 2006)<sup>12</sup>. The package should include the following information as at October 31, 2005:

- (a) A cover letter from the Chief Risk Officer, addressed to OSFI. The letter will include the following information:
  - (i) the status of the institution's implementation efforts and level of adherence to the IRB minimum requirements as at October 31, 2005, including those parts of implementation not yet finalized;
  - (ii) information on the nature of any and all representations made to the Audit and Risk Committees of the Board in respect of the IRB implementation and approval process.
- (b) Completed self-assessment documentation <sup>13</sup> that includes:
  - (i) a description of the self-assessment process;

<sup>&</sup>lt;sup>13</sup> Institutions should refer to the IRB Self-Assessment Instructions, which will be provided by the supervisory teams upon request.



Exemptions only apply to those asset classes, business units and/or legal entities that are deemed immaterial and will therefore report on an alternative Pillar 1 approach to credit risk. A listing of all "immaterial" asset classes, business units, and legal entities, together with the associated amount of Qualifying Assets and Total Assets, should be included in the rollout plan.

<sup>&</sup>lt;sup>11</sup> January 1, 2008 for those institutions with a fiscal year-end of December 31st.

<sup>&</sup>lt;sup>12</sup> Refer to Section V of this document for a description of a foreign bank subsidiary's application package.

- (ii) a description of self-assessment assumptions relating to materiality, exemptions and 'waivers';
- (iii) a completed set of risk rating system self-assessments; and
- (iv) a completed model inventory for non-retail exposures.
- (c) Applications for waivers and exemptions, as applicable.
- (d) Applications for applicable domestic subsidiaries that also intend to report on an IRB approach under the new Basel framework, including information on the composition of credit assets within these entities and the application of internal risk rating system methodologies.
- (e) A 'refreshed' or updated rollout plan.

Following the submission of the application package, institutions will also submit a letter to OSFI from the Chief Internal Auditor by March 31, 2006. The letter will provide an assessment in the form of negative assurance, based on:

- (f) Work conducted to that point in time, observations and other audit procedures, on the institution's progress towards adherence with all IRB minimum requirements.
- (g) A review of business and/or management's self-assessment made as part of the formal application, including the self-assessment process developed and implemented by the risk and/or business management (as applicable).

In addition to the cover letter, the institution will submit:

- (h) A description of the work performed to date by internal audit in respect of an institution's adherence to the IRB minimum requirements. Where internal audit work is performed, the internal auditor's opinion should also be included as part of the approval package.
- (i) Details of internal audit plans during the parallel reporting period in respect of IRB implementation.

As part of the supervisory process, OSFI will review institutions' application packages. In particular, OSFI will want to understand the process used by an institution to demonstrate its adherence to the IRB minimum requirements. During the review process, institutions will be expected to continue their implementation efforts as outlined in the agreed rollout plans. Where applicable, OSFI will notify institutions of material approval issues that are identified throughout this process. Otherwise, once an institution has completed this phase satisfactorily, it will progress to the next phase.

# Phase 3: Parallel Reporting and Completion of OSFI Review for Approval

The parallel reporting period for IRB institutions covers five quarters (i.e., Q4 2006<sup>14</sup> to Q4 2007 inclusive) prior to implementation and involves institutions reporting on a dual basis to cover both the new capital calculations as well as the existing capital calculations<sup>15</sup>. OSFI recognises that this period of dual reporting will provide institutions with a critical amount of time to complete IRB implementation. Consequently, Phase 3 will provide OSFI with an opportunity to complete its outstanding approval work.

Where applicable, OSFI will notify institutions of material approval issues that are identified throughout this process. Once an institution has completed this phase satisfactorily, it will progress to the next phase of the approval process.

