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Minimum Requirements for Risk Management
Mindestanforderungen an das Risikomanagement
MaRisk

AT[1] 1 Preliminary remarks

1 This Circular provides a flexible, hands-on framework for risk management at institutions based on section 25a (1) of the German Banking Act (Kreditwesengesetz – KWG). Furthermore it refines the requirements placed on a proper business organisation for the outsourced activities and processes pursuant to section 25a (2) KWG. Within the meaning of this Circular, risk management–taking into account the institution's risk-bearing capacity–includes in particular the determination of appropriate strategies, as well as the establishment of appropriate internal surveillance procedures. The internal surveillance procedures comprise the internal control system and internal audit.In particular, the internal control system covers

- rules regarding the organisational and operational structure and
- processes for identifying, assessing, treating, monitoring and communicating risks.

To this extent, this Circular aims primarily to ensure the establishment of appropriate internal governance structures. This also means that the supervisory body is involved as appropriate to ensure that it can perform its supervisory duties properly.

2 The Circular also provides a qualitative framework for the implementation of Articles 22 and 123 of the Directive 2006/48/EC (Capital Requirements Directive (CRD)). These provisions state that institutions have to set up appropriate 'Robust Governance Arrangements', as well as strategies and processes that ensure adequate internal capital to cover all material risks ("Internal Capital Adequacy Assessment Process"). The Supervisory Authority shall assess the quality of these processes on a regular basis in accordance with Article 124 of the CRD ("Supervisory Review and Evaluation Process"). As a result, and taking into account the principle of double proportionality, this Circular shall provide a regulatory framework for the new qualitative supervisory system in Germany ("Supervisory Review Process"). With regard to the new methods for the calculation of regulatory own funds in accordance with the CRD, the requirements of this Circular have been formulated in a neutral manner, to the extent that compliance is possible irrespective of the method chosen. The Supervisory Authority expects audits to be in-line with the flexible overall structure of the Circular. As a result, audits have to be performed based on a risk-oriented approach.

3 By way of section 33 (1) of the Securities Trading Act (WpHG) in conjunction with section 25a (1) KWG this Circular also implements Art. 13 of the Directive 2004/39/EC (Markets in Financial Instruments Directive) provided it is likewise applicable to credit institutions and financial services institutions. This regards the general organisational requirements pursuant to Art. 5, as well as the risk management and internal audit requirements pursuant to Art. 7 and 8, the requirements relative to management board responsibility pursuant to Art. 9 and to outsourcings pursuant to Art. 13 and 14 of the Directive 2006/73/EC (Implementing Directive for the Markets in Financial Instruments Directive). These requirements serve to achieve the objective of the Markets in Financial Instruments Directive, namely to harmonise the financial markets in the European Union in the interests of cross-border financial services and to converge investor-protection standards.

4 This Circular gives due consideration to the diversity of institutional structures and business activities. It contains several opening clauses which enable simplified implementation depending on the size of the institution, its core business activities and its risk profile. In particular, this permits flexible implementation for smaller institutions. This Circular is open to the ongoing development of risk management processes and procedures, provided that such development does comply with the objectives of the Circular. In this context, the Supervisory Authority will maintain an ongoing dialogue with the industry.

5 The Supervisory Authority expects audits to be in line with the flexible overall structure of the Circular. As a result, audits have to be performed based on a risk-oriented approach.

6 The Circular has a modular structure so that any necessary adaptations to individual regulatory sections can be confined to the immediate overhaul of individual modules. A general part (AT module) provides basic principles for risk management. Specific requirements with

[1] The abbreviations referring to the corresponding parts of the modular structure of the MaRisk are adopted in the English text as given in the original text (AT = General Part; BT = Special Part; BTO = Special Part regarding requirements for the organisational and operational structure; BTR = Special Part referring to the processes for identifying, assessing, treating, monitoring and communicating certain risks)

regard to the organisation of the lending and trading business, as well as those relating to the identification, assessment, management, monitoring and communicating of counterparty risks, market price risks, liquidity risks and operational risks are set forth in a special part (BT module). The latter also provides a framework for the internal audit of institutions.

AT 2 Scope of application

1 The institutions' compliance with this Circular's requirements is intended to contribute to the elimination of deficiencies in the banking and financial services industries which may jeopardise the security of the assets entrusted to the institutions or impair the proper conduct of banking transactions or financial services, or which may create substantial disadvantages for the economy as a whole. When performing securities services and ancillary securities services the institutions must also comply with the requirements subject to the proviso that they protect the interests of the securities service customer.

AT 2.1 Affected institutions

1 The requirements of this Circular are to be observed by all institutions within the meaning of sections 1 (1b) or 53 (1) KWG. They also apply to the foreign branches of German institutions. They do not apply to branches of companies domiciled in another state of the European Economic Area pursuant to section 53b KWG. The parent company or the parent financial conglomerate company of a group of institutions, a financial holding group or a financial conglomerate have to set up a procedure to ensure that material risks at group level are treated and monitored appropriately and in accordance within the restrictions set by company law.

2 Financial services institutions and securities trading banks have to comply with the requirements of the Circular to the extent that this appears necessary, based on the size of the institution and the nature, scale, complexity and risk content of its business activities, in order to ensure compliance with the statutory obligations in accordance with section 25a KWG. This applies in particular to the modules AT 3, AT 5, AT 7 and AT 9.

3 The requirements set forth in this Circular apply to investment companies within the meaning of section 2 (6) of the Investment Act (*Investmentgesetz*) subject to the proviso that

a) BTO 1 does not apply to investment companies,

b) BTO 2 and BTR do not apply to activities and processes related to fund management and individual asset management; the requirements contained in these modules apply only mutatis mutandis to activities and processes related to the investment company's own account business,

c) the requirements contained in the AT only apply to the extent that they are not explicitly defined in special frameworks of rules and regulations for investment companies.

AT 2.2 Risks

1 The requirements set forth in this Circular relate to the management of material risks of the institution, as well as risk concentrations associated with these risks. In order to assess whether or not a risk is deemed material, the management has to obtain an overview of the overall risk profile of the institution.

