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DECREE
of the National Bank of Slovakia
of 13 March 2007

on banks' own funds of financing and banks' capital requirements and on securities dealers' own funds of financing and securities dealers' capital requirements

In accordance with Article 30(8), Article 31(5), Article 32(11), Article 33(25), Article 33a(8), Article 33b(9), Article 33c(5) and (6), Article 33d(10), Article 33e(12), Article 39(15) and Article 48(8) of Act no. 483/2001 Coll. on banks and including consequential amendments to certain laws, as amended (hereinafter "the Banking Act"), and in accordance with Article 74(9), Article 74a(10) and Article 139(9) of Act no. 566/2001 Coll. on securities and investment services and including consequential amendments to certain laws, (the Securities Act), as amended (hereinafter "the Securities Act"), the National Bank of Slovakia stipulates as follows:

PART ONE
GENERAL PROVISIONS

Article 1

This Decree lays down:
a) what constitutes a bank's own funds of financing and a securities dealer's own funds of financing (hereinafter "own funds") on a consolidated basis and how to calculate the own funds of a bank or securities dealer which is not authorized to perform activities under the Banking Act, and how to calculate own funds on a consolidated basis;
b) the credit risk coefficient;
c) what is meant by default, probability of default, loss given default, expected loss, conversion factor, small and medium-sized entity, as well as other definitions for the purpose of calculating credit risk;
d) details of the calculation of risk-weighted exposures by the standardized approach for credit risk and of the calculation of the corresponding capital requirements and capital requirements on a consolidated basis;
e) details of the calculation of a bank's risk-weighted exposures by the internal ratings based approach and of the calculation of the corresponding capital requirements and capital requirements on a consolidated basis,
f) details of credit risk mitigation methods;
g) details of the calculation of risk-weighted exposure amounts for securitization positions;
h) a bank's risk calculation methods using a simplified approach and the calculation of the corresponding capital requirements and capital requirements on a consolidated basis;
i) the calculation of a bank's market risk using an internal model, and the calculation of the corresponding capital requirements and capital requirements on a consolidated basis;
j) requirements for an internal market risk model;
k) details of the calculation of a bank's operational risk and the calculation of the corresponding capital requirements and capital requirements on a consolidated basis;
l) requirements for maintaining and managing a bank's trading book, rules for the valuation of trading-book positions and details of how to maintain the trading book;
m) details of how to calculate a bank's large exposures, how to calculate a securities dealer's large exposures, and how to calculate large exposures on a consolidated basis.

Article 2

For the purposes of this Decree:

a) 'subordinated debt' means a bank's liabilities which arise where funds are received under the condition that, in the event of the bank's bankruptcy or dissolution with liquidation, the respective creditor will be paid off only after the bank's other creditors have been paid;

b) 'subordinated claim' means a creditor's right to a financial settlement based upon a contract stipulating that in the event of the borrower's bankruptcy or dissolution with liquidation, this claim will be settled only after the claims of other creditors have been settled;

c) 'underlying instrument' means the asset to which a derivative relates or on which it is based;

d) 'debt security' means a negotiable security -

1. which represents an issuer's liability to repay funds provided, and especially a bond;
2. to which attaches a liability for the repayment of deposited funds, and especially a certificate of deposit;
3. to which attaches the liability of an issuer or a person appointed by an issuer, and especially a bill of exchange;

e) 'precious metal' means gold, silver, platinum or palladium;

f) 'option' means the right of a counterparty to receive or deliver the object of an option and the obligation of a second counterparty, at the request of the first counterparty, to deliver or receive the object of the option for a price agreed when the transaction was concluded, while the period between the concluding of the transaction and its settlement shall be longer than that of a spot transaction;

g) 'fixed term transaction' means a transaction whose performance is agreed in such a way that the period between when the transaction is concluded and settled is longer than that of a spot transaction, and which is binding upon both parties. It includes especially, swaps, futures and forwards;

h) 'a future' means a fixed term transaction concluded on a regulated market or another organized public market, whereby a counterparty undertakes to deliver or receive at a fixed place and time, for a pre-agreed price selected from that market's standardized offer, a standardized quantity of a financial instrument or commodity. The counterparty shall at the same time undertake to pay the organizer of this market an initial margin and, if necessary, and to make variation margin payments to that organizer;

i) 'a forward' means a fixed term transaction in which the counterparty undertakes to deliver or receive, for a price agreed when the transaction is concluded, a fixed quantity of a financial instrument or commodity, or to pay a fixed amount of money equal to the difference between the price agreed for the underlying instrument and the market price of the underlying instrument;

j) 'a swap' means a fixed term transaction in which the counterparty undertakes to exchange, on a fixed date and for a price agreed when the transaction is concluded, a fixed quantity of a financial instrument or commodity for another financial instrument or another commodity;

k) 'spot transaction' means a transaction in which the object of the transaction is paid for and delivered within two working days or within another period customary in the respective markets;

l) 'warrant' means a security which gives its owner the right to subscribe for or purchase an underlying instrument for an agreed price, at any time before its maturity or on its maturity date. Such a purchase may be settled by the delivery of the respective underlying instrument or in cash;

m) 'delta option' means the size of the change in an option price resulting from a unit change in the price of the instrument underlying the option;

n) 'delta equivalent' means the product of the fair value of the instrument underlying the respective option as at its valuation date and the absolute value of this option's delta;

o) 'regulated market' means a stock exchange, foreign stock exchange or another foreign regulated market;[1)]

p) 'recognized foreign securities dealer' means a foreign securities dealer which does not have its registered office in a Member State of the European Union or in a country belonging to the

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[1)] Article 2(14) of Act no. 429/2002 Coll. on the stock exchange.

European Economic Area, and which, in its activities performed abroad, is obliged to comply with rules at least to the extent laid down in Articles 71 and 74 of the Securities Act;
q) 'collective investment undertaking' means a unit trust or a legal person whose scope of business involves investing in assets on the principle of risk diversification. A unit trust means the common assets of unit-holders raised by an asset management company or by the unit-holders themselves, through the issuance of unit certificates or the crediting of units, the purpose being to increase its value by investing in assets;
r) 'independent valuer' means an expert as defined by a separate law[2)] or a person who, under the law of another country, is subject to requirements comparable to those to which an expert is subject and who is independent of the lending decision process;
s) 'multilateral development bank' means a bank as defined in Article 21(3);
t) 'securities or commodities lending or borrowing' means a creditor's obligation to transfer the equity right in a fungible security or the ownership right in a commodity of determinable type, and simultaneously the borrower's obligation to transfer to the creditor, after an agreed period, the same number of fungible securities or the same type of commodities in the borrowed volume, while the borrower's obligation under this transaction shall be appropriately secured by a lien or by the pledge of a right or assignment of a receivable. Fungible securities mean securities of the same type and form which have the same issuer and to which attach the same rights;
u) 'residential real estate' means real estate which is, under a separate law[3)] or the law of another country, designated for housing. Residential real estate may be deemed to include a built-up area and courtyard, or similar land under the law of another country, in which a person has the same ownership rights, or similar rights under the law of another country, as those in the real estate mentioned in the previous sentence.

