

Pursuant to Article 161, paragraph (1), item (3) of the Credit Institutions Act (Official Gazette 117/2008) and Article 43, paragraph (2), item (9) of the Act on the Croatian National Bank (Official Gazette 75/2008) the Governor of the Croatian National Bank hereby issues the

DECISION
on risk management

I GENERAL PROVISIONS

Subject matter
Article 1

This Decision prescribes in detail the minimum risk management requirements, including as follows:

- 1) general risk management rules;
- 2) credit risk management rules;
- 3) market risk management rules; and
- 4) operational risk management rules.

Legal persons subject to the Decision
Article 2

(1) The provisions of this Decision shall apply to credit institutions with registered offices in the Republic of Croatia which have been authorised by the Croatian National Bank, with the exception of electronic money institutions.

(2) The provisions of this Decision shall, as appropriate, apply to the branches of third-country credit institutions which have been authorised to provide services by the Croatian National Bank.

Definitions
Article 3

(1) For the purposes of this Decision, the following definitions shall apply:

- 1) "risk management system" shall mean the overall organisational structure, rules, processes, procedures, systems and resources to identify, measure or assess, contain, monitor and report on risk exposure and overall risk management, and it shall imply the establishment of an adequate corporate governance and risk culture;

- 2) "risk culture" shall at a minimum comprise general risk awareness across all levels of a credit institution as well as employee attitude and behaviour towards and in relation to risk and risk management;
- 3) "risk appetite" shall mean the amount or level of risk which a credit institution considers acceptable to assume in implementing its business strategy and objectives in the existing business environment. The risk appetite shall involve declaring an intention to assume risk and determining risk tolerance in terms of the level of risk which a credit institution considers acceptable;
- 4) "risk containment" shall mean the overall strategic determinants, methods, criteria and procedures to accept, avoid, mitigate or control, or transfer the identified risk;
- 5) "risk profile" shall mean the measurement or assessment of all risks to which a credit institution is or might be exposed in its operation;
- 6) "senior management" shall mean the authorised persons directly subordinated to the management board of a credit institution whose main task is to adopt operational decisions relating to their scope of operation, manage risks and implement management board decisions;
- 7) "stress testing" shall mean a risk management technique used to assess the potential effects of specific events and/or changes in several risk factors on the financial position of a credit institution. Stress testing may be divided into scenario analysis and sensitivity analysis. Scenario analysis is an assessment of the impact of a concurrent change in several risk factors on the financial position of a credit institution wherein the cause of stress is not identified. Sensitivity analysis is an assessment of the impact of a specific risk factor on the financial position of a credit institution wherein the cause of stress is not identified;
- 8) "operation support function" shall mean the activities of a credit institution performed by the persons authorised to keep bookkeeping records on contractual placements;
- 9) "country risk" shall mean the risk that relevant bodies or the central bank will not be able or willing to settle the liabilities to other countries and creditors in these countries and that other debtors in the country in question will not be able to settle the liabilities to foreign creditors;
- 10) "currency-induced credit risk" shall mean the risk of loss to which a credit institution granting foreign currency placements or placements indexed to foreign currency is additionally exposed and which arises from a debtor's currency risk exposure;
- 11) "front office function" shall mean the credit institution activities performed by the persons authorised to contract risk-bearing transactions;
- 12) "treasury back office function" shall mean the credit institution activities performed by the persons authorised to conduct treasury back office operations and keep bookkeeping records of contractual transactions;
- 13) "internal control system" shall mean the set of processes and procedures put in place to appropriately control risk, monitor the effectiveness of a credit institution's operation, the reliability of its financial and other information and the compliance with regulations, internal bylaws, standards and codes, with a view to ensuring the stability of the credit institution's operation;

(2) For the purposes of this Decision, "placements" shall mean the financial assets in the form of credits granted, debt instruments and other receivables which a credit institution,

in line with its business policies, classifies under the financial instrument categories entitled "loans and receivables" and "held-to-maturity investments" in accordance with International Accounting Standard 39 Financial Instruments: Recognition and Measurement. The term "placements" shall, in addition to the principal amount, also include the nominal interest and all commissions and fees, i.e., the total interest income from a financial instrument and off-balance sheet liabilities subject to credit risk.