As a general rule, the types of risk to be taken into consideration include:

a) counterparty risks (including country risks),

b) market price risks,

c) liquidity risks and

d) operational risks.

AT 2.3 Transactions

1 In general, lending transactions within the meaning of this Circular include all transactions in accordance with section 19 (1) KWG (balance sheet assets and off-balance-sheet transactions entailing a counterparty risk).

2 Lending decisions within the meaning of this Circular include all decisions on new loans, loan increases, participating interests, the exceeding of limits, the determination of borrower-related limits, as well as counterparty and issuer limits, prolongations and changes to risk-relevant circumstances on which the lending decision was based (e.g. collateral, loan purpose). The issue as to whether the decision was taken by the institution only or together with other institutions (syndicated lending) is immaterial.

3 As a general rule, "trading business" covers all activities based on a

a) money market transaction,

b) securities transaction,

c) foreign exchange transaction,

d) transaction in fungible receivables (e.g. trading in borrowers' notes).

e) transaction in commodities

f) transaction in derivatives

and which are concluded in the institution's own name and for its own account. Securities transactions also include transactions with registered bonds and securities lending, but not the initial issue of securities. Trading transactions also include - regardless of the underlying - any form of repurchase agreement.

4 Transactions in derivatives include forward transactions with prices which derive from an underlying asset, a reference price, a reference interest rate, a reference index or an event defined in advance.

AT 3 Overall responsibility of the management board

1 Management board (section 1 (2) KWG) is responsible - irrespective of their internal responsibilities - for ensuring that the company has a proper business organisation and that this organisation is developed further. This responsibility encompasses all material aspects of risk management and has to take into account outsourced activities and processes. Management board is only capable of meeting this responsibility if the risk management system allows them to assess the risks and take the necessary measures to limit them.

AT 4 General requirements for risk management

AT 4.1 Risk-bearing capacity

1 On the basis of the overall risk profile, the institution has to ensure that the material risks are covered by the risk taking potential at all times, taking into account any correlation between risks where appropriate, and that the institution is therefore able to bear its material risks.

2 An institution's risk-bearing capacity has to be taken into account when determining strategies (AT 4.2) and adjusting these strategies. Appropriate processes for identifying, assessing, treating, monitoring and communicating risks (AT 4.3.2) have to be established in order to implement the strategies and guarantee the institution's risk-bearing capacity.

3 Institutions have to define all material risks which are not included in the assessment of their risk-bearing capacity (e.g. liquidity risks). Institutions have to state clearly the reasons for

the non-inclusion of such risks. Institutions have to ensure that the processes for identifying, assessing, treating, monitoring and communicating risks give appropriate consideration to such risks.

4 The individual institution is responsible for selecting the methods employed to determine its risk-bearing capacity. The assumptions on which the methods are based have to be explained clearly. The responsible employees have to examine the methods at least once a year to assess their suitability.

AT 4.2 Strategies

1 The management board has to define a business strategy and a consistent risk strategy. The risk strategy has to take into account the objectives and plans of the institution's material business activities as set forth in the business strategy, as well as the risks of material outsourcings (AT 9 item 2). Responsibility for the determination of these strategies cannot be delegated. The management board is required to ensure the implementation of the strategies. The level of detail contained in the strategies depends on the scope and complexity, as well as the risk content of the planned business activities.

2 The risk strategy has to contain the objectives of risk treatment with regard to the institution's material business activities. It may be divided into sub-strategies where appropriate (e.g. a strategy for counterparty risks). The level of detail of these sub-strategies may vary. Appropriate consideration has to be given to the limitation of risk concentrations when determining the risk strategy.

3 The management board has to review the strategies at least once per year and adjust them as appropriate. The supervisory body of the institution has to be notified of all strategies and given an opportunity to discuss them.

4 The content of the risk strategy as well as any amendments thereto, together with the business strategy where appropriate, have to be communicated in a suitable manner within the institution.

AT 4.3 Internal control system

1 Depending on the nature, scale, complexity and risk content of its business activities, each institutions has to

a) set forth regulations regarding the organisational and operational structure and

b) establish processes for identifying, assessing, treating, monitoring and communicating risks.

AT 4.3.1 Organisational and operational structure

1 When determining the organisational and operational structure, the institution has to ensure that incompatible activities are performed by different employees.

2 Processes, as well as the related tasks, competencies, responsibilities, controls and communication channels have to be clearly defined and attuned to one another. This also applies to the linkage to material outsourcings.

AT 4.3.2 Processes for identifying, assessing, treating, monitoring and communicating risks

1 The institution has to establish appropriate processes which ensure that material risks can be

a) identified,

b) assessed,

c) treated and

d) monitored and communicated.

These processes should be included in an integrated risk-return management system ("Gesamtbanksteuerung").

2 The processes for identifying, assessing, treating, monitoring and communicating risks have to ensure that material risks – including those arising from outsourced activities and processes – can be identified at an early stage, captured completely and presented in an appropriate manner. The processes should take any correlations between the various types of risk into account.

3 Appropriate scenarios are to be employed on a regular basis to assess the risks used to determine the institution's risk-bearing capacity.

4 The management board has to require submission of a report on the risk situation and the result of the scenario assessments at appropriate intervals. The risk report has to be written clearly and concisely, and has to contain both a description and an assessment of the risk situation. Suggested actions, e.g. to reduce risk, are also to be included in the risk report where required. Details on risk reporting can be found in BTR 1 to BTR 4.

5 Information which is important from a risk point of view has to be communicated immediately to the management board, the responsible members of staff and, where appropriate, internal audit, so that appropriate measures and/or audits can be initiated at an early stage.

6 The management board has to submit an appropriate written report on the institution's risk situation to the supervisory body on a quarterly basis.

7 The processes for identifying, assessing, treating, monitoring and communicating risks have to be amended to reflect any changes in the overall situation as soon as possible.

AT 4.4 Internal audit

1 Each institution must have a functioning internal audit in place. The functions of an internal audit may be carried out by a member of the management board if it would be disproportionate with respect to the size of the institution to establish an internal audit.