PART TWO
OWN FUNDS

Article 3

(1) A bank's own funds shall comprise:
a) the sum of the bank's original own funds and additional own funds less the value of deductible items under Article 6;
b) the bank's supplementary own funds.

(2) A bank's own funds under Article 1(a) shall be assigned for the coverage of:
a) credit risk and dilution risk arising from activities recorded in the banking book, and operational risk arising from all the bank's trading activities;
b) risks arising from positions recorded in the trading book, and foreign exchange risk and commodity risk arising from activities recorded in the banking book as well as trading book.

(3) From a bank's own funds under paragraph 1(a), the amount assigned for the coverage of risks mentioned in paragraph 2(b) shall not be more than that part of these own funds which exceeds the capital requirement for the coverage of risks under paragraph 2(a).

(4) A bank's supplementary own funds shall be assigned for the coverage of risks under paragraph 2(b).

[2)] Act no. 382/2004 Coll. on experts, interpreters and translators, including consequential amendments to certain laws, as amended by Act no. 93/2006 Coll.
[3)] Article 43b(3) and (4) of Act no. 50/1976 Coll. on land-use planning and building regulation (the Building Act) as amended.

(5) A bank's own funds shall, as at a date other than that as at which its financial statements are prepared, be calculated so that their components:
a) the valuation of which is, in accordance with a separate law,[4)] adjusted by risks and losses, are included in the calculation of own funds the amount of which is adjusted by realized losses established as at the reporting date;
b) which are depreciated under a separate law[4)] are included in the calculation of own funds at a valuation reduced by the sum of depreciation for previous accounting periods and a proportional part of the annual depreciation pertaining to the completed calendar months of the current accounting period.

Article 4

(1) A bank's original own funds shall represent the difference between the items generating their value and the items reducing their value.

(2) Items generating the value of a bank's original own funds shall comprise:
a) paid-up share capital;
b) share premium;
c) reserve fund[5)] and other funds created from the distribution of after-tax profits which are available for unrestricted and immediate use to cover risks or losses as soon as they appear;
d) retained earnings from previous years, apart from earnings arising from future income on securitized assets and allowing for a reduction in credit risk in securitization positions.

(3) Items reducing the value of a bank's original own funds shall comprise:
a) accumulated losses from previous years;
b) the financial result pending approval, if it is a loss;
c) the loss for the current accounting period, including a loss in the current accounting period which arises from a value adjustment or the creation of provisions for the purposes of evaluating the bank's trading book positions in accordance with Article 154;
d) own shares at book value held by the bank;
e) 50% of the expected loss on the bank's assets the valuation of which has not been adjusted, and 50% of the expected loss on the bank's off-balance sheet items for which provisions have not been created;
f) goodwill,
g) the net book value of software;
h) the gross book value of contributions to the share capital of the bank's shareholder which owns 5% or more of the bank's share capital, up to the issue price of the shares that this shareholder owns in the bank, less the proportional part of a provision for such a contribution covering risks, losses and impairment;
i) negative valuation differences in equity instruments arising under the portfolio of financial instruments available for sale, measured at fair value.

Article 5

(1) A bank's additional own funds shall comprise:
a) subordinated debts which mature in more than one year and meet the following conditions:
1. the contract under which the bank accepts the subordinated debt is governed by the provisions of a separate law[6)] concerning a subordination clause;
2. the contract on the subordinated debt is concluded for a fixed period;

[4)] Act no. 431/2002 Coll. on accountancy, as amended.
[5)] Article 67 of the Commercial Code.
[6)] Article 408a of the Commercial Code.

3. the subordinated debt is not in the form of a security;
4. under the contract on the subordinated debt, the creditor has provided funds to the bank -
4a. for a period of at least five years;
4b. in the whole of the agreed amount;
4c. with repayment fixed to commence not sooner than five years from when the funds were provided to the bank;
4d. with no discretion to ask for prepayment;

b) the amount by which provisions exceed the expected loss on the bank's assets or the amount representing a negative difference under the calculation mentioned in Article 48, assuming that the bank uses the internal ratings based approach;
c) positive valuation differences in equity instruments arising under the portfolio of financial instruments available for sale, measured at fair value after the deduction of income tax.

(2) Subordinated debts under paragraph (1) shall comprise the bank's additional own funds in the amount of:
a) 100% of their nominal value if their residual maturity period is longer than five years;
b) 80% of their nominal value if their residual maturity period is longer than four years, but not longer than five years;
c) 60% of their nominal value if their residual maturity period is longer than three years, but not longer than four years;
d) 40% of their nominal value if their residual maturity period is longer than two years, but not longer than three years;
e) 20% of their nominal value if their residual maturity period is longer than one year, but not longer than two years.

(3) The progressive reduction in the value of subordinated debts under paragraph (2) shall not be used if it is agreed in writing that the borrower is not required to pay at fixed times either the principal of a subordinated debt or the interest thereon, where such repayments would mean that the amount of the borrower's own funds fails to meet the capital requirements laid down in the Banking Act.

(4) A bank's subordinated debts under paragraph (1) shall not account for more than one half of the amount of its original own funds as defined in Article 4.

(5) The amount of additional own funds that a bank includes in its original own funds may not be more than the amount of its original own funds as defined in Article 4.

(6) A bank's additional own funds shall be reduced by 50% of the expected loss on the bank's assets the valuation of which has not been adjusted, and 50% of the expected loss on the bank's off-balance sheet items for which provisions have not been created.

Article 6

(1) The sum of a bank's original own funds under Article 4 and additional own funds under Article 5 shall be reduced by:
a) the net book value of -
1. the bank's share in the capital of another bank or financial institution which amounts to more than 10% of the capital of this bank or financial institution; and
2. the bank's subordinated claims against this other bank or financial institution which constitute part of the own funds of this bank or financial institution;

b) the sum of the net book values of -

1. the bank's shares in the capital of other banks or financial institutions which amount to not more than 10% of the capital of these banks or financial institutions;
2. the bank's subordinated claims against other banks or financial institutions not mentioned in subparagraph (a) which constitute part of the own funds of these other banks or financial institutions;
3. the bank's participations, under Article 44(13)(d) of the Banking Act, in insurance companies,[7)] reinsurance companies,[8)] and financial holding companies as defined by a separate law on the insurance industry;[9)] and
4. the bank's subordinated claims against insurance companies, reinsurance companies, and financial holding companies as defined by a separate law on the insurance industry,[9)] which constitute part of the own funds of these companies, provided that the bank holds a participation in them;

c) the expected loss under Article 47(4)(a) and (b) and Article 48 and positive differences arising from the calculation referred to in Article 48, where the bank uses the internal ratings based approach;
d) the amount of securitization positions which have received a risk weight of 1 250 %.

(2) The procedure mentioned in paragraph (1)(b) points 1 and 2 shall be used only if the sum calculated under paragraph (1)(b) points 1 and 2 is more than 10% of the sum of the bank's original own funds and additional own funds.