(3) For the purposes of this Decision, the term "credit risk" shall also include concentration risk, securitisation risk, country risk, currency-induced credit risk and residual risk.

II GENERAL RULES FOR THE ESTABLISHMENT AND APPLICATION OF THE RISK MANAGEMENT SYSTEM

Risk management system

Article 4

(1) A credit institution shall establish a risk management system appropriate for the type, scope and complexity of its operation and the risk profile.

(2) The risk management system of a credit institution shall cover credit risk, market risks, operational risk, liquidity risk, interest rate risk in the non-trading book, strategic risk, reputation risk and other risks to which the credit institution is or might be exposed in its operation.

(3) A credit institution shall regularly supervise and examine the risk management system. The internal audit function of a credit institution shall at least on an annual basis evaluate the appropriateness and efficiency of the risk management system.

(4) The risk management system shall, at a minimum, include the following:

- 1) a strategy, policies and other internal bylaws on risk management;
- 2) an organisational structure with defined powers and responsibilities to manage risks;
- 3) a risk management process; and
- 4) an efficient internal control system.

Strategies, policies and other internal bylaws on risk management

Risk assumption and management strategy

Article 5

(1) A credit institution shall:

- 1) adopt a risk management strategy;
- 2) clearly determine and document the risk appetite; and
- 3) regularly align the risk management strategy with the business strategy.

(2) The risk assumption and management strategy shall be set out in one or several written documents which shall, at a minimum, include the objectives and fundamental principles of risk assumption and management and the credit institution's risk appetite.

Policies and internal bylaws on risk assumption and management

Article 6

(1) A credit institution shall adopt policies and other internal bylaws governing risk management.

(2) The policies and other internal bylaws on risks management shall be set out in one or several written documents which shall, at a minimum, include the following:

- 1) a determination of the risk appetite as regards specific risks;
- 2) clearly-defined powers and responsibilities to manage risks within a credit institution;
- 3) a methodology for the identification and measurement or assessment of the risks to which a credit institution is or might be exposed;
- 4) risk containment and monitoring procedures, including the establishment of adequate limits;
- 5) procedures and measures in the event of non-compliance with the adopted policies and procedures;
- 6) procedures and measures for crisis situations; and
- 7) where applicable, risk management within the group.

(3) The policies and other internal bylaws referred to in paragraph (2) of this Article shall be set out in writing, clearly defined and documented, and accessible to all the employees of a credit institution involved in the risk assumption and management process.

(4) A credit institution shall update the policies and other internal bylaws referred to in paragraph (2) of this Article at least on an annual basis and at each significant change in risk exposure and it shall ensure that they are applied at the level of the whole credit institution.

(5) The credit risk, market risks and operational risk management rules referred to in Title III of this Decision constitute the minimum requirements which a credit institution shall, in addition to the general rules on the risk management system establishment and application, referred to in this Title, incorporate as appropriate into its internal bylaws on credit risk, market risks and operational risk management

Organisational structure

Organisational structure

Article 7

(1) A credit institution shall establish an appropriate organisational structure comprising powers and responsibilities that are precisely determined, clearly defined and distributed among the employees, up to the managerial level.

(2) The organisational structure shall be appropriate where it:

- 1) enables an effective communication and cooperation at all organisational levels, including an appropriate information flow within a credit institution;
- 2) limits and prevents conflicts of interest;
- 3) provides for a transparent and documented decision making process.

Conflicts of interest prevention

Article 8

A credit institution shall in a timely manner identify the areas of operation which may give rise to potential conflicts of interest and it shall ensure that any form of conflict of interest is adequately prevented.

Employees

Article 9

(1) Depending on the type, scope and complexity of its operation, a credit institution shall ensure an appropriate number of employees possessing professional knowledge and experience.

(2) A credit institution shall determine the key employees and their deputies to be involved in the risk management system.

(3) A credit institution shall establish an adequate policy on salaries and other income of the management board and supervisory board members, key employees and other employees. The policy on salaries and other income shall be considered adequate if it is in line with the objectives of a credit institution, its risk management and business strategies, and if it is based on a reasonable assumption of risk.

Organisational culture

Article 10

(1) A credit institution shall establish an organisational culture based on high professional and ethical business standards.