#### Phase 4: Approval for Pillar 1 Credit Risk Capital Purposes

This penultimate phase involves the IRB approval decision. While OSFI recognises the need to signal its approval decision in advance of the Implementation Date, it also believes that an ultimate approval decision will need to be based on a review process that takes into account the findings of the entire parallel reporting period. Consequently, OSFI will provide a two-step approval decision:

- (a) The first step will be an approval decision that is conditional on the satisfactory completion of the parallel reporting period and self-assessment process. This decision will be communicated to institutions by the Conditional Approval Date (i.e., by August 1, 2007).
- (b) The second step will be a reconfirmed and final approval decision, which will be given to institutions by the Formal Approval Date (i.e., by December 31, 2007), based on the submission of an appropriately revised and updated application package submitted to OSFI by October 31, 2007.

The revised and updated application package should include a final assessment as at July 31, 2007. The application package submitted should refresh all areas identified in Phase 2, including:

- Confirmation that the Board and Senior Management have received appropriate representations in order to fulfil their responsibilities relating to IRB approval; and
- An opinion from Internal Audit as to the design and effectiveness of the internal controls to ensure adherence to all applicable IRB minimum requirements.

<sup>&</sup>lt;sup>15</sup> Refer to OSFI's Guideline A Part I – Capital Adequacy Requirements (January 2001) and Part II – Capital Adequacy Requirements – Market Risk (November 1997).



<sup>&</sup>lt;sup>14</sup> Based on an institution's fiscal year.

An IRB approval decision will mean that the institution can report on IRB approaches for Pillar 1 credit risk purposes (subject to the provisions of the institution's rollout plan) and can therefore progress to the next phase of the approval process, namely, post-implementation monitoring.

# **Phase 5: Monitoring of Ongoing Compliance**

To be eligible for an IRB approach, an institution should demonstrate to OSFI that it is in compliance with the minimum requirements at the outset (i.e., from November 1, 2007<sup>16</sup>) and on an ongoing basis. Consequently, OSFI will expect institutions to demonstrate continued compliance with the IRB minimum requirements after the Implementation Date of the new Basel framework.

Once an institution has been approved for IRB, it will be required to reconfirm its adherence to the IRB minimum requirements on an annual basis throughout the Transition Period, i.e., the three-year period immediately following the Implementation Date. In particular, OSFI requires, on an annual basis, a letter from the Chief Risk Officer confirming the following:

- (a) The institution's level of adherence to the IRB minimum requirements.
- (b) The status of the institution's rollout plan.
- (c) Changes in materiality thresholds, waivers and exemptions (if applicable).

OSFI believes that this approach will provide an opportunity to review the execution of rollout plans, as well as address other approval issues that are identified in the early years of implementation.

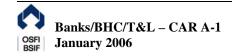
Throughout the Transition Period, monitoring will also include periodic reviews of adherence to the IRB minimum requirements. Also, where there are material changes to the risk rating system, institutions will be expected to undertake reviews of their applications and compliance with the minimum requirements and make these available to OSFI for its review.

## V. Additional Considerations

#### 1. FIRB Institutions

All IRB approval principles, requirements and steps described in this document apply to both AIRB and FIRB approaches. OSFI expects that self-assessment for the FIRB approach will reflect specific elements related to the FIRB requirements.

<sup>&</sup>lt;sup>16</sup> January 1, 2008 for those institutions with a fiscal year-end of December 31<sup>st</sup>.



# 2. Foreign Bank Subsidiaries

The approval of foreign bank subsidiaries will be performed in line with the Basel Committee's cross-border principles for Basel II implementation. In particular, OSFI will work with applicable home-country supervisors to avoid performing redundant and uncoordinated approval work. In order to streamline the approval process and limit the burden on foreign bank subsidiaries, wherever possible, OSFI will review a number of factors in cooperation with home-country supervisors, such as the risk profile of the Canadian subsidiary, the location of rating system expertise, the composition of the local portfolio, and the respective application packages of home-country supervisors.