(3) Fifty per cent of the amount of the deductible items mentioned in paragraph (1) shall reduce the bank's original own funds under Article 4, and fifty per cent of the amount of the deductible items mentioned in paragraph (1) shall reduce the bank's additional own funds under Article 5. If 50% of the amount of the deductible items under paragraph (1) is more than the amount of the additional own funds, the surplus shall be deducted from the original own funds.

(4) The procedure mentioned in paragraph (1)(d) shall not be used if the respective values of securitization positions are included in the calculation of risk-weighted exposures for the purpose of calculating the bank's capital requirement.

Article 7

(1) A bank's supplementary own funds shall comprise:
a) subordinate debts referred to in Article 5(1) which, under Article 5(4) do not constitute part of the bank's additional own funds;
b) subordinated debts not mentioned in subparagraph (a), provided that:

1. the contract under which the bank accepts the subordinated debt is governed by the provisions of a separate law[6)] concerning a subordination clause;
2. the contract on the subordinated debt is concluded for a fixed period;
3. the subordinated debt is not in the form of a security;
4. under the contract on the subordinated debt, the creditor has provided funds to the bank -
4a. for a period of at least three years;
4b. in the whole of the agreed amount;
4c. with repayment of the subordinated debt fixed to commence not sooner than three years from when the funds were provided to the bank;
4d. with no discretion to ask for prepayment;

[7)] Article 4(1) of Act no. 95/2002 Coll. on the insurance industry, including consequential amendments to certain laws, as amended.
[8)] Article 11(1) of Act no. 95/2002 Coll.
[9)] Article 43(5)(i) of Act no. 95/2002 Coll. as amended.
[6)] Article 408a of the Commercial Code.

5. it is contractually agreed that the borrower is not obliged to pay at fixed times either the principal of a subordinated debt or the interest thereon, if such repayments would mean that the amount of the borrower's own funds fails to meet the capital requirements laid down in the Banking Act.

(2) The amount of supplementary own funds that a bank includes in its own funds may not be more than one and a half times that amount of the bank's own funds which exceeds the capital requirement for risk coverage under Article 3(2)(a).

Article 8

(1) The own funds of a consolidated group under Article 44(2) of the Banking Act (hereinafter "consolidated own funds") shall represent the own funds under Articles 3 to 7 of the members of a consolidated group -
a) consolidated by the full consolidation method[10)] in respect of the relationship between a controlling entity and controlled entities in accordance with Article 7(19) of the Banking Act;
b) consolidated by the proportional consolidation method[10)] in respect of a relationship in which an entity has a participation in other entities in accordance with Article 44(13)(d) of the Banking Act, where these other entities are not controlled by anyone.

(2) Apart from the own funds under paragraph (1), consolidated own funds shall represent:
a) the shares of minority shareholders if the full consolidation method used includes the shares of minority shareholders in own funds items mentioned in Article 4(2) and (3)(a) to (c);
b) a valuation difference arising from the revaluation of participations included in the consolidation by the equity method;
c) amounts resulting from exchange rate differences in the consolidation of data.

(3) Consolidated funds under paragraph (2), if the remainder constitute a credit, together with the consolidated items mentioned in Article 4(2) shall represent original consolidated own funds.

(4) Consolidated funds under paragraph (2), if the remainder constitute a debit, together with the consolidated items mentioned in Article 4(3) shall be deducted from the original consolidated own funds.

(5) The value of goodwill shall be deducted from consolidated own funds.

(6) For the purpose of calculating consolidated own funds, the sum of a bank's original own funds and additional own funds shall not be reduced under Article 6 if the bank uses the method of full consolidation or proportional consolidation.

PART THREE
CAPITAL REQUIREMENTS FOR CREDIT RISK COVERAGE

CHAPTER ONE
INTRODUCTORY PROVISIONS ON CREDIT RISK

Article 9

[10)] Article 22(1) of Act no. 431/2002 Coll. as amended.

(1) For the calculation of the amount of own funds required to cover credit risk, the credit risk coefficient shall be set at 0.08.

(2) For the purposes of this Part:
a) 'loss' means a loss after taking into account the time value of money and expenses related to the recovery of claims;
b) 'credit risk mitigation' means a technique used by a bank to reduce the credit risk associated with an exposure or exposures which the bank continues to hold;
c) 'counterparty credit risk' means the risk that a counterparty will fail to meets its obligation;
d) 'central counterparty' means an entity that is allowed by law to operate on a financial market as the buyer to every seller and the seller to every buyer;
e) 'long settlement transactions' mean transactions in cash, financial instruments or commodities where the settlement or delivery takes place later than is usual on the respective market, but not sooner than five business days from when the transaction was entered into;
f) 'margin lending transactions' mean transactions in which a bank extends credit in connection with the purchase, sale or carrying of securities. Margin lending transactions do not include credits secured by securities collateral;
g) 'netting set' means a group of transactions that are subject to a contract on netting and on novation (hereinafter a "contractual netting agreement") and which meet the conditions laid down in this Decree. Each transaction which is not subject to a contractual netting agreement and is recognized under this Decree shall be interpreted as its own netting set;
h) 'risk position' means a risk number that is assigned to a transaction under the standardized method set out in Article 13 following a predetermined algorithm;
i) 'hedging set' means a group of risk position from transactions within a single netting set for which only their net value is relevant for determining the exposure value under the standardized method set out in Article 13;
j) 'margin agreement' means a contractual agreement under which one counterparty shall supply collateral to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a predetermined level;
k) 'margin threshold' means the largest amount of an exposure that remains outstanding until one party has the right to call for collateral;
l) 'margin period of risk' means the time period from the last exchange of collateral covering a netting set with a defaulting counterparty until positions vis-à-vis that counterparty are closed and the resulting market risk is re-hedged;
m) 'effective maturity under the internal model method for a netting set with maturity greater than one year' means the ratio of the sum of expected exposure over the life of the transaction in the netting set discounted at the risk-free rate of return divided by the sum of expected exposure over one year in a netting set discounted at the risk-free rate. This effective maturity may be adjusted to reflect rollover risk by replacing expected exposure with effective expected exposure for forecasting horizons under one year;
n) 'cross-product netting' means the inclusion of positions under different transaction categories within the same netting set pursuant to the cross-product netting rules set out in Article 15;
o) 'current market value' means the net market value of the portfolio of positions within the netting set with the counterparty, and both positive and negative market values are used in its computation;
p) 'distribution of market values' means the forecast of the probability distribution of net market values of transactions within a netting set for some future date, given the realized market value of those transactions up to the present time;
r) 'distribution of exposures' means the forecast of probability distribution of market values where negative net market values are set equal to zero;
s) 'risk-neutral distribution' means a distribution of market values or exposures at a future time period where the distribution is calculated using market implied values;

t) 'actual-distribution' means a distribution of market values or exposures at a future time period where the distribution is calculated using historic or realized values, such as volatilities calculated using past price or rate changes;
u) 'current exposure' means the larger of zero or the market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in bankruptcy;
v) 'peak exposure' means the 99th percentile of the distribution of exposures at any particular future date before the maturity date of the longest transaction in the netting set;
x) 'expected exposure (EE)' means the average of the distribution of exposures at any particular future date before the longest maturity transaction in the netting set matures;
y) 'effective expected exposure at a specific date' means either:

1. maximum expected exposure that occurs at that date or any prior date, or
2. or the greater of the expected exposure amounts at that date, or the effective exposure at the previous date;

z) 'expected positive exposure (EPE)' means the weighted average over time of effective exposures where the weights are the proportion that an individual expected exposure represents of the entire time interval. When calculating the minimum capital requirement the average is taken over the first year or, if all the contracts within the netting set mature within less than one year, over the period of the longer maturity contract in the netting set;
za) 'effective Expected Positive Exposure' means the weighted average over time of effective expected exposure over the first year, or, if all the contracts within the netting set mature within less than one year, over the time period of the longest maturity contract in the netting set, where the weights are the proportion that an individual expected exposure represents of the entire time interval;
zb) 'credit valuation adjustment' means an adjustment to the mid-market valuation of the portfolio of transactions with a counterparty. This adjustment reflects the market value of the credit risk due to any failure to perform on contractual agreements with a counterparty. The adjustment may reflect the market value of the credit risk of the counterparty or the market value of the credit risk of both the bank and the counterparty;
zc) 'one-sided credit valuation adjustment' means a credit valuation adjustment that reflects the market value of the credit risk of the counterparty to the bank, but does not reflect the market value of the credit risk of the bank to the counterparty;
zd) 'rollover risk' means the amount by which positive exposure is understated in regard to a contractual framework within which the respective exposure is expected to be renewed in the future. The exposures that may be generated by future transactions on the basis of that contractual framework shall not be included in the calculation of expected positive exposure;
ze) 'general wrong-way risk' means the risk arising when the probability of default of counterparties is positively correlated with general market risk factors;
zf) 'specific wrong-way risk' means the risk arising when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transaction with the counterparty. A bank shall be considered to be exposed to specific wrong-way risk if the future exposure to a specific counterparty is expected to be high when the counterparty's probability of default is also high;
zg) 'revolving exposure' means a bank's exposure arising from a credit agreement on the basis of which the bank's counterparty may request that a financial amount representing the credit be provided other than by a one-time payment.

(3) For the purpose of calculating credit risk, financial instruments other than equity instruments – which are valued at market value and are included in the portfolio of financial instruments available for sale – shall be adjusted by valuation differences recorded for own funds.

CHAPTER TWO

STANDARDIZED APPROACH FOR CREDIT RISK

Methods for determining the exposure value of off-balance sheet items

Article 10

(1) For the contracts listed in Article 16, the exposure value of off-balance sheet items shall, for the purposes of calculating the respective capital requirements for the coverage of credit risk, be determined by the mark-to-market method, standardized method or internal model method, unless otherwise provided by this paragraph or paragraphs (2) to (7). When calculating the exposure value for the contracts listed in Article 16(3), a bank may not use the original exposure method. The combined use of the methods set out in this paragraph shall be permitted within a group, but not within a single legal entity, with the exception of the case mentioned Article 13(19).

(2) The internal model method shall be applied to:
a) derivatives;
b) repurchase transactions;
c) securities or commodities lending or borrowing transactions;
d) margin lending transactions; and
e) long settlement transactions.

(3) When a bank purchases credit derivative protection against a non-trading book exposure, or against a counterparty credit risk exposure, it may compute its capital requirement for the hedged asset in accordance with Articles 128 and 129 or subject to the approval of the National Bank of Slovakia in accordance with Article 42(1)(b) or Articles 83 to 86. In these cases, the exposure value for the counterparty credit risk shall be deemed to be set to zero.

(4) The exposure value for counterparty credit risk from sold credit default swaps in the non-trading book, where they are treated as credit protection provided by the bank and subject to capital requirements for credit risk for the full notional, shall be set to zero.

(5) Under all methods set out in paragraph (1), the exposure value for a given counterparty shall be equal to the sum of the exposure values calculated for each netting set with that counterparty.

(6) An exposure value of zero for counterparty credit risk can be attributed to derivative contracts, repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions outstanding with a central counterparty and that have not been rejected by the central counterparty. Furthermore, an exposure value can be attributed to credit risk exposures to central counterparties that result from the said contracts which the bank has outstanding with the central counterparty. The counterparty credit risk exposures of the central counterparty shall be fully collateralized on a daily basis.

(7) Exposures arising from long settlement transactions may be determined using any of the methods set out in paragraph (1), regardless of the methods chosen for treating over-the-counter derivatives, repurchase transactions, securities or commodities lending or borrowing transactions, and margin lending transactions. In calculating capital requirement for long settlement transactions, banks that use the internal ratings based approach may assign the risk weights under the standardized approach for credit risk on a permanent basis and irrespective of the materiality of such positions.

(8) Where the mark-to-market method or original exposure method is used, the exposure calculation shall take into account the risk inherent in the contract, appropriate to the nature thereof. Where the contract provides for or directly stipulates a multiplication of cash flows, the exposure value shall be adjusted in order to take into account the effects of the multiplication within the structure of that contract.

Article 11

(1) When using the mark-to-market method by assigning the current market values of transactions, a bank shall calculate the market value of all the contracts and determine which of these values is positive. Subsequent calculations shall take into account only the positive exposures.

(2) To calculate an exposure value using the mark-to-market method, the positive market value of the contract shall be the sum of the respective value of the potential future credit exposure arising under this contract and calculated in accordance with paragraphs (3) and (4), except in cases of single-currency basis swaps in which the exposure value shall be calculated as the respective positive market value of the contract.

(3) To calculate the value of a potential credit exposure, the notional amount of the exposure shall be multiplied by the respective coefficient in Table 1. For contracts with multiple exchanges of principal, the respective coefficients shall be multiplied by the number of remaining principle payments still to be made according to the contract. For contracts that are structured to settle outstanding exposure on more than one payment date and where the market value of the contract is set at zero on these dates, the residual maturity shall be deemed equal to the time until the next payment date. In the case of contracts concerning interest rates or debt securities that meet the condition under the previous sentence and have a residual maturity of over one year, the coefficient shall be no lower than 0.005.

Table 1

Residual maturity of exposure	**Contracts concerning interest rates or debt securities**	**Contracts concerning foreign-exchange rates and gold**	**Contracts concerning equities**	**Contracts concerning precious metals except gold**	**Contracts concerning other commodities and other underlying instruments, and other contracts**
One year or less	0	0.01	0.06	0.07	0.10
Over one year, not exceeding five years	0.005	0.05	0.08	0.07	0.12
Over five years	0.015	0.075	0.10	0.08	0.15

(4) For the purpose of calculations under paragraph (3), a bank may use the coefficients prescribed in Table 2 provided that the bank proceeds in accordance with Article 182(7) for contracts concerning commodities other than gold within the meaning of Article 16(3).