(2) A credit institution shall ensure that the employees at all levels are clearly informed of the powers, roles and responsibilities assigned to them in the risk management process.

Competences and responsibilities of the supervisory board, management board and senior management

Article 11

(1) The supervisory board of a credit institution shall:

- 1) grant approval to the management board of the credit institution for its risk management strategy and policies;
- 2) grant approval to the management board for the credit institution's organisational structure;
- 3) grant approval to the management board for the policy on salaries and other income.

(2) The management board of a credit institution shall be responsible for:

- 1) establishing clearly defined and consistent lines of responsibility, including the separation of powers and responsibilities among the supervisory board, management board, boards appointed by it and senior management;
- 2) ensuring an adequate number of employees possessing professional knowledge and experience to be involved in the risk management system;
- 3) approving and periodically (at least on an annual basis) examining and aligning risk management strategies and policies;
- 4) establishing an efficient internal control system which also includes appropriate administrative and accounting procedures;
- 5) establishing efficient risk control, compliance and internal audit functions;
- 6) establishing an organisational culture in accordance with Article 10 of this Decision.

(3) The senior management shall be directly responsible to the management board of a credit institution, in particular for:

- 1) implementing the risk management strategy and policies;
- 2) establishing and maintaining the risk management process;
- 3) establishing procedures and compiling instructions and guidelines for carrying out the credit institution's business activities which result in risk exposures;
- 4) maintaining the efficiency of internal controls embedded in the risk management system;
- 5) establishing adequate procedures to assess the impact of the introduction of new products on the credit institution's risk exposure.

Risk management process

Establishment of the risk management process

Article 12

(1) A credit institution shall establish a risk management process which includes a regular and timely risk identification, measurement or assessment, containment and monitoring, including reporting on the risks to which a credit institution is or might be exposed in its operation.

(2) A credit institution shall adopt a risk management methodology defining risk management criteria, methods and procedures.

(3) A credit institution shall appropriately document the risk management process.

(4) The risk management process shall also include clearly defining and documenting the risk profile and aligning the risk profile with the risk appetite.

(5) A credit institution shall appoint at least one member of the management board to be competent for the risk management process.

Risk identification, measurement or assessment and risk containment

Article 13

(1) A credit institution shall on an ongoing basis identify the risks to which it is or might be exposed in its operation and it shall analyse the causes of risk exposure.

(2) A credit institution shall regularly measure or assess the risks which it has identified in its operation. The risk measurement or assessment procedures must include appropriate quantitative and/or qualitative methods to measure or assess risks, which are also to enable the detection of changes in the credit institution's risk profile, including the emergence of new risks.

(3) A credit institution shall clearly define decision making criteria and procedures for the containment of risks, taking into account both the existing and desired risk profile and the risk appetite.

(4) A credit institution shall appropriately document the risk containment method and risk containment, including the reasons for risk acceptance, mitigation, avoidance or transfer.

Risk monitoring and reporting

Article 14

(1) A credit institution shall establish a system for regular monitoring of and reporting on its risk exposure and risk profile.

(2) A credit institution shall establish such a risk reporting and monitoring system as to provide all relevant credit institution management levels with timely, accurate and sufficiently detailed information required for making business decisions and ensuring its safe and stable operation.

(3) The information referred to in paragraph (2) of this Article shall at a minimum comprise the relevant information on the risk exposures referred to in Article 4, paragraph (2) of this Decision, including the information on the risk profile and changes therein, data on significant internal losses, information on the measures and activities that are to be or

have been implemented to contain risk, information on the exemptions from compliance with internal bylaws, including the exemptions from the determined risk appetite, as well as the information on positive and negative changes in business indicators which suggest or might suggest a change in risk exposure.

(4) A credit institution shall adequately monitor the risks transferred to a third party.

Internal control system

Internal control system and control activities

Article 15

A credit institution shall establish and implement an effective internal control system in all areas of operation, in accordance with the Credit Institutions Act, Decision on the internal control system, and other regulations adopted under that Act.

New products

Article 16

(1) The risk management of a credit institution shall also cover the risks arising from the conclusion of transactions relating to new products, including the entrance to new markets and trading in new instruments.