2 The internal audit as an instrument of the management board is under its direct control and has to report to the management board. It can also be subject to the direct control of one executive in the management board, who should, if possible, be the chairperson.

3 The internal audit has to examine and assess, in a manner which is risk-focused and independent of individual processes, the effectiveness and appropriateness of the "risk management in general", and the internal control system in particular, as well as the extent to which all activities and processes comply with the appropriate regulations regardless of whether these are outsourced or not. This does not affect BT 2.1 item 3.

4 In order to enable it to perform its duties, the internal audit has to be granted a full, unlimited right to information. This right has to be ensured at all times. In this respect, the internal audit has to be immediately provided with the necessary information, the required documents and an opportunity to review the institution's activities, processes and IT systems.

5 The internal audit has to be informed of any management board directives and resolutions that could be relevant to its activities. It has to be informed of any material changes to the risk management in a timely manner.

6 With respect to its risk management at group level group internal audit shall supplement the activities of the internal audit of subsidiaries. Group internal audit may also make use of the findings of the internal audit of the subsidiary companies.

AT 5 Organisational guidelines

1 The institution has to ensure that its business activities are conducted on the bases of organisational guidelines (e.g. manuals, work documentation or workflow procedures). The level of complexity of the organisational guidelines depends on the nature, scale, complexity and risk content of the business activities in question.

2 The organisational guidelines have to be set down in writing and communicated to the staff members concerned in a suitable manner. Care has to be taken to ensure that the latest version of these guidelines is available to these staff members. The guidelines have to be amended to reflect any changes in the institutions' activities and processes as soon as possible.

3 Most importantly, the organisational guidelines has to contain the following information:

a) rules regarding the organisational and operational structure, as well as the assignment of tasks, the decision-making hierarchy and the various responsibilities,

b) rules on the processes for identifying, assessing, treating, monitoring and communicating risk,

c) rules for the internal audit,

d) rules which ensure compliance with statutory provisions and other requirements (e.g. dataprotection, compliance) and

e) rules for procedures for material outsourcings.

4 The organisational guidelines have to enable the internal audit to conduct an audit.

AT 6 Documentation

1 As a general rule, all business, control and monitoring records have to be drawn up systematically and in a manner which is clear to knowledgeable third parties and, subject to statutory regulations, retained for two years. Files have to be kept up to date and processes are to be in place to ensure that the contents are complete.

2 Any material actions and decisions that are relevant for compliance with this Circular have to be documented in a clear manner. This also includes decisions with regard to the use of significant opening clauses, for which grounds have to be stated, where appropriate.

AT 7 Resources

AT 7.1 Personnel

1 The staffing of the institution has to be based, in both quantitative and qualitative terms, on the institution's internal operational needs, business activities and risk situation. This also applies to the assignment of temporary staff.

2 The employees and their deputies have to have the knowledge and experience required as determined by their duties, competencies and responsibilities. Suitable measures have to be taken to ensure that the employees have the appropriate qualifications.

3 Employee absence, or resignation from the institution, should not result in any long-term impairment of operations.

4 The remuneration and incentive systems must not contradict the aims set forth in the strategies.

AT 7.2 Technical facilities and related processes

1 The scope and quality of the institution's technical facilities and related processes have to be based, in particular, on the institution's operational needs, business activities and risk situation.

2 The IT systems (hardware and software components) and the related IT processes have to ensure data integrity, availability, authenticity and confidentiality. In order to ensure this, the IT systems and the related IT processes have to be based on established standards as a general principle. The suitability of these systems and processes has to be assessed on a regular basis by the employees responsible for the technical and professional aspects of the relevant processes and systems.

3 The IT systems have to be tested before they are used for the first time and after any material changes have been made. They have to then be approved by both the staff responsible for the relevant processes and the staff responsible for the systems. As a general rule, the production and testing environments has to be kept separate.

4 Enhancements and changes to technical specifications (e.g. the adjustment of parameters) have to involve both the staff responsible for the relevant processes and the staff responsible for the systems. Technical approval need not be user-specific.

AT 7.3 Contingency plan

1 Provisions are to be made for emergencies relating to time-critical activities and processes (contingency plan). The measures set forth in the contingency plan have to aim at reducing the scale of any possible impact. The effectiveness and suitability of the plan have to be assessed on a regular basis by means of contingency testing. The results of the contingency tests have to be communicated to the responsible members of staff. If time-critical activities and processes are outsourced, the outsourcing institution and the external service provider are to have contingency plans that are coordinated with each other.

2 The contingency plan has to include business continuity and recovery plans. The business continuity plans have to ensure that alternative solutions are available in the event of an emergency as soon as possible. The recovery plans have to ensure the restoration of normal operations within an appropriate period of time. The contingency plans have to provide the communication channels to be used in the event of an emergency and have to be provided to the affected employees.

AT 8 Activities in new products or on new markets

1 A plan has to be drawn up prior to commencing business activities that relate to new products or markets (including new distribution channels). This plan is to be based on the result of the risk content analysis performed for these new business activities. It has to describe the main consequences of the new activities on risk management.

2 The decision as to whether or not activities involve a new product or market have to be made in conjunction with an area independent of front office and trading (BTO 1 item 2).

3 As far as trading activities are concerned, a test phase has to, as a general rule, be introduced before continuous trading in the new product or on the new market commences. During the test phase, trading has to be limited to a manageable scale. Care has to be taken to ensure that continuous trading begins only once the test phase has been completed successfully and appropriate processes for identifying, assessing, treating, monitoring and communicating risks are in place.

4 The organisational units which will be involved in the operations of the new business at a later stage have to participate in the drafting of the plan and in the test phase; the internal audit has to be involved in line with its duties.

5 The plan and the commencement of ongoing business activities have to be approved by the professional responsible management board member, in cooperation with the management board member responsible for monitoring the activities in question. These approval processes can be delegated, provided that clear guidelines are in place and that the management board is informed of the decisions as soon as possible.

6 If the organisational units to be involved in the operation of the new business at a later stage believe that the activities in a new product or on a new market can be managed appropriately, AT 8 need not be applied.

AT 9 Outsourcing

1 Outsourcing is the assignment of another company to carry out activities or processes related to the execution of banking transactions, financial services or other typical services that would otherwise be performed by the institution itself.

