



April 01, 2007

## **Guidelines for applications to use the IRBA for calculating minimum capital requirements**

### **Introduction**

Institutions, groups of institutions and financial holding companies<sup>1</sup> within the meaning of section 1 (1b) and 10a (1 to 5) of the German Banking Act<sup>2</sup> are permitted to calculate their minimum capital requirements for credit risk on the basis of their own internal estimates of risk components (**I**nternal **R**atings **B**ased **A**pproach, or IRBA). The prior approval of the Federal Financial Supervisory Authority (BaFin) is required. Pending approval of the application, institutions are required to use the Standardised Approach<sup>3</sup> for credit risk to calculate their regulatory minimum capital requirements.

Applications by affiliated institutions have to observe section 10 (1a) of the German Banking Act.

The requirements that need to be fulfilled to obtain approval are set out in the EU Directives<sup>4</sup> 2006/48/EC and 2006/49/EC and are implemented into national law by means of the German Banking Act and the Solvency Regulation<sup>5</sup>. The aim of the IRBA examinations is to determine whether these requirements are being met by the applicant institutions.

These guidelines provide prospective applicants with information on how to apply and how applications are reviewed. The forms that need to accompany the application (implementation plan and checklists) can be obtained from the websites of BaFin and the Deutsche Bundesbank.

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<sup>1</sup> In the following document, reference will be made only to "institutions". The rules apply accordingly to groups of institutions and financial holding companies which submit an IRBA application for the calculation of regulatory capital requirements at group level.

<sup>2</sup> German Banking Act of November 17, 2006

<sup>3</sup> Principle I can be applied until January 1, 2008

<sup>4</sup> Directive 2006/48/EC of June 14, 2006, Official Journal of the European Union of June 30, 2006, L 177, p. 1; Directive 2006/49/EC, Official Journal of the European Union of June 30, 2006, L 177, p. 201

<sup>5</sup> Solvency Regulation of December 14, 2006 (SolvV)

Institutions interested in applying the IRBA to determine their regulatory minimum capital requirements need to coordinate closely with banking supervisors. Institutions are therefore asked to apply as soon as possible. Applications are generally processed on a first-come, first-served basis. The submitted documentation on rating systems should be complete, well-structured and meaningful in order to ensure that applications can be examined as efficiently as possible.

## **1 Basic principles**

The application for approval to use the IRBA is to be submitted in writing for

- initial approval for an institution to use the IRBA,
- an extension of existing approval to use the IRBA to cover the use of internal estimates of additional risk components (loss given default, conversion factor), or
- an extension of existing approval to include additional business lines, new products or new markets, if an additional rating system which has not yet been approved is required.

These applications are reviewed by banking supervisors. It is necessary to distinguish here between the overall process for giving an institution approval to use the IRBA and an examination of the suitability of individual rating systems. The IRBA approval process consists largely of reviewing the implementation plan and the suitability of individual or multiple rating systems. An institution is given approval to use the IRBA if it meets the requirements to use IRBA set out in section 56 of SolvV and has reached the entry threshold in accordance with section 64 of SolvV applying internal rating systems whose suitability for determining regulatory minimum capital requirements has been reviewed and confirmed by banking supervisors. Within the framework of temporary partial use<sup>6</sup>, additional suitability examinations for such rating systems may follow. The examination for IRBA approval hence encompasses the entire process from the submission of an application until that notification of approval that the exit threshold set out in section 66 of SolvV has been reached, after which only immaterial business units as stated in the implementation plan may remain permanently exempted from the use of the IRBA.

The IRBA suitability examinations for each internal rating system review actual compliance with the requirements governing individual rating systems. The examinations are largely conducted on-site at the applicant institution. A "rating system" consists of all methods, procedures, controls, data collection and IT systems that support the assessment of credit risk, the assignment of IRBA exposures to grades or pools (rating) and the quantification of default and loss estimates for certain types of IRBA exposures.

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<sup>6</sup> section 64 et seqq of SolvV; temporary partial use within the meaning of Article 85 (2) of the Directive 2006/48/EC of June 14, 2006

The examination covers compliance with the requirements for

- the implementation plan,
- the complete coverage of new exposures and exposures in stock that have to be taken into account
- the degree to which an institution's business units are covered by suitable internal rating systems,
- the suitability of the internal rating system(s) for determining regulatory minimum capital requirements,
- the integration of the internal rating system(s) in the relevant processes and procedures of the institution,
- the preparation for IRBA disclosure requirements,
- the preparation for stress tests and validation.

Even if the application is only for individual rating systems, banking supervisors will examine the overall portfolio (e.g. regarding the materiality of those business units that are not designated to be transferred to the IRBA).<sup>7</sup> An important issue here is whether the institution's internal assignment of exposures to supervisory asset classes (e.g. retail business – corporates) is compatible with the way rating systems are being applied.