(2) A credit institution shall prescribe in its internal bylaws the criteria and procedures relating to the conclusion of transactions referred to in paragraph (1) of this Article and within them at a minimum:

- 1) define what it considers to be a new product and establish the procedures for the introduction of new products;
- 2) define the powers and responsibilities for the approval and verification of new products; and
- 3) establish adequate control procedures to be implemented by the control functions of the credit institution.

(3) Prior to concluding a transaction referred to in paragraph (1) of this Article, a credit institution shall analyse, define and document all the relevant aspects of such a conclusion, including an analysis of the risk arising therefrom, and within this at a minimum:

- 1) describe the new product;
- 2) analyse the impact of the new product on its existing and future risk exposure;
- 3) ensure the required technical, organisational and human resources;
- 4) define the procedures to be used to manage the risks related to new products; and
- 5) comply with the accounting, tax and legal requirements, including those of the supervisory authority.

III CREDIT RISK, MARKET RISKS AND OPERATIONAL RISK MANAGEMENT RULES

CREDIT RISK MANAGEMENT RULES

Organisational requirements

Article 17

(1) A credit institution shall ensure that the front office function is clearly separated, operationally and organisationally, from the operation support function and the risk control function, up to the level of the management board.

(2) A credit institution shall establish a clearly defined and consistent organisational structure for the decision making process on the granting of placements, ensuring:

- 1) the establishment of criteria, policies and procedures for the granting of new placements and the refinancing and restructuring of existing placements;
- 2) the establishment of rules on the granting of placements at the level of individual debtors and collateral providers and at the level of the group of persons connected with the debtors and collateral providers, depending on the placement amount and risk; and
- 3) the establishment of the competences of the supervisory board, management board and boards appointed by them, as well as of the powers to grant placements assigned to individual management levels, depending on the placement amount and risk.

(3) A credit institution shall ensure that a placement may be granted only subject to the approval of the authorised persons responsible for credit risk assessment. A credit institution shall establish decision making rules for the granting of placements which are to apply when the authorised persons contracting transactions and the authorised persons responsible for credit risk assessment cannot reach an agreement on a decision to grant placements.

(4) Exceptionally, where a credit institution grants placements which are materially insignificant with regard to credit risk, the granting procedure may be simplified by making decisions on the granting of placements within the front office function. In this case, the credit institution shall prescribe the identification criteria for materially insignificant placements, the rules governing the granting of these placements, including their classification based on similar characteristics, and the rules governing their monitoring on an aggregate basis which must be performed within the risk control function.

(5) Where a credit institution grants a placement under conditions differing from the general operating conditions, it shall determine the rules of procedure regarding the granting and monitoring of such placements and the implementation of adequate measures to reduce credit risk associated with these placements.

(6) A credit institution may not determine value adjustments (impairment) of on-balance sheet items or provisions for risk-bearing off-balance sheet items within the front office function.

Credit process

Article 18

The credit process shall at a minimum include the following:

- 1) a placement granting process;
- 2) a placement monitoring process;
- 3) a credit portfolio analysis;
- 4) the treatment of non-performing placements;
- 5) a credit risk early warning system, and
- 6) a placement classification process according to the degrees of risk.

Placement granting process

Article 19

(1) Before granting a placement, a credit institution shall assess the creditworthiness of the debtor, taking into account its own criteria prescribed in an internal bylaw and the minimum requirements referred to in the Decision on the classification of placements and off-balance sheet liabilities of credit institutions.

(2) When analysing the recoverability of a placement, a credit institution shall primarily take into account the creditworthiness of the debtor and treat, as a rule, the collateral received for the placement as the secondary collection source.

(3) Before granting a placement, a credit institution shall assess the value and validity of the collateral. Where the collateral value to a great extent depends on the creditworthiness of a third-party collateral provider, the credit institution shall assess the creditworthiness of such collateral provider.

Placement monitoring process

Article 20

(1) The placement monitoring process shall include an assessment of the creditworthiness of the debtor and of the group of persons connected with the debtor as well as an assessment of the collateral quality during the legal relationship constituting the exposure.

(2) A credit institution shall ensure the monitoring of compliance with contractual terms and conditions and, when the placements have been granted for designated purposes, the monitoring of whether the funds placed have been used exclusively for these purposes.