# (a) Application Package

OSFI expects a simplified application package for foreign bank subsidiaries. The application package will include the following summary level information as it relates to Canadian operations:

- (i) A cover letter from the Chief Risk Officer of the foreign bank subsidiary. The contents of the letter are the same as for domestic institutions (see Section IV, Phase 2 (a)). In addition, the letter should:
  - (1) indicate the credit risk approach to be adopted by the parent institution on a consolidated basis for reporting under the new Basel framework;
  - (2) describe any differences in Pillar 1 credit risk approaches between the parent institution and the foreign bank subsidiary (if applicable);
  - (3) explain the high-level division of responsibilities between the parent institution and foreign bank subsidiary, as they relate to implementation of the new Basel framework and the self-assessment process.
- (ii) A cover letter from Chief Internal Auditor. The contents of the letter are the same as for domestic institutions (see Section IV Phase 2 (f) to (i)). In addition, the letter should:
  - (1) describe in summary form internal audit work performed by the parent institution and the foreign bank subsidiary, respectively; and
  - (2) indicate broadly the division of responsibilities between the parent institution and the foreign bank subsidiary in respect of internal audit work.
- (iii) A summary of self-assessment results that includes a brief description of the self-assessment process.
- (iv) Applications for waivers and exemptions, if applicable.

(v) A high-level rollout plan for the foreign bank subsidiary. The rollout plan should address key dependencies between the parent institution and foreign bank subsidiary in terms of deliverables and timelines (see Section IV, Phase 1, Part 1B).

Where possible, OSFI will continue to work with applicable home-country supervisors on a case-by-case basis to further examine ways of reducing the scale of this application package.

#### (b) Timelines

The five approval phases described in Section IV of this document are broadly applicable to foreign bank subsidiaries. However, Phase 1 of Section IV has been modified as follows:

- (i) An initial self-assessment or gap analysis will not be required for foreign bank subsidiaries.
- (ii) The high-level rollout plans for the foreign bank subsidiary will be submitted as part of the formal application package by April 1, 2006 (for institutions with December 31<sup>st</sup> fiscal year-ends).
- (iii) The schedule of meetings to monitor institution's implementation efforts will be determined on a case-by-case basis, based on discussions with the applicable home-country supervisor.

#### 3. Defect and Cure

OSFI believes the approval framework will provide sufficient time and opportunity to address most approval issues because the interim milestones will provide for a 'defect and cure' approach well in advance of the implementation date.

However, OSFI also recognises there may be some exceptional circumstances that could potentially prevent an institution from progressing to IRB (and therefore should report on an alternative approach for Pillar 1 credit risk capital reporting purposes). Consequently, OSFI will use the ongoing review process, both before and after the implementation date of the new Basel framework, to advise institutions on preparing for contingencies and alternative outcomes.

Where material approval issues exist after the approval of IRB (e.g., an institution fails to satisfactorily implement its rollout plan), OSFI may reconsider the institution's eligibility for IRB. Moreover, for the duration of any non-compliance, OSFI may also consider the need to take other appropriate supervisory action.

# **Appendix I: Approval Process Milestones**

(for approval by fiscal year-end 2007)

Phases	Milestone	Description	Institutions with October 31 Year- ends: Key Dates for IRB Approval	Institutions with Dec 31 Year-ends: Key Dates for IRB Approval
1	2	3	4	5
Phase 1	Start Date ('Informal' Application Date)	An institution enters the IRB approval process. This date should be at least 3 years prior to the implementation date.	November 1, 2004	N/A
	Rollout Plan Date	An institution submits its rollout plan for IRB.	November 1, 2004	N/A
Phase 2	Formal Application Date & Preparation for Meaningful Parallel Reporting	An institution submits its formal IRB application to OSFI.	February 1, 2006	April 1, 2006
Phase 3	Parallel Reporting Period Start Date	The start date of the parallel reporting period.	August 1, 2006	October 1, 2006
Phase 4	Conditional Approval Date	An institution will be conditionally approved for IRB, subject to satisfactorily completing the parallel reporting period.	August 1, 2007	October 1, 2007
	Implementation Date	The start date for the new Basel framework.	November 1, 2007	January 1, 2008
	Formal Approval Date	An institution will be formally approved for IRB under Pillar 1 of the new Basel framework. This date should be within two months of the implementation date.	December 31, 2007	February 29, 2008
Phase 5	Transition Period	The start and end dates for the Transition Period.	November 1, 2007 - October 31, 2010	January 1, 2008 - December 31, 2010