2 On the basis of a risk analysis the institution shall determine on its own responsibility which outsourcings of activities and processes are material with regard to risks (material outsourcings). The respective operational units are to be involved in the preparation of the risk analysis. The internal audit shall also be involved within the scope of its functions. The risk analysis has to be revised when material changes occur in the risk situation.

3 Outsourcings which are non-material with regard to risk have to comply with the general requirements on proper organisation pursuant to section 25a (1) KWG.

4 As a general rule, all activities and processes may be outsourced when this does not impair proper business organisation pursuant to section 25a (1) KWG. Outsourcing must not lead to the delegation of management board responsibility to the insourcing company. Management board functions must not be outsourced. Special requirements for outsourcing measures may also arise from specific statutory regulations, for example those for Building Societies (Bausparkassen) with respect to the risk control/management of the home savings collective (Kollektivsteuerung).

5 If the institution intends to terminate a material outsourcing contract it shall take measures to ensure continuitity and quality of the outsourced activities and processes after termination of the respective contracts.

6 The following terms shall be agreed in the outsourcing contract for material outsourcings:

a) specification and if necessary description of service to be performed by the insourcing company,

b) stipulation of information and audit rights of the internal audit and external audits,

c) ensuring BaFin's information and examining rights and control capabilitiy,

d) rights to give directives if necessary,

e) regulations that ensure compliance with data protection provisions,

f) appropriate periods of notice,

g) regulations on the possibility and the modalities of sub-outsourcing that guarantee that the institutions continue to comply with the banking supervisory requirements,

h) the commitment of the insourcing firm to inform the institution of any developments that may impair the proper performance of the outsourced activities and processes.

7 The institution shall manage the risks associated with material outsourcings in an appropriate manner and monitor the execution of the outsourced activities and processes in a proper manner. This also includes a regular evaluation of the service of the insourcing firm on the basis of specific criteria. The institution must assign clear responsibilities for management and monitoring.

8 If internal audit is to be outsourced completely the management board shall appoint an audit officer who has to ensure that internal audit is functioning properly. The requirements of AT 4.4 and BT 2 are to be taken into account accordingly.

9 The requirements on the outsourcing of activities and processes must also be complied with when outsourced activities and processes are sub-outsourced.

BT 1 Special requirements for the internal control system

1 This module sets out the special requirements for the internal control system. These requirements relate primarily to the organisational and operational structure in the lending and trading business (BTO) and the processes for identifying, assessing, treating, monitoring and communicating risks for counterparty risks, market price risks, liquidity risks and operational risks (BTR).

BTO Requirements for the organisational and operational structure

1 The purpose of this module is to set forth the requirements that apply to the organisational and operational structure in the lending and trading business. The BTO requirements can be applied in a simplified manner depending on the size of the institution, its business focus and its risk situation.

2 This Circular distinguishes between the following areas:

a) the area which initiates lending transactions and has a vote in the lending decisions ("front office"),

b) the area which has an additional vote on lending decisions ("back office") and

c) "trading".

Furthermore, a distinction is also made between the following functions:

d) those functions which serve to monitor and communicate risks ("risk control function") and

e) those functions which serve to settle and control trading transactions ("settlement and control function").

3 As a general rule, care has to be taken to ensure that the structure of the front office and trading areas are kept separate, up to and including the management board level, from those areas or functions set forth in item 2 b), d) and e), as well as in BTO 1.1 item 7, BTO 1.2 item 1, BTO 1.2.4 item 1, BTO 1.2.5 item 1 and BTO 1.4 item 2.

4 Market price risk control functions have to be separated, up to and including the management board level, from those areas which are responsible for positions.

5 The segregation of functions has also to be observed at deputy level. In principle, the designated deputy can also be a suitable member of staff below management board level.

6 The involvement of the management board member responsible for the risk control functions in a committee entrusted by management board with risk management duties does not conflict with the principle of the segregation of functions.

7 The section responsible for accounting (accounting department), in particular the preparation of the account allocation rules and development of the system of accounts, has to be independent of the front office and trading areas.

8 As a general rule, material legal risks are to be assessed by asection which is independent of the front office and trading areas (e.g. the legal department).

9 In the case of IT-based processing, the segregation of functions is to be ensured by means of corresponding procedures and precautions.

BTO 1 Lending business

1 This module sets out the requirements that apply to the organisational and operational structure, the procedures for the early detection of risks and the procedures for the classification of risks in the lending business. As far as trading transactions and participating interests are concerned, the implementation of individual requirements set forth in this module may be waived provided that their implementation is not deemed to be appropriate in view of the specific features of these types of business (e.g. the requirement to monitor the loan purpose set forth in BTO 1.2.2 item 1).

BTO 1.1 Segregation of functions and voting

1 The basic principle that applies to the structure of processes in lending business is the clear structural separation of the front office and back office up to and including the management board level. In the case of small institutions, exceptions may be made under certain circumstances with regard to the segregation of functions.

2 Depending on the nature, scale, complexity and risk content of the exposure in question, a lending decision requires two consenting votes by both the front and back office. This is without prejudice to any further-reaching decision-making rules (e.g. KWG, memorandum and articles of association). If these decisions are made by a single committee, the majority structure within that committee has to be defined in such a way that the back office cannot be outvoted.

3 In the case of trading transactions, counterparty and issuer limits are to be set by means of a back office vote.

4 In the case of lending decisions which are deemed immaterial from a risk point of view, the institution may decide that only one vote is necessary ("non-risk relevant lending transactions"). The process can also be simplified in the case of lending transactions initiated by third parties. In this respect, the structural separation between front office and back office is only relevant to lending transactions where the risk involved makes two votes necessary. If a second vote is not necessary, care has to be taken to ensure the proper implementation of the requirements set forth in BTO 1.2.

5 Each management board member may, within the limits of the individual decision-making power, take lending decisions independently and also maintain customer contact; this does not affect the structural separation between the front office and the back office. In addition, two votes are required where risk aspects render this necessary. In the event that decisions made within the framework of an individual's decision-making power deviate from the votes or if such decisions are made by the management board member responsible for the back office, they have to be highlighted in the risk report (BTR 1 item 7).