Table 2

Residual maturity of the exposure	**Contracts concerning precious metals except gold**	**Contracts concerning other metals except gold**	**Contracts concerning agricultural products**	**Contracts concerning other commodities except gold, including contracts concerning energy**
One year or less	0.02	0.025	0.03	0.04
Over one year, not exceeding	0.05	0.04	0.05	0.06

five years				
Over five years	0.075	0.08	0.09	0.1

Article 12

(1) To calculate an exposure value using the original exposure method, the notional amount of the exposure arising under each contract shall be multiplied by the coefficient given in Table 3.

Table 3

Exposure with original or residual maturity	Contracts concerning interest rates or debt securities	Contracts concerning foreign currencies and gold
One year or less	0.005	0.02
Over one year, not exceeding two years	0.01	0.05
Additional allowance for each additional year	0.01	0.03

(2) For the purpose of the calculation under paragraph (1), either the original maturity or residual maturity of the exposure may be used for contracts concerning interest rates or debt securities.

Article 13

(1) The standardized method may be used only for over-the-counter derivatives and long settlement transactions. The exposure value shall be calculated separately for each netting set and shall be determined net of collateral, as follows:

exposure value = $\beta * \max\left(CMV - CMC; \sum_j \left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right| * CCRM_j\right)$

where:
CMV = current market value of the portfolio of transactions within the netting set with a counterparty gross of collateral, that is, where:

$$CMV = \sum_i CMV_i$$

where:
CMV_i = the current market value of transaction i;
CMC = the current market value of the collateral assigned to the netting set, that is, where:

$$CMC = \sum_l CMC_l$$

where:
CMC_l = the current market value of collateral l;
i = index designating transaction;
l = index designating collateral;
j = index designating hedging set category. These hedging sets correspond to risk factors for which risk positions of opposite sign can be offset to yield a net risk position on which the exposure value is then based;
RPT_{ij} = risk position from transaction I with respect to hedging set j;
RPC_{lj} = risk position from collateral l with respect to hedging set j;
$CCRM_j$ = counterparty credit risk multiplier set out in Table 5 with respect to hedging set j;

$\beta = 1,4$.
Collateral received from a counterparty has a positive sign and collateral posted to a counterparty has a negative sign. Collateral that is recognized for the standardized method is confined to the collateral referred to in Article 100(8).

(2) When a derivative transaction with a linear risk profile, concluded on a regulated market, stipulates the exchange of a financial instrument for a payment, the payment part is referred to as the payment leg. Transactions that stipulate the exchange of payment against payment consist of two payment legs. The payment legs consist of the contractually agreed gross payments, including the notional amount of the transaction. For the purposes of the following calculations, a bank may disregard the interest rate risk from legs with a residual maturity of less than one year. A bank may treat transactions that consist of two payment legs that are denominated in the same currency as a single aggregate transaction.

(3) Transactions with a linear risk profile with equities (including equity indices), gold, other precious metals or other commodities as the underlying instruments are mapped to a risk position in the respective equity (or equity index) or commodity (including gold and other precious metals) and an interest rate risk position of the payment leg. If the payment leg is denominated in a foreign currency, it is additionally mapped to a risk position in the respective currency.

(4) Transactions with a linear risk profile with a debt instrument as the underlying instrument are mapped to an interest rate risk position for the debt instrument and another interest rate risk position for the payment leg. Transactions with a linear risk profile that stipulate the exchange of payment against payment, including foreign exchange forwards, are mapped to an interest rate risk position for each of the payment legs. If the underlying debt instrument is denominated in a foreign currency, the debt instrument is mapped to a risk position in this currency. If a payment legs is denominated in a foreign currency, the payment leg is again mapped to a risk position in this currency. The exposure value assigned to a foreign exchange basis swap is zero.

(5) The size of a risk position from a transaction with linear risk profile is the effective notional value (market price multiplied by quantity) of the underlying instruments (including commodities) converted to Slovak koruny using the exchange rate listed by the National Bank of Slovakia as at the date of determination, except for underlying debt instruments.

(6) For debt instruments and for payment legs, the size of the risk position is the effective notional value of the outstanding gross payments (including the notional amount) converted into Slovak koruny using the exchange rate listed by the National Bank of Slovakia as at the date of determination, multiplied by the modified duration of the debt instrument or payment leg.

(7) The size of a risk position from the agreement mentioned in Article 104(a) is the notional value of the debt instrument, according to which the value of the payment under the agreement is modified, multiplied by the residual maturity of the agreement mentioned in Article 104(a).

(8) The size of a risk position from a derivative with a non-linear risk profile, concluded on a regulated market, including options and swaptions, is equal to the delta equivalent effective notional value of the instrument underlying the transaction, except in the case of an underlying debt instrument.

(9) The size of a risk position from a derivative with a non-linear risk profile, concluded on a regulated market, including options and swaptions, of which the underlying instrument is a debt instrument or a payment leg, is equal to the delta equivalent effective notional value of the financial

instrument or payment leg multiplied by the modified duration of the debt instrument or payment leg.

(10) For the determination of risk positions, collateral received from a counterparty is to be treated as a claim on the counterparty under a derivative contract that is due on date of determination, while collateral posted is to be treated like an obligation to the counterparty that is due on the date of determination.

(11) A bank may use the following formulae to determine the size and sign of a risk position:
for all financial instruments other than debt instruments and the payment legs of transactions:

effective nominal value, or

delta equivalent notional value = $p_{ref} \frac{\partial V}{\partial p}$

where:
p_{ref} = price of the underlying instrument, expressed in the reference currency;
V = value of the financial instrument (in the case of an option this is the option price, and in the case of a transaction with a linear risk profile this is the value of the underlying instrument itself);
p = price of the underlying instrument, expressed in the same currency as V.

for debt instruments and the payment legs of all transactions:

effective notional value multiplied by the modified duration, or

delta equivalent notional value multiplied by the modified duration

$$\frac{\partial V}{\partial r}$$

where:
V = value of the financial instrument (in the case of an option this is the option price, and in the case of a transaction with a linear risk profile this is the value of the underlying instrument itself or of the payment leg);
r = market interest rate level.
If V is denominated in a currency other than the reference currency, the derivative must be converted into the reference currency by multiplication with the relevant exchange rate.

(12) The risk positions are to be grouped into hedging sets. For each hedging set, the absolute value amount of the sum of the resulting risk positions is computed. This sum is termed the "net risk position" and is represented by:

$$\left| \sum_i RPT_{ij} - \sum_l RPC_{lj} \right|$$

in the formulae set out in paragraph (1).

(13) For interest rate risk positions from money deposits received from the counterparty as collateral, from payment legs and from underlying debt instruments, to which according to Table 28

and Article 159(1) and (2) a capital charge of 1.60% or less applies, there are six hedging sets for each currency, as set out in Table 4. Hedging sets are defined by a combination of the criteria 'maturity' and 'referenced interest rates'.