(3) A credit institution shall, in accordance with the provisions of Chapter 4 of the Decision on the classification of placements and off-balance sheet liabilities of credit institutions, regularly examine the collateral value and validity.

(4) The placement monitoring must be established in such a manner as to enable a timely implementation of adequate measures to mitigate credit risk if the creditworthiness of the debtor or collateral provider deteriorates.

(5) A credit institution shall adopt a procedure prescribing the collection and monitoring of all relevant information which might point to an increase in the risk of the placements and collateral, and a procedure of reporting this information to all authorised persons included in the credit risk management process, so that the risk of placements could be reassessed.

Credit portfolio analysis

Article 21

(1) A credit institution shall establish a system for an ongoing analysis of the structure and quality of the overall credit portfolio which shall include an analysis of concentration risk inherent in the portfolio and an assessment of future trends in the credit portfolio structure and quality. A credit institution shall take into account these analyses when defining the strategies and policies for the credit risk assumption and management.

(2) The credit portfolio monitoring and analysis must be established in such a manner as to provide for timely implementation of adequate measures to mitigate credit risk.

Treatment of non-performing placements

Article 22

(1) A credit institution shall define the criteria for the increase in the degree of risk according to which a placement is to be considered as non-performing and classified within the scope of the non-performing placement monitoring function.

(2) A credit institution shall define the criteria for the treatment of non-performing placements, which must be specially monitored due to their increased degree of risk. A credit institution shall establish an ongoing and efficient function responsible for the monitoring and treatment of non-performing placements, independent from the activities performed by the front office function.

(3) A credit institution shall assess whether the restructuring of placements granted to an individual debtor is economically justified. If such restructuring of placements is economically justified, the credit institution shall establish an adequate restructuring plan and monitor its implementation and effects.

(4) A credit institution shall perform legal acts as necessary for the activation and liquidation of the collateral for the non-performing placements, in accordance with the Decision on the classification of placements and off-balance sheet liabilities of credit institutions.

Credit risk early warning system

Article 23

(1) A credit institution shall establish a credit risk early warning system providing for a timely identification of debtors carrying an increased risk.

(2) A credit institution shall define adequate qualitative and quantitative early warning indicators of credit risk.

Placement classification process

Article 24

(1) In order to assess credit risk, a credit institution shall establish an adequate process of classifying placements into categories according to their recoverability, taking into account the minimum requirements referred to in the Decision on the classification of placements and off-balance sheet liabilities of credit institutions. The placement classification process shall be adequate if it is based on quantitative and, where possible, qualitative criteria, which take into account specific placement characteristics. These criteria are to provide for a clearly defined classification of risks into appropriate categories.

(2) A credit institution shall ensure that the appropriateness of the process of classifying placements into categories according to their recoverability is monitored and revised on an ongoing basis.

(3) A credit institution shall carry out value adjustments of on-balance sheet items and form provisions for risk-bearing off-balance sheet items in accordance with International Accounting Standards and International Financial Reporting Standards, taking into account the minimum requirements referred to in the Decision on the classification of placements and off-balance sheet liabilities of credit institutions.

Credit risk control

Article 25

(1) A credit institution shall prescribe in its internal bylaws the scope and method of credit risk control as well as the scope and frequency of internal reporting on credit risk to the senior management, boards appointed by the management board and/supervisory board, and directly to the management board.

(2) In order to implement credit risk mitigation measures, a credit institution shall ensure a timely and efficient analysis and monitoring of credit risk and timely reporting to the relevant persons on the exemptions from the policies, procedures and credit limits.

Stress testing
Article 26

When assessing the overall credit portfolio risk, a credit institution shall perform stress testing in accordance with Article 10 of the Decision on the internal capital adequacy assessment process for credit institutions.

Treatment of concentration risk
Article 27

(1) A credit institution shall adopt adequate rules to identify and measure concentration risk, which shall at a minimum include the following:

- 1) the identification and measurement of concentrations associated with individual persons and groups of connected persons;
- 2) the identification and measurement of concentrations associated with a group of exposures connected by common risk factors, such as the same economic sector, geographic region or activities, or the application of risk mitigation techniques; and
- 3) the identification and measurement of concentrations associated with the overall credit portfolio.