6 The institution has to define a clear and consistent decision-making hierarchy for decisions in lending business. If the votes are split, clear decision-making rules have to be defined in this hierarchy. In such cases, the loan has to be either rejected or passed on to the next hierarchy level for a decision (escalation procedure).

7 The review of certain types of collateral – to be determined under risk aspects – is to be conducted outside the front office. This also applies to suggestions regarding risk provisioning for significant exposures. The organisational integration of all other processes or subprocesses listed in BTO 1.2 is at the institutions' discretion (such as loan processing or subprocesses of loan processing), unless this Circular states otherwise.

BTO 1.2 Requirements for lending business processes

1 The institution has to set up loan processing procedures (the granting and further processing of the loan), the monitoring of loan processing, intensified loan management, the processing

of problem loans and risk provisioning. Responsibility for the development and quality of these processes has to lie outside of the front office.

2 The institution has to formulate processing guidelines for lending business processes, which are to be broken down (e.g. by loan type) where appropriate. It has to set up also procedures for the monitoring, administration and realisation of pledged collateral.

3 All aspects material to the counterparty risk of a lending exposure have to be identified and assessed, with the intensity of these activities depending on the risk content of the exposures. Recourse may also be made to external sources when assessing counterparty risk. Sector and, where appropriate, country risks have to be given the appropriate consideration. Critical issues concerning an exposure are to be highlighted and, where applicable, considered under various scenarios.

4 With respect to property/project financing, the loan processing procedure has to ensure that not only the economic aspects, but also those aspects regarding the technical feasibility and development, as well as the legal risks associated with the property/project, are included in the assessment. Recourse may also be made to the expertise of an appropriate organisational unit independent of the borrower. Whenever external sources are consulted for these purposes, their qualification has to be assessed in advance.

5 Depending on the risk content of the loans, the risks related to an exposure are to be evaluated using a risk classification procedure, either as part of the lending decision or in the case of regular or ad hoc assessments. The risk classification is to be reviewed annually.

6 There should be a verifiable link between the classification in the risk classification procedure and the terms and conditions of the loan.

7 The institution has to establish a procedure that conforms to the decision-making hierarchy, for dealing with the exceeding of limits. To the extent acceptable in terms of the risk, the requirements set forth in BTO 1.1. and BTO 1.2 may be applied in a simplified fashion to the exceeding of limits and prolongations on the basis of clear rules.

8 A procedure has to be set up to monitor the timely submission of the necessary lending documents and ensure timely evaluation. A dunning procedure is to be implemented for overdue documents.

9 The institution has to use standardised lending documents, to the extent that this is possible and appropriate with respect to the type of lending business in question, with the structure of the credit documents depending on the nature, scale, complexity and risk content of the business.

10 Contractual agreements relating to lending business have to be concluded on the basis of legally validated documentation.

11 Legally validated standard texts, which have to be updated on an ongoing basis, have to be used for individual loan agreements. Where a deviation from the standard texts is necessary for a given exposure (such as in the case of customised agreements), an examination has to be conducted by a section that is independent of the front office prior to signing the agreement, to the extent that this is deemed necessary from a risk point of view.

BTO 1.2.1 Granting of loans

1 The process of granting loans encompasses all necessary workflows up to the loan payout. All factors which are material to risk assessment have to be analysed and assessed, taking particular account of the debt-servicing ability of the borrower or the property/project, whereby the intensity of the assessment depends on the risk content of the exposure (e.g. credit assessment, risk classification or an assessment based on a simplified procedure).

2 As a general rule, the value and legal validity of collateral has to be assessed prior to the granting of the loan. Existing collateral values may be used if there are no indications of changes in value.

3 If the value of the collateral is dependent to a substantial degree on the financial situation of a third party (e.g. guarantee), the counterparty risk of the third party has to be reviewed as appropriate.

4 The institution has to set forth the types of collateral it is willing to accept and the method of calculating the value of collateral.

BTO 1.2.2 Further processing of loans

1 Whether or not the borrower is complying with the terms of the contract has to be monitored in the further processing of loans. In the case of special-purpose loans, the institution has to monitor whether or not the funds made available are being used as agreed (monitoring of the loan purpose).

2 Counterparty risk is to be assessed annually, whereby the intensity of ongoing assessments depends on the risk content of the exposure (e.g. credit assessment, risk classification as part of the risk classification procedure, or assessment based on a simplified procedure).

3 The value and legal validity of collateral has to be assessed at suitable intervals within the framework of further loan processing, depending on the type of collateral and if higher than a threshold set by the institution in accordance with the risk involved.

4 Ad hoc reviews of exposures, including collateral, have to be conductedimmediately, at least whenever the institution obtains knowledge, from either internal or external sources, which would indicate a substantial negative change in the risk assessment of the exposures or the collateral. Such information has to be forwarded to all of the organisational units involved immediately.

BTO 1.2.3 Monitoring of loan processing

1 Process-related controls have to be established for loan processing to ensure compliance with the organisational guidelines. Controls may also be conducted via the standard “four-eyes” principle.

2 The monitoring procedure has to focus, in particular, on whether or not the loan approval was in line with the defined decision-making hierarchy and whether or not the prerequisites or requirements of the loan agreement were met prior to the granting of the loan.

BTO 1.2.4 Intensified loan management

1 The institution has to set forth criteria to determine when an exposure requires special observation (intensified loan management). Responsibility for the development and quality, as well as the regular review of these criteria has to lie outside of the front office.

2 Exposures under intensified loan management are to be reviewed at regularly scheduled intervals, in order to determine what sort of further handling they require (further intensified loan management, return to normal management, transfer to winding up or restructuring).

BTO 1.2.5 Treatment of problem loans

1 The institution has to forth criteria governing the transfer of an exposure to the staff or areas specialising in restructuring and winding up, and/or their involvement. Responsibility for the development and quality, as well as the regular review of these criteria has to lie outside of the front office. The lead responsibility for the restructuring or winding-up process and the monitoring thereof need not be exercised by the front office.