Table 4

	Government referenced interest rates	**Non-government referenced interest rates**
Maturity	One year or less	One year or less
Maturity	Over one year, not exceeding five years	Over one year, not exceeding five years
Maturity	Over five years	Over five years

(14) For interest rate risk positions from underlying debt instruments or payment legs for which the interest rate is linked to a reference interest rate that represents a general market interest level, the residual maturity is the length of the time interval up to the next re-adjustment of the interest rate. In all other cases, it is the remaining life of the underlying debt instrument or in the case of a payment leg, the remaining life of the transaction.

(15) There is one hedging set for each issuer of a reference debt instrument that underlies a credit default swap.

(16) For interest rate risk positions from money deposits that are posted with a counterparty as collateral when that counterparty does not have debt obligations of low specific risk outstanding and from underlying debt instruments, to which according to Table 28 and Annex 159(1) and (2) a capital charge of more than 1.60% applies, there is one hedging set for each issuer. When a payment leg emulates such a debt instrument, there is also one hedging set for each issuer of the reference debt instrument. A bank may assign risk positions that arise from debt instruments of a certain issuer, or from reference debt instruments of the same issuer that are emulated by payment legs, or that underlie a credit default swap, to the same hedging set.

(17) Underlying instruments other than debt instruments shall be assigned to the same respective hedging sets only if they are identical or similar instruments. In all other cases they shall be assigned to separate hedging sets. The similarity of instruments is established as follows:
a) for equities, similar instruments are those of the same issuer. An equity index is treated as a separate issuer;
b) for precious metals, similar instruments are those of the same metal. A precious metal index is treated as a separate precious metal;
c) for electric power, similar instruments are those delivery rights and obligations that refer to the same peak or off-peak load time interval within any 24 hour interval;
d) for commodities, similar instruments are those of the same commodity. A commodity index is treated as a separate commodity.

(18) The counterparty credit risk multipliers (CCRMs) for the different hedging set categories are set out in Table 5 below.

Table 5

	Hedging set categories	**CCRM**
1.	Interest rates	0.2%
2.	Interest rates for risk positions from a reference debt instrument that underlies a credit default swap and to which a capital charge of 1.60 %, or less, applies under Article 159(1) and (2)	0.3%
3.	Interest rates for risk positions from a debt instrument or reference debt instrument to which a capital charge of more than 1.60 % applies under Article 159(1) and (2) (Table 28)	0.6%
4.	Exchange rates	2.5%
5.	Electric power	4.0%
6.	Gold	5.0%

7.	Equity	7.0%
8.	Precious metals (except gold)	8.5%
9.	Other commodities (except precious metals and electric power)	10.0%
10.	Underlying instruments of over-the-counter derivatives	10.0%

Underlying instruments of derivatives concluded on a regulated market, as referred to in point 10 of Table 5, shall be assigned to separate individual hedging sets for each category of underlying instrument.

(19) For transactions with a non linear risk profile, or for payment legs and transactions with debt instruments as underlying instruments, for which a bank cannot determine the delta or the modified duration, respectively, with an internal market risk model that the National Bank of Slovakia has approved for the purposes of determining the minimum capital requirements for market risk, the National Bank of Slovakia shall determine the size of the risk positions and the applicable CCRMjs conservatively. The calculation of risk position values may, with the agreement of the National Bank of Slovakia, be made using the mark-to-market method. Netting shall not be recognized, and the exposure value shall be determined as if there were a netting set that comprises just the individual transaction.

(20) A bank shall have internal procedures to verify that, prior to including a transaction in a hedging set, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in Article 15.

(21) A bank that makes use of collateral to mitigate its counterparty credit risk shall have internal procedures to verify that, prior to recognizing the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in the third part of Chapter Four on credit risk mitigation.

Article 14

(1) Subject to the approval of the National Bank of Slovakia, a bank may use the internal model method to calculate the exposure value for the transactions in Article 10(2)(a), or for the transactions in Article 10(2)(b) to (d), or for the transactions in Article 10(2)(a) to (d). In each of these cases the transactions in Article 10(2)(e) may be included as well. Notwithstanding Article 10(1), third sentence, a bank may choose not to apply this method to exposures that are immaterial in size and risk. To apply the internal model method, a bank shall meet the requirements set out in this paragraph and paragraphs (2) to (42).

(2) Subject to the approval of the National Bank of Slovakia, implementation of the internal model method may be carried out sequentially across different transaction types, and during this period a bank may use the mark-to-market method or the standardized method. For this purpose, banks shall not be required to use a specific type of model for the calculation of an exposure value.

(3) For all over-the-counter derivative transactions and for long settlement transactions for which a bank has not received approval from the National Bank of Slovakia to use the internal model method, the bank shall use the mark-to-market method or the standardized method. Combined use of these two methods is permitted on a permanent basis within a group. Combined use of these two methods within a legal entity is only permitted where one of the methods is used for the cases set out in Article 13(19).

(4) A bank which has obtained permission to use the internal model method shall not revert to the use of the mark-to-market method or standardized method except for demonstrated good cause and subject to the approval of the National Bank of Slovakia. If a bank ceases to comply with

the requirements for the use of the internal market method set out in this paragraph, paragraphs (1) to (3) and paragraphs (5) to (42), it shall either present to the National Bank of Slovakia a plan for a timely return to compliance or demonstrate that the effect of non compliance is immaterial.

(5) The exposure value shall be measured at the level of the netting set. The internal model shall specify the forecasting distribution for changes in the market value of the netting set attributable to changes in risk factors, such as interest rates, foreign exchange rates. The internal model shall then compute the exposure value for the netting set at each future date given the changes in the risk factors. For margined counterparties, the internal model may also capture future collateral movements.

(6) A bank may include eligible funded credit protection as defined in Article 100(8) and Article 157(6) in its forecasting distributions for changes in the market value of the netting set, if the quantitative, qualitative and data requirements for the internal market method are met for the collateral.

(7) The exposure value shall be calculated as the product of α and effective expected positive exposure (EPE), as follows:

Exposure value = α × Effective EPE

where:
α = 1.4
unless the National Bank Slovakia sets a higher α, and
effective EPE shall be computed by estimating expected exposure (EE_t) as the average exposure at future date t, where the average is taken across possible future values of relevant market risk factors. The model estimates EE at a series of future dates t1, t2, t3, up to tn.

(8) Effective EE shall be computed recursively as:

Effective EE_{tk} = max(effective EE_{tk-1}; EE_{tk})

where:
the current date is denoted as t0 and effective EEt0 equals current exposure.

(9) In this regard, effective EPE is the weighted average of effective EE during the first year of the respective exposure. If all contracts in the netting set mature within less than one year, EPE is the weighted average of EE until all contracts in the netting set mature. Effective EPE is computed as a weighted average of effective EE:

$$EffectiveEPE = \sum_{k=1}^{\min(1 year, maturity)} EffectiveEE_{tk} * \Delta t_k$$

where:
the weights Δtk = tk — tk 1 allow for the case when future exposure is calculated at dates that are not equally spaced over time.

(10) EE or peak exposure measures shall be calculated based on a distribution of exposures that accounts for the possible non-normality of the distribution of exposures.

(11) A bank may use an exposure value that is more conservative than α multiplied by effective EPE as calculated according to the equation in paragraph (7) for every counterparty.