(2) A credit institution shall adopt adequate methodologies to monitor and mitigate concentration risk. These methodologies shall at a minimum include the following:

- 1) an active management of credit portfolio diversification;
- 2) a determination of concentration limits; and
- 3) credit risk transfer or mitigation, including the direct sale of placements, transfer of placements or credit risk through securitisation and use of credit derivatives and collateral.

Treatment of securitisation risk
Article 28

A credit institution which is the originator of revolving securitisation transactions with early amortisation provisions shall adopt liquidity plans covering both scheduled and early amortisations.

Treatment of country risk
Article 29

(1) A credit institution which grants placements to debtors having their registered office or domicile outside the Republic of Croatia shall have in place appropriate policies and procedures to identify, measure, monitor and control the risk of the countries in which the debtors have their registered office or domicile.

(2) The country risk monitoring shall include an assessment of the probability of default by the counterparty having the registered office or domicile outside the Republic of Croatia arising from country-specific economic and political factors, and an assessment of the

feasibility of contracts which have provided a basis for individual placements and of the possibility of liquidating the collateral under the laws of the country in question in a specific period.

MARKET RISKS MANAGEMENT RULES

Organisational requirements

Article 30

(1) A credit institution shall ensure that the front office function is clearly separated, operationally and organisationally, from the operation support function and the risk control function, up to the level of the management board.

(2) The operational separation of the front office function from the treasury back office function shall include the establishment of adequate safety and operating procedures and the rights of access to information technologies as well as the physical separation of these functions.

Transaction contracting

Article 31

(1) A credit institution shall ensure that the contracting parties reach an agreement on all the essential elements of a transaction prior to its conclusion.

(2) A credit institution shall ensure that transactions are arranged in line with market conditions. Exceptionally, a credit institution may contract transactions which are not in line with market conditions, provided that the following conditions are met:

1) a transaction has been contracted based on a clearly defined and justified client request, with the agreed on deviation from market conditions clearly specified in the documentation accompanying the transaction; and

2) each transaction which has not been contracted in line with market conditions must be accompanied by a clearly specified description of the deviation from market conditions and the reasons for it.

(3) A credit institution shall prescribe in its internal bylaws the procedure of reporting to the management board and senior management on all significant transactions which have not been contracted in line with market conditions.

(4) A credit institution shall ensure that trading is conducted only in its business premises.

(5) A credit institution shall define in an internal bylaw the employees authorised to contract transactions, the type and value of the transactions such employees may contract, the transaction contracting methods and the system of reporting on contractual transactions.

(6) Where transactions are contracted by telephone, a credit institution shall ensure that all telephone conversations of the employees authorised to contract transaction are recorded.

(7) A credit institution shall ensure that each contractual transaction is accompanied by written documentation containing all essential elements of the contracted transaction and other relevant information. The certificate for the contracted transaction and the accompanying documentation are to be forwarded to the treasury back office function in the shortest possible period. The transactions concluded after the working hours of the treasury back office function must be specifically marked and included in the daily trading position.

(8) A credit institution shall ensure that the employees authorised to contract transactions enter transaction data into the information system using their own identification marks. The time of data entry and employee identification mark must be automatically generated.

Transaction recording and control

Article 32

(1) A credit institution shall ensure that each contractual transaction is adequately recorded and immediately included into internal reports on contractual transactions.

(2) A credit institution shall verify whether the certificates for contractual transactions received from the counterparty are timely and complete. The receipt of certificates for contractual transactions from the counterparty is to fall within the scope of the treasury back office function. A credit institution shall immediately notify the counterparty on untimely received or incomplete transaction certificates.

(3) A credit institution shall establish the regular control of the transaction contracting process, including the control of:

- 1) the completeness of documentation on a contractual transaction and its timely forwarding to the treasury back office function;
- 2) the consistency of contractual transaction data with contractual transaction certificates, electronic trading systems certificates and other sources;
- 3) whether contractual transaction are in line with market conditions;
- 4) the deviations from internal trading rules; and
- 5) the consistency of the front office function transaction records with those of other independent organisational units.