2 If the criteria have been met, an assessment is to be conducted as to the feasibility and/or desirability of a restructuring with respect to the borrower.

3 If the institution decides to support a restructuring, it has to require submission of a restructuring plan. The implementation of the restructuring plan and the effects of the measures are to be monitored by the institution.

4 In the case of significant exposures, the responsible management board members have to be informed of the status of the restructuring process on a regular basis. If necessary, recourse can be taken to outside specialists with relevant expertise for the restructuring process.

5 In the event that an exposure is to be wound up, a winding-up plan needs to be developed. Employees (or external specialists where appropriate) with relevant expertise are to be involved in the collateral realisation process.

BTO 1.2.6 Risk provisioning

1 The institution has to set forth criteria which are to form the basis for value allowances, write-downs and loan loss provisions (including country risk provisioning), taking due account of the accounting standards in use (e.g. an internal valuation procedure for loans).

2 The calculations of necessary risk provisioning are to be kept up to date. In the event that substantial risk provisioning is required, the management board has to be notified immediately.

BTO 1.3 Procedure for the early detection of risks

1 The procedure for the early detection of risks is intended primarily to identify, in a timely manner, borrowers whose loans are beginning to show signs of increased risk. With such a system in hand, the institution shall be able to initiate countermeasures at the earliest possible stage (e.g. intensified loan management).

2 To this end, the institution has to develop indicators for the early identification of risks based on quantitative and qualitative risk features.

3 The institution is permitted to exempt certain types of lending business to be defined under risk aspects or lending transactions below certain thresholds from the application of the procedure for the early detection of risks. The function of early detection of risks may also be performed by a risk classification procedure, provided that this procedure adequately allows early detection of risks.

BTO 1.4 Risk classification procedure

1 Clear risk classification procedures are to set up at every institution for the initial, regular or ad hoc assessment of counterparty risk and, as appropriate, property/project risk. Criteria have to be defined to ensure that risks are clearly assigned to a risk class for the purpose of their assessment.

2 Responsibility for the development, quality and monitoring of the use of risk classification procedures must not lie with the front office.

3 Key indicators for determining counterparty risk in the risk classification procedure have to include not only quantitative criteria but, wherever possible, also qualitative criteria. In particular, account has to be taken of the borrower's ability to generate income in the future in order to repay the loan.

4 The classification procedures are to be adequately incorporated into the lending business processes and, where appropriate, into the decision-making hierarchy.

BTO 2 Trading business

1 The main purpose of this module is to set forth the requirements that apply to the organisational and operational structure in the trading business.

BTO 2.1 Segregation of functions

1 The basic principle that applies to processes in the trading business is the clear structural separation between the trading area and the "risk control function" and "settlement and control function" up to and including the management board level.

2 An institution may refrain from the segregation of functions including the management board level if the whole of trading activities focus on trading transactions deemed immaterial from a risk point of view ("non-risk-relevant trading activities").

BTO 2.2 Requirements for trading business processes

BTO 2.2.1 Trading

1 When a trade is transacted, the terms and conditions, including any ancillary agreements, have to be agreed in full.

2 As a general rule, transactions which are not in-line with market conditions are not permitted. Exceptions may be made in individual cases if

a) they are made at the client's request, can be justified and the deviation from market conditions is clearly visible from the documentation,

b) they are made on the basis of internal rules governing the types of transaction, the client group, the scale and the structure of these transactions,

c) the deviation from market conditions is disclosed to the client in the trade confirmation and

d) the management has been informed in the case of material transactions.

3 Trading outside the business premises is only admissible within the scope of internal rules; theses rules have to specify, in particular, the authorised individuals, scope and recording. The counterparty has to make an immediate telex confirmation for such trades. These trades are to be reported immediately by the trader to his own institution in a suitable form, they are to be marked and brought to the notice of the responsible management board member or an organisational unit authorised by that member.

4 Audio recordings should be made of traders' conversations relating to transactions, and these recordings are to be retained for at least three months.

5 Immediately after their conclusion, trades must be recorded together with all of the relevant transaction data, taken into account when determining the respective position (updating of positions) and passed on to the settlement function together with all documentation. The transaction data may also be transferred automatically by a settlement system.

6 Where data is recorded directly in an IT system, care has to be taken to ensure that a trader can enter transactions solely under his own trader ID. The recording date and time as well as the transaction's serial number are to be entered automatically by the system and must be impossible for the trader to alter.

7 Trades concluded after the cut-off time for settlement (late trades) are to be marked as such and included in that day's positions (including subsequent settlement) if they result in substantial changes. The transaction data and documentation relating to late trades have to be passed immediately to an area which is independent of trading.

8 Prior to the conclusion of agreements in connection with trading activities, especially in the case of master agreements, netting agreements and collateral agreements, assessments are to be performed by a section which is independent of trading, to determine whether and, if so, to what extent they are legally enforceable.

9 With regard to money transfers employees belonging to the trading area in organisational terms may only have joint signature authority with employees from an areawhich is independent of trading.

BTO 2.2.2 Settlement and control

1 Processing involves the issuing of trade confirmations or contract notes on the basis of the transaction data received from trading and performing subsequent settlement tasks.

2 As a matter of principle, every trade is to be confirmed immediately in writing or in equivalent form. The confirmation has to contain the required transaction data. If the trade is transacted via a broker, the broker is to be named. Assessments are to be performed to en-

sure that the corresponding counter-confirmations are received immediately, whereby care has to be taken to ensure that the incoming counter-confirmations are passed directly to the settlement function in the first instance and are not addressed to trading. Missing or incomplete counter-confirmations have to be reported to the counterparty immediately, unless all parts of the trade in question have been executed correctly.

3 The institution may refrain from confirmation in the case of trades cleared via a settlement system that ensures the automatic reconciliation of the relevant transaction data ("matching") and executes trades only where the data matches. In the event that there is no automatic matching of the relevant transaction data, the institution may refrain from confirmation if the settlement system allows both counterparties to access the transaction data at all times and these are kept monitored.