(12) A bank may use their own estimates of α, subject to a floor of 1.2, where α shall equal the ratio of the internal capital requirement from a full simulation of CCR exposure across counterparties (numerator) and the internal capital requirement based on EPE (denominator). In the denominator, EPE shall be used as if it were a fixed outstanding amount. Banks shall demonstrate that their internal estimates of α capture in the numerator material sources of stochastic dependency of distribution of market values of transactions or of portfolios of positions across counterparties. Internal estimates of α shall take account of the granularity of portfolios.

(13) A bank shall ensure that the numerator and denominator of α are computed in a consistent fashion with respect to the modelling methodology, parameter specifications and portfolio composition. The approach used shall be based on the bank's internal capital approach, be well documented and be subject to independent validation. Banks shall review their estimates on at least a quarterly basis, and more frequently according to changes in the portfolio composition. Banks shall also assess the model risk.

(14) Where appropriate, volatilities and correlations of market risk factors used in the joint simulation of market and credit risk should be conditioned on the credit risk factor to reflect potential increases in volatility or correlation in an economic downturn.

(15) If the netting set is subject to a margin agreement, banks shall use one of the following EPE measures:
(a) effective EPE without taking into account the margin agreement;
(b) the threshold, if positive, under the margin agreement plus an add-on that reflects the potential increase in exposure over the margin period of risk. The add-on is computed as the expected increase in the netting set's exposure beginning from a current exposure of zero over the margin period of risk. A floor of five business days for netting sets consisting only of repurchase transactions subject to daily remargining and daily mark-to-market, and ten business days for all other netting sets is imposed on the margin period of risk used for this purpose; or
(c) if the model captures the effects of margining when estimating EE, the model's EE measure may be used directly in the equation in paragraph (8) subject to the approval of the National Bank of Slovakia.

(16) A bank's EPE model shall meet the operational requirements set out in paragraphs (17) to (41).

(17) A bank shall have a risk management unit that is responsible for the design and implementation of its CCR management system, including the initial and on going validation of the model. This unit shall control input data integrity and produce and analyse reports on the output of the bank's risk measurement model, including an evaluation of the relationship between measures of risk exposure and credit and trading limits. This unit shall be independent from units responsible for originating, renewing or trading exposures and free from undue influence; it shall be adequately staffed; and it shall report directly to the senior management of the bank. The work of this unit shall be closely integrated into the day-to-day credit risk management process of the bank. Its output shall be an integral part of the process of planning, monitoring and controlling the bank's and overall risk profile.

(18) A bank shall have a CCR management system that is consistent and conceptually sound. A sound CCR management framework shall include the identification, measurement, management, approval and internal reporting of CCR.

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(19) A bank's risk management system shall take account of market, liquidity, and legal and operational risks that can be associated with CCR. The bank shall not undertake business with a counterparty without assessing its creditworthiness and shall take due account of settlement and pre-settlement credit risk. These risks shall be managed as comprehensively as practicable at the counterparty level (aggregating CCR exposures with other credit exposures) and at the firm-wide level.

(20) A bank's senior management shall be actively involved in the CCR control process and shall regard this as an essential aspect of the business to which significant resources need to be devoted. Senior management shall be aware of the limitations and assumptions of the model used and the impact these can have on the reliability of the output. Senior management shall also be aware of how the internal model takes into account uncertainties of the market environment.

(21) The daily reports prepared on a bank's exposures to CCR shall be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual credit managers or traders and reductions in the bank's overall CCR exposure.

(22) A bank's CCR management system shall be used in conjunction with internal credit and trading limits. Credit and trading limits shall be related to the bank's risk measurement model in a manner that is consistent over time and that is well understood by the bank's credit managers, traders and senior management.

(23) A bank's measurement of CCR shall include measuring daily and intra-day usage of credit lines. The bank shall measure current exposure gross and net of collateral. At portfolio and counterparty level, the bank shall calculate and monitor peak exposure or potential future exposure at the confidence interval chosen by the bank. The bank shall take account of large or concentrated positions, including by groups of related counterparties, by industry, by market, etc.

(24) A bank have a routine and rigorous program of stress testing in place as a supplement to the CCR analysis based on the day-to-day output of the bank's risk measurement model. The results of this stress testing shall be reviewed periodically by senior management and shall be reflected in the CCR policies and limits set by senior management.

(25) A bank shall have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the CCR management system. The bank's CCR management system shall be well documented and shall provide an explanation of the empirical techniques used to measure CCR

(26) A bank shall conduct an independent review of its CCR management system regularly through its own internal auditing process. This review shall include the activities of the business units referred to in paragraph (17) and of the independent CCR control unit. A review of the overall CCR management process shall take place at regular intervals and shall specifically address, at a minimum:
(a) the adequacy of the documentation of the CCR management system and process;
(b) the organisation of the CCR control unit;
(c) the integration of CCR measures into daily risk management;
(d) the approval process for risk pricing models and valuation systems used by front and back-office personnel;
(e) the validation of any significant change in the CCR measurement process;
(f) the scope of CCR captured by the internal risk measurement model;
(g) the integrity of the management information system;

(h) the accuracy and completeness of CCR data;
(i) the verification of the consistency, timeliness and reliability of data sources used to run models, including the independence of such data sources;
(j) the accuracy and appropriateness of volatility and correlation assumptions;
(k) the accuracy of valuation and risk transformation calculations; and
(l) the verification of the internal model's accuracy through frequent back-testing.

(27) The distribution of exposures generated by the internal model used to calculate effective EPE shall be closely integrated into the day-to-day CCR management process of the bank. The model's output shall be used in the credit approval, CCR management, internal capital allocation and corporate governance of the bank.

(28) A bank shall have a track record in the use of internal models that generate a distribution of exposures to CCR. Thus, the bank shall demonstrate that it has been using an internal model to calculate the distribution of exposures upon which the EPE calculation is based that meets, broadly, the minimum requirements set out in this paragraph for at least one year prior to approval by National Bank of Slovakia.

(29) The internal model used to generate a distribution of exposures to CCR shall be part of a CCR management framework that includes the identification, measurement, management, approval and internal reporting of CCR. This framework shall include the measurement of usage of credit lines (aggregating CCR exposures with other credit exposures) and internal capital allocation. In addition to EPE, the bank shall measure and manage current exposures. Where appropriate, the bank shall measure current exposure gross and net of collateral. The use test is satisfied if the bank uses other CCR measures, such as peak exposure or potential future exposure, based on the distribution of exposures generated by the same internal model to compute EPE.

(30) A bank shall compute EE daily unless it demonstrates to the National Bank of Slovakia that its exposures to CCR warrant less frequent calculation. The bank shall compute EE in such a way that takes into account the time structure of future cash flows and maturity of the contracts and in a manner that is consistent with the materiality and composition of the exposures.

(31) Exposure shall be measured, monitored and controlled over the life of all contracts in the netting set. The bank shall have procedures in place to identify and control the risks for counterparties where the exposure rises beyond the one-year horizon. The forecast increase in exposure shall be an input into the bank's internal capital model.