## **2 How applications are examined**

The IRBA approval procedure begins when an institution submits an application for approval to BaFin. The examination starts with an evaluation of the implementation plan submitted. This is followed by suitability examinations of individual rating systems at the institutions.

Even institutions using rating systems developed in joint projects (e.g. within an association) must themselves submit a complete application and are examined individually. However, in their examination, supervisors will refer to information already gained from other institutions in the same project which is equally valid for all institutions involved in the project. Associations or responsible service units are not allowed to submit applications for examination.

BaFin sends the examination report to the institution. In addition, it offers the institution the possibility of a meeting to discuss the result of the examination. The discussion can also be used to coordinate or define further steps to be taken in the implementation plan and hence the upcoming IRBA suitability examinations.

IRBA approval is given by means of written notification. The applicant institution is allowed to use confirmed internal rating systems for determining regulatory minimum capital requirements only after initial

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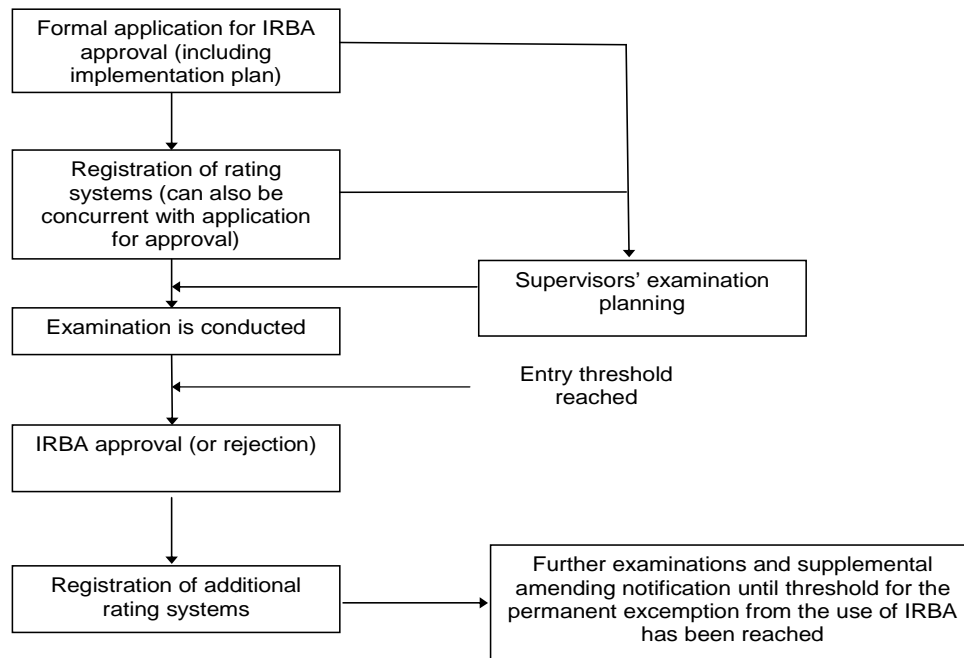
<sup>7</sup> Possible starting points for an analysis of the overall portfolio include sectoral and regional focal points, the type of collateral, the creditworthiness structure of the overall portfolio, the magnitude of lending and maturity structures.

approval has been delivered. However, this approval can be subject to compliance with conditions imposed in the notification.

If only parts of the overall portfolio are covered, initial approval generally does not signal the end of the IRBA approval process. Banking supervisors monitor compliance with the implementation plan and the fulfilment of any conditions contained in the approval. Those rating systems for which an application is filed once the entry threshold has been reached during the temporary partial use of the IRBA can be approved through amending notifications depending on the progress made in the examination process. After approval subject to conditions has been issued, follow-up examinations can be imposed.

The approval process is finished only once all of the rating systems listed in the implementation plan have been approved to be used for the IRBA. Rating systems are regularly reviewed to check if they are continuously suitable for the institution's loan portfolio.

The chart below illustrates the overall approval process.



The examinations in the institution will be ordered by BaFin under section 44 (1) sentence 2 of German Banking Act.

The applicant institution has to bear the costs of the approval procedure, including the costs of the examination.

### 3 Conditions for approval

For the application for IRBA approval, the implementation plan, at the very least, is absolutely essential. The implementation plan is a binding presentation of the bank's own implementation dates for all of the rating

systems for which IRBA approval is being sought<sup>8</sup>. The implementation plan therefore contains the institution's intentions regarding

- the dates,
- the business units,
- the rating systems,
- the business divisions and sites and
- the percentage of coverage of the entire portfolio

for which the bank is ready for examination and is seeking approval to use the IRBA.