4 Transactions are to be subject to ongoing monitoring. In particular, assessments have to be made to ascertain whether

a) the transaction documents are complete and have been submittedas soon as possible,

b) the data supplied by traders is correct and complete and - where available - matches the data in the brokers' confirmations, print-outs from trading systems or other relevant sources,

c) the transactions fall within the defined limits with regard to their type and scope,

d) the terms agreed are in line with market conditions, and

e) any deviations from predefined standards (e.g. master data, delivery instructions methods of payment) have been agreed.

Changes and cancellations related to transaction data or booking have to be assessed independent of the trading section.

5 Appropriate procedures, broken down by trade type as appropriate, must be set up to allow assessments to be performed on the extent to which transactions comply with market conditions. The management board member responsible for these assessments has to be informed immediately if, in deviation from BTO 2.2.1 item 2, the terms and conditions of executed trades do no comply with market conditions.

6 Any discrepancies identified during settlement and control has to be remedied immediately by an area independent of trading.

7 The positions established in the trading area are to be matched with the positions in the downstream processes and functions (e.g. settlement, accounting) on a regular basis.

BTO 2.2.3 Positions to be covered by the risk control function

1 Trades, including ancillary agreements which result in positions, have to be covered by the risk control function immediately.

BTR Requirements for processes for identifying, assessing, treating, monitoring and communicating risks

1 This module contains special requirements for the structure of processes for identifying, assessing, treating, monitoring and communicating risks (AT 4.3.2) with regard to

a) counterparty risks (BTR 1),

b) market price risks (BTR 2),

c) liquidity risks (BTR 3) and

d) operational risks (BTR 4).

BTR 1 Counterparty risks

1 The institution has to introduce appropriate measures to ensure that counterparty risks can be limited, taking into account its risk-bearing capacity.

2 No lending transaction may be entered into without a borrower-related limit (borrower limits, borrower unit limits), i.e. without a lending decision.

3 As a general rule, trades may only be executed with contractual partners for which counterparty limits apply. All transactions concluded with a particular counterparty are to be counted towards that counterparty's individual limit. Replacement risks und settlement risks have to be taken into account when determining the extent to which the counterparty limits have been utilised. The individuals responsible for the positions in question have to be informed of the limits that apply to them and their current utilisation level as soon as possible.

4 Furthermore, issuer limits generally have to be set up for trades also. If limits do not exist for particular issuers in trading, issuer limits for trading purposes may be defined at short notice based on clear rules, without the need to perform the full loan processing procedure-defined in the relevant organisational guidelines according to risk aspects. The relevant loan processing procedure has to be initiated within three months.

5 Transactions are to be counted towards the borrower-related limits immediately. Compliance with the limits has to be monitored. Records are to be kept of any instances in which limits are exceeded, as well as of any measures taken as a result. The exceeding of counterparty and issuer limits that exceed a level determined from a risk point of view has to be reported to the responsible management board members on a daily basis.

6 Suitable measures have to be taken to ensure that significant overall business risks (sector-related risks, distribution of exposures by size category and risk class, and, where appropriate, country risks and other concentration risks) can be treated and monitored.

7 A risk report, which has to include the key structural characteristics of the lending business, has to be drawn up at regular intervals, but at least on a quarterly basis, and provided to the management board.

The risk report has to contain the following information:

a) the performance of the lending portfolio, e.g. by sector, country, risk class and size or collateral category,

b) the extent of limits granted and external lines; moreover, large exposures and other noteworthy exposures (e.g. material problem loans) have to be listed and commented on,

c) where appropriate, a separate analysis of country risks,

d) any instances where limits were exceeded to a substantial degree (including reasons),

e) the scale and development of new business,

f) the development of the institution’s risk provisioning,

g) any major lending decisions made which deviate from the strategies and

h) lending decisions taken by management board members acting within their individual decision-making power which differ from the votes or were taken by a management board member responsible for the back office.

BTR 2 Market price risks

BTR 2.1 General requirements

1 A limit system has to be set up on the basis of the institution’s risk-bearing capacity in order to limit market price risks.

2 No transaction that incurs market price risks may be entered into in the absence of a market price risk limit.

3 The procedures used to assess market price risks have to be reviewed on a regular basis.

4 The results calculated by the accounting department and the risk control function have tobe subjected to regular plausibility checks.

5 A risk report, which has to include details of the market price risks incurred by the institution, has to be drawn up at regular intervals, but at least on a quarterly basis, and provided to the management board. The report has to contain the following information:

a) an overview of the risk development and performance of positions that incur market price risks,

b) any instances in which the limits have been substantially exceeded, and

c) changes to key assumptions or parameters which form the basis of the market price risk assessment procedures.

BTR 2.2 Market price risks in the trading book

1 The institution has to ensure that trading book transactions which incur market price risks are counted immediately towards the corresponding limits and that the individual responsible for a position is informed as soon as possible of the limits relevant to him and of their current level of utilisation. Suitable measures have to be introduced in the event that these limits are exceeded; an escalation procedure has to be initiated as appropriate.

2 The trading book positions that incur market price risks have to be valuated on a daily basis.

3 Trading book results have to be calculated on a daily basis. The existing risk positions have to be consolidated into overall risk positions at least once a day at the close of trading. In principle, the overall risk positions, results and limit utilisation levels have to be reported to the management board member responsible for risk control function as soon as possible on the next business day. This report has to be agreed with the trading areas.

4 Risk figures derived from risk simulation models have to be continuously compared with actual trends.

BTR 2.3 Market price risks in the banking book (including interest rate risks)

1 The banking book positions that incur market price risks have to be valued on a quarterly basis at the very least.

2 Furthermore, the banking book results have to be calculated on at least a quarterly basis.

3 Suitable measures have to be taken to ensure that situations in which limits are exceeded due to interim changes in risk positions can be avoided.

4 Depending on the nature, scale, complexity and risk content of the positions in the banking book, valuation, calculation and communication of risks may also be necessary on a daily, weekly or monthly basis.

5 The procedure used to assess interest rate risks in the banking book have to cover the key characteristics of interest rate risk.

6 The determination of interest rate risks can be based either on the effects of interest rate changes on accounting P&L of the institution or on the market or present value of the positions in question. In determining the impact on accounting P&L, possible developments after the balance sheet date have to be taken into account as appropriate.