Market risk exposure analysis

Article 33

(1) When analysing its market risk exposure, a credit institution shall at a minimum take into account the following:

- 1) all credit institution activities sensitive to changes in market factors, also taking into account trading book and non trading book positions;
- 2) the development and liquidity of relevant financial markets and market price volatility of financial instruments;
- 3) actual and projected mismatches and open positions arising from credit institution activities;
- 4) risk concentration in the trading book;
- 5) correlations between market prices of various financial instruments;
- 6) correlations with other risks to which the credit institution is exposed, e.g. credit risk and liquidity risk;
- 7) complex financial instruments;
- 8) embedded options; and
- 9) profit and capital simulations under various scenarios, including the maximum loss quantification under extreme market conditions.

(2) When analysing its interest rate risk exposure, a credit institution shall, in addition to the elements referred to in paragraph (1) of this Article, take into account various aspects of interest rate risk, including, at a minimum, the risk arising from:

- 1) changes in the yield curve and the correlations between various yield curves which are relevant for credit institution activities; and
- 2) the possible execution of embedded interest rate options.

(3) When analysing its foreign exchange risk exposure, a credit institution shall, in addition to the elements referred to in paragraph (1) of this Article, at a minimum take into account the following:

- 1) the impact of adverse exchange rate fluctuations on the value of the open foreign exchange position; and
- 2) changes in carrying values of the credit institution's foreign currency positions arising from changes in the exchange rates.

(4) A credit institution shall regularly assess the profit and capital simulations in relation to its actual performance. The simulations shall relate to the following:

- 1) interest and interest-sensitive income and expense and the economic value of on-balance and off-balance sheet items under various interest rate scenarios;
- 2) foreign exchange and foreign exchange-sensitive income and expense and the economic value of on-balance and off-balance sheet items under various exchange rate scenarios; and
- 3) other market factors and market-sensitive income and expense as well as the economic value of on-balance and off-balance sheet items under various market scenarios.

Trading book Article 34

As regards trading book positions, a credit institution shall at a minimum establish the following:

- 1) that trading book positions are evaluated on a daily basis;
- 2) that each excess of the limits is immediately identified and that the reports on the excesses of established limits are prepared on a daily basis;
- 3) that price volatility of trading book positions is monitored on a regular basis;
- 4) that liquidity of the financial asset portfolio and of relevant markets is monitored on a regular basis; and
- 5) that open positions, which are divided into spot positions, forward positions and option positions, are measured and monitored on an ongoing basis, taking into account individual risks arising from these positions and their value, maturity and complexity.

Market risk monitoring

Article 35

(1) The monitoring of risks arising from trading activities shall comprise daily monitoring of data on:

- 1) trading positions;
- 2) utilisation and excesses of the limits;
- 3) trading results.

(2) A credit institution shall establish a system of limits for restricting exposures to measurable market risks.

(3) When determining limits for restricting losses, a credit institution shall take into account the capital and income levels. The structure of the limits must be based on an assessment of the level of risk and the maximum permitted losses. A credit institution shall ensure that the limits are adjusted on a regular basis in accordance with stress testing results. The limits must comprise each contractual transaction.

(4) A credit institution shall establish an authorisation system for the transactions exceeding the established limits and a system of explaining the reasons for exceeding the established limits.

(5) A credit institution shall establish a system of reporting to the senior management and, if it deems necessary, to the management board, on all excesses of the established limits.

(6) The system of monitoring the utilisation and excesses of the limits must comprise the control of contractual transactions' alignment with the established limits; the control of the authorisation system for transactions exceeding the established limits and the control of the system of explaining the reasons for exceeding the established limits.

(7) The reports providing a basis for a credit institution's monitoring of data on contractual transactions and limits are also to include a breakdown of open positions by transaction type, risk type, organisational unit or portfolio, as well as breakdown of the established limits and their utilisation levels. A credit institution shall monitor the excesses of the limits on a daily basis, during and at the end of the working hours. The reports

providing a basis for a credit institution's monitoring of data on trading results are to include current and cumulative results on a monthly and annual basis broken down by areas of trading.

OPERATIONAL RISKS MANAGEMENT RULES

Management system

Article 36

(1) A credit institution shall ensure that the operational risk management system takes into account the fact that operational risk is inherent in all credit institution activities, processes, products and systems.

(2) The management board of a credit institution shall ensure that all relevant credit institution management levels and segments are included in the decision making process on strategic and other significant determinants related to operational risk management.