If the implementation plan fails to provide assurance that the approval procedure will be successful the application will be rejected. This can be the case, for example, if the planned period for implementing the IRBA exceeds the supervisory timeframe (no more than 2½ years until the supervisory reference level and no more than 5 years altogether) for temporary partial use of the IRBA or if the plan is not plausible.

Any deviation from the implementation plan submitted must be notified to the banking supervisors immediately.

An IRBA suitability examination cannot begin until evidence has been provided that the institution fulfils the following requirements.

- The institution has sufficient experience in the use of rating systems.
- By the time of the review, the rating system being submitted for review has been used for an appropriate period as the key instrument for measuring and managing credit risk. The institution has satisfied itself that the rating system is suitable for the measurement and management of credit risk.
- The rating system essentially fulfils the requirements set forth in the Solvency Regulation.

The obligor-specific or transaction-specific components of a rating system can also be separately registered for examination; the above requirements then have to be fulfilled initially only for the relevant components<sup>9</sup>. In such cases too, the suitability of the rating system can be confirmed only once the entire rating system (all components) has been successfully reviewed.

All of the requirements set forth in the Solvency Regulation must be fulfilled, at the latest, when the rating system is used for IRBA purposes.

The time period described in the first item necessary to demonstrate sufficient experience in the use of rating systems is defined by section

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<sup>8</sup> section 59 of SolvV

<sup>9</sup> A rating system component refers to exactly one of the three risk parameters (PD, LGD, CF) and comprises all procedures to assess the credit risks, to assign exposures to grades or pools and to estimate that credit risk parameter.

63 (1) of SolvV. This period is temporarily reduced following section 338 (1) of SolvV.

The internal review of the rating system by the institution prior to a supervisory suitability examination mentioned in the second item requires, above all, that the rating systems be validated, including relevant examination activities and assessments by credit risk controlling, internal audit or another independent internal audit unit, and management.

#### **4 Components of the application**

- **Application**

The application for approval to use the IRBA for calculating minimum capital requirements for credit risk, along with the accompanying documents, must be submitted to BaFin in triplicate. The application must be submitted in writing. The application, the implementation plan and the checklists must be in German. The checklists and any accompanying internal documents must be submitted in an electronically readable form (e.g. CD-ROM). Conventional file formats are to be used. In case of doubt about the suitability of certain file formats, prior coordination of the details is recommended.

If a group of institutions or financial holding companies are submitting an application for approval to use the IRBA, this application must include a list of the affiliated institutions that are to be included in the calculation of the minimum capital requirement using the IRBA. For each affiliated institution seeking approval to use the IRBA for calculating the minimum capital requirement at the individual institutional level a separate application must also be submitted. Where ultimate parent institutions or subordinated institutions are domiciled abroad, banking supervisors will seek coordination with the national supervisors of the countries that are relevant to the applicant institution.

When the application for approval is submitted, not all of the rating systems need to comply with the requirements to be verified during the suitability examinations. Applicant institutions can help to make the processing of the IRBA application as efficient and cost-effective as possible by not registering rating systems for examination individually but, if feasible, "in sizeable packages". Generally, suitability examinations for rating systems start once the institution deems the portion of the portfolio covered by rating systems will exceed the entry threshold into the IRBA.

When registering a rating system for the IRBA suitability examination, the institution stipulates to which internal business unit and IRBA asset class it intends to internally apply the rating system submitted. In addition, every time an institution registers a rating system, it must refer to the implementation plan. In particular, it has to explain how the rating system registered complies with the time schedule and what coverage ratio of the entire portfolio will be achieved with this registered rating system. The checklists and accompanying documents must be appended to the institution's registration of a rating system. The

registration of a rating system for a suitability examination should be addressed to BaFin and is an annex to the application for approval.

The application must name a contact person in the institution and a deputy.

- **Accompanying documents**

The documents accompanying the application are to enable banking supervisors to assess internal rating systems in respect of suitability requirements. Banking supervisors reserve the right to require additional information to be submitted if the application allows only a partial assessment of the suitability of the rating systems or no assessment whatsoever. BaFin may reject the application if it is not possible to review and assess the application for approval owing to incomplete or missing information.

The following documents are part of the application.

- **Implementation plan**

The banking supervisors provide a form for the implementation plan on which institutions' presentations should be based.

- **Checklists**

Checklists are tables laid down by banking supervisors in which institutions show how they comply with the individual IRBA requirements. They are an essential element of the documents to be submitted for each rating system. They enable examinations to be conducted efficiently and must be carefully completed in full by each applicant institution for each individual rating system.

The banking supervisors will provide appropriate forms with instructions on how to complete them.

- **Documentation**

All of the documents mentioned in the checklist have to be submitted with each checklist, along with a table of these annexes. Organisational charts showing the bank's organisational structure need to be submitted as well.