7 Appropriate assumptions have to be established with regard to the consideration of positions with indeterminate capital tie-up or interest terms.

8 Institutions which incur material interest rate risks in various currencies have to assess the interest rate risks in each currency.

BTR 3 Liquidity risks

1 The institution has to ensure that it can meet its payment obligations at all times. At the same time, it has to guarantee a sufficient level of diversification, primarily with regard to its asset and capital structure.

2 The institution has to prepare a liquidity overview covering an appropriate period of time, which has to compare the institution's expected inflows with its expected outflows of funds. It has to specify the assumptions on which the expected in- and outflows are based. Appropriate scenario assessments have to be performed on a regular basis when preparing the liquidity overview.

3 Assessments have to be performed on an ongoing basis to determine the extent to which the institution is in a position to cover any liquidity requirement which may arise. These assessments have to focus, in particular, on the liquidity of the institution's assets.

4 The institution has to set forth which measures are to be taken in the event of a liquidity squeeze. This involves specifying the sources of liquidity available, taking into account any liquidation shortfalls. The institution has to determine also the communication channels to be used in the event of a liquidity squeeze.

5 A report on the institution's liquidity situation has to be submitted to the management board on a regular basis.

BTR 4 Operational risks

1 The institution has to introduce appropriate measures to account for operational risks.

2 Care has to be taken to ensure that material operational risks are identified and assessed at least once a year.

3 Major losses are to be analysed immediately with regard to their causes.

4 A report on major losses and material operational risks has to be provided to the management board at least once a year. This report has to include the type of loss or risk, the causes, the scope of the loss or risk and, where appropriate, any countermeasures which have been introduced.

5 The report is to be used as the basis for decisions as to whether measures have to be taken to remedy the causes, and, if so, which measures, or which risk management measures (e.g. insurance policies, alternative procedures, reorientation of business activities, catastrophe protection measures). The implementation of these measures has to be monitored.

BT 2 Special requirements for the internal audit

BT 2.1 Duties of the internal audit

1 As a general rule, the audit activities of the internal audit have to cover all of a institution's activities and processes based on a risk-oriented approach.

2 The internal audit should be involved in key projects, although it has to preserve its independence and avoid conflicts of interest.

3 In the case of material outsourcings to another company the internal audit of the institution may not carry out own audit activities provided that the auditing work carried out within the insourcing company meets the requirements of AT 4.4 and BT 2. The internal audit of the outsourcing institution shall satisfy itself at regular intervals that these prerequisites are fulfilled. The audit findings concerning the institution are to be passed on to the internal audit of the outsourcing institution.

BT 2.2 General principles for the internal audit

1 The internal audit department has to perform its duties in an autonomous and independent fashion. In particular, it has to ensure that it is not subject to any instructions with regard to its reporting and evaluation activities. The management's right to order additional audits does not conflict with the autonomy and independence of the internal audit department.

2 As a general rule, members of staff employed in the internal audit may not be entrusted with tasks which are not related to auditing. They may not, under any circumstances, perform tasks which are not consistent with auditing activities. Provided that the internal audit department maintains its independence, it may provide advisory support to management or other organisational units of the institution within the realm of its duties.

3 As a general rule, members of staff employed in other organisational units of the institution may not be entrusted with internal audit tasks. This does not, however, rule out justified situations in which other employees can, due to their particular expertise, conduct activities for the internal audit on a temporary basis.

BT 2.3 Planning and conducting of the audit

1 The activities of the internal audit have to be based on a comprehensive audit plan which has to be updated on a yearly basis. Audit planning has to be risk-oriented. The activities and processes of the institution, even if these are outsourced, have to be audited at appropriate intervals, as a general rule within three years. Auditing has to be performed annually if particular risks exist.

2 Audit planning, audit methods and quality are to be reviewed and developed further on an ongoing basis.

3 It has to be ensured that any special audits required at short notice, e.g. due to deficiencies which have arisen or certain informational requirements, can be performed at any time.

4 Audit planning, as well as any major adjustments to it, has to be approved by the management board.

BT 2.4 Reporting obligation

1 Internal audit has to prepare a written report on each audit as soon as possible and, as a general rule, submit this report to the responsible management board members. In particular, the report has to include a description of the subject of the audit and the findings, including any planned measures where appropriate. Any major findings have to be highlighted. The results of the audit also have to be assessed. In the event of severe findings, the report has to be submitted to the management board immediately.

2 The audits are to be documented by working documents. These must show the work carried out, the findings, the conclusions and must be drawn in a manner that is transparent for competent third parties.

3 If a consensus cannot be reached between the audited organisational unit and internal audit with regard to the implementation of measures necessary for the remedy of findings, the audited organisational unit has to make an official statement.

4 Internal audit has to prepare an overall report of all of the audits performed in the course of the financial year as soon as possible and present this report to the management board as soon as possible. The overall report has to provide information on major findings and the remedy measures taken. It has to state whether or not and to what extent the audit plan has been adhered to.

5 The management board has to be informed immediately in the event that the audit identifies severe findings against management board members. The management board then immediately has to inform the chairperson of the supervisory body and the supervisory authorities (BaFin, Deutsche Bundesbank). If the management board fails to meet its reporting obligation or if it fails to implement appropriate measures, internal audit has to inform the chairperson of the supervisory body.

6 The management board has to provide the supervisory body with a concise report on severe findings and on the major findings which have not yet been remedied at least once a year. Severe findings, the measures resolved to remedy them and the implementation of these measures have to be highlighted in this report. The management board has to inform the supervisory body of particularly severe findings immediately.

7 Audit reports and working documents are to be kept for six years.

BT 2.5 Reaction to findings

1 The internal audit has to perform appropriate assessments to ensure that any findings identified in the course of the audit are remedied within the required period. Where appropriate, it has to perform a follow-up audit.

2 If the major findings are not remedied within an appropriate period, the head of internal audit at first has to inform the responsible member of the management board in writing. If the findings remain unresolved, the management board has to be informed of these findings in writing in the next overall report at the latest.