Operational risk definition, events and sources

Article 37

(1) For the purposes of operational risk management and in accordance with Article 122, paragraph (2) of the Credit Institutions Act, a credit institution shall define operational risk in such a manner as to articulate what it considers as operational risk.

(2) For the purposes of operational risk management, a credit institution shall define the principles for the establishment and classification of operational risk events and operational risk sources.

(3) A credit institution shall define and prescribe what it considers as significant operational risk and operational risk loss.

Operational risk management

Article 38

(1) The operational risk management of a credit institution shall in particular cover business changes, including new products, activities, processes and systems, operational risk occurring in project management and outsourcing of business activities as well as significant risks inherent in the existing products, activities, processes and systems.

(2) When identifying, measuring or assessing operational risk, a credit institution shall take into account all relevant internal and external factors, and cover the operational risk or events which have resulted in losses and the operational risk to which it is exposed, but which has not resulted in losses.

(3) A credit institution shall measure or assess exposures to the identified operational risk, taking into account the probability and frequency of risk occurrence and the potential impact thereof on the credit institution.

(4) In order to appropriately manage operational risk, and in accordance with the Credit Institutions Act, a credit institution shall by the regulations adopted under that act and by other regulations in particular ensure the following:

- 1) an appropriate management of the information system and information system risk;
- 2) an appropriate management of outsourcing-related risks;
- 3) an appropriate management of compliance risk and legal risk,
- 4) an appropriate business continuity management; and
- 5) the establishment of an appropriate system for the prevention of money laundering and terrorist financing.

Operational risk determination and analysis

Article 39

A credit institution shall immediately carry out a detailed analysis of significant operational risk losses or operational risk which it has identified and implement adequate measures to reduce and/or limit the consequences of the events or contain risk, and it shall report thereon to the management board and other relevant bodies and/or persons.

Monitoring and reporting on operational risk exposures

Article 40

A credit institution shall, as applicable, at a minimum include the following in the regular monitoring of and reporting on operational risk exposures:

- 1) the type of loss or risk;
- 2) the causes and sources of the events or risks;
- 3) the scope and significance of the events or risks; and
- 4) the measures which are to be or have been implemented to reduce and limit the consequences of the events or contain risk.

Business continuity management

Article 41

(1) A credit institution shall establish a business continuity management process to ensure business continuity and limit losses in the event of a serious disruption or discontinuation of operation.

(2) Within business continuity management, a credit institution shall identify and define key/vital business activities, processes, systems (including those that are outsourced) and the level of service which the credit institution must maintain or timely restore and, in this regard:

- 1) assess the impact of their disruption or discontinuation on the credit institution operation and identify related risks; and
- 2) define the priorities, time frame and strategy to maintain/restore the identified key business activities, processes, systems and service level.

(3) A credit institution shall ensure that business continuity management is an integral part of operational risk management and overall risk management, which requires the integration of operational risk management methods into the business continuity management process.

Plans **Article 42**

(1) A credit institution shall adopt a business continuity plan and a contingency plan to ensure business continuity, i.e., to timely restore key business activities, processes, systems and service level and to limit the losses in the event of a serious disruption or discontinuation of operation.

(2) A credit institution shall regularly revise the business continuity plan and the contingency plan in line with business changes, including changes in the products, activities, processes and systems, changes in the environment, and in line with its business strategy and objectives.

(3) A credit institution shall continue, as appropriate, to regularly test the business continuity plan and the contingency plan after the revision and it shall document test results.

Reporting on business continuity planning **Article 43**

(1) A credit institution shall, within the system of reporting on operational risk exposure, report to the management board and to the relevant levels of credit institution management on all relevant facts related to business continuity planning, and especially on testing the business continuity plan and the contingency plan, and on all significant changes in business continuity management.

(2) A credit institution shall, in the event of circumstances requiring the activation of the business continuity plan and the contingency plan, immediately notify the Croatian National Bank on all the relevant facts and circumstances pertaining to that matter.

IV TRANSITIONAL AND FINAL PROVISIONS

Article 44

This Decision shall be published in the Official Gazette and shall enter into force on 1 July 2009.

No.: 5-020/01-09/ŽR
Zagreb, 2 January 2009

Croatian National Bank
Council Chairman
Governor
Željko Rohatinski, m.p.