(32) A bank shall have in place stress testing processes, taking into account the scope and complexity of activities performed, for use in the assessment of capital adequacy for CCR. These stress measures shall be compared with the measures of EPE and considered by the bank as part of the process set out in Article 23(4) and Article 27(3) of the Banking Act. Stress testing shall also involve identifying possible events or future changes in economic conditions that could have unfavourable effects on the bank's credit exposures and an assessment of the bank's ability to withstand such changes.

(33) A bank shall stress test its CCR exposures, including jointly stressing market and credit risk factors. Stress tests of CCR shall consider concentration risk (to a single counterparty or groups of counterparties), correlation risk across market and credit risk, and the risk that liquidating the counterparty's positions could move the market. Stress tests shall also consider the impact on the bank's own positions of such market moves and integrate that impact in its assessment of CCR.

(34) A bank shall give due consideration to exposures that give rise to a significant degree of general wrong-way risk.

(35) A bank shall have procedures in place to identify, monitor and control cases of specific wrong-way risk, beginning at the inception of a transaction and continuing through the life of the transaction.

(36) The internal model shall reflect transaction terms and specifications in a timely, complete, and conservative fashion. Such terms shall include at least contract notional amounts, maturity, reference assets, margining arrangements and netting agreements. The terms and specifications shall be maintained in a database that is subject to formal and periodic audit. The process for recognizing netting agreements shall require signoff by legal staff to verify the legal enforceability of netting and be input into the database by an independent unit. The transmission of transaction terms and specifications data to the model shall also be subject to internal audit and formal reconciliation processes shall be in place between the model and source data systems to verify on an ongoing basis that transaction terms and specifications are being reflected in EPE correctly or at least conservatively.

(37) The internal model shall employ current market data to compute current exposures. When using historical data to estimate volatility and correlations, at least three years of historical data shall be used and shall be updated quarterly or more frequently if market conditions warrant. The data shall cover a full range of economic conditions, such as a full business cycle. A unit independent from the business unit shall validate the price supplied by the business unit. The data shall be acquired independently of the lines of business, fed into the model in a timely and complete fashion, and maintained in a database subject to formal and periodic audit. A bank shall also have a well-developed data integrity process to clean the data of erroneous or anomalous observations. To the extent that the model relies on proxy market data, including, for new products, where three years of historical data may not be available, internal policies shall identify suitable proxies and the bank shall demonstrate empirically that the proxy provides a conservative representation of the underlying risk under adverse market conditions. If the model includes the effect of collateral on changes in the market value of the netting set, the bank shall have adequate historical data to model the volatility of the collateral.

(38) The internal model shall be subject to a validation process. The process shall be clearly articulated in the bank's policies and procedures. The validation process shall specify the kind of testing needed to ensure model integrity and identify conditions under which assumptions are violated and may result in an understatement of EPE. The validation process shall include a review of the comprehensiveness of the model.

(39) A bank shall monitor the appropriate risks and have processes in place to adjust its estimation of EPE when those risks become significant. This includes the following:
(a) the bank shall identify and manage its exposures to specific wrong-way risk;
(b) for exposures with a rising risk profile after one year, the bank shall compare on a regular basis the estimate of EPE over one year with EPE over the life of the exposure; and
(c) for exposures with a residual maturity below one year, the bank shall compare on a regular basis the market value of this exposure and the realized exposure profile, and store data that would allow such a comparison.

(40) A bank shall have internal procedures to verify that, prior to including a transaction in a netting set, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in Article 15.

(41) A bank that makes use of collateral to mitigate its CCR shall have internal procedures to verify that, prior to recognizing the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in the third part of Chapter Four on credit risk mitigation.

(42) A bank's EPE model shall meet the following validation requirements:
(a) the qualitative validation requirements set out in Article 184;
(b) interest rates, foreign exchange rates, equity prices, commodities, and other market risk factors shall be forecast over long time horizons for measuring CCR exposure. The performance of the forecasting model for market risk factors shall be validated over a long time horizon;
(c) the pricing models used to calculate CCR exposure for a given scenario of future shocks to market risk factors shall be tested as part of the model validation process. Pricing models for options shall account for the nonlinearity of option value with respect to market risk factors;
(d) the EPE model shall capture transaction-specific information in order to aggregate exposures at the level of the netting set. A bank shall verify that transactions are assigned to the appropriate netting set within the model;
(e) the EPE model shall also include transaction-specific information to capture the effects of margining. It shall take into account both the current amount of margin and margin that would be passed between counterparties in the future. Such a model shall account for the nature of margin agreements, the frequency of margin calls, the margin period of risk, the minimum threshold of unmargined exposure the bank is willing to accept, and the minimum transfer amount. Such a model shall either model the mark-to-market change in the value of collateral posted or apply the rules set out in third part of Chapter Four on credit risk mitigation;
(f) static, historical back-testing on representative counterparty portfolios shall be part of the model validation process. At regular intervals, a bank shall conduct such back-testing on a number of representative counterparty portfolios (actual or hypothetical). These representative portfolios shall be chosen based on their sensitivity to the material risk factors and correlations to which the bank is exposed.

Article 15

(1) For the purposes of risk mitigation under this Decree:
a) a bank's 'counterparty' means an entity that has the power to conclude the agreement mentioned in paragraph (4)(a);
b) ‘contractual cross product netting agreement’ means a written bilateral agreement between a bank and a counterparty which creates a single legal obligation covering all included bilateral master agreements and transactions belonging to different product categories.

(2) The following are considered to be different product categories under paragraph (1)(b):
a) repurchase transactions, securities and commodities lending and borrowing;
b) margin lending transactions; and
c) derivatives.

(3) For the purposes of risk reduction in accordance with this Decree, contractual netting shall not be recognized unless the following conditions are met:
a) under the contractual netting agreement, if a bank or its counterparty withdraws from a contract subject to contractual netting, the mutual claims and obligations will be automatically amalgamated in such a way that the net sum is treated as a new obligation or exposure which at once extinguishes and replaces the former obligations or exposures. These consequences of withdrawal from a contract subject to contractual netting shall be enforceable irrespective of the obligor's solvency, bankruptcy or restructuring proceedings against the obligor, compulsory administration or liquidation of the bank or counterparty, or any other similar situations; the net sum arising from the

netting, i.e. the new obligation, represents the sum of the positive and negative market values of included individual transactions;
b) the contractual netting agreement is bilateral;
c) the contractual netting agreement and the law under which it is governed do not allow for non-performance of the obligor's obligations arising under the novation to an entity who is subject to a bankruptcy order;
d) a written and reasoned legal opinion has been submitted to the National Bank of Slovakia to the effect that the respective contractual netting agreement under subparagraphs (a) to (c) is, considering the findings of the relevant courts and administrative authorities, enforceable under:

1. the law of the jurisdiction in which the counterparty is incorporated and, if a foreign branch of an undertaking is involved, also under the law of the jurisdiction in which the branch is located;
2. the law that governs the individual transactions included;
3. the law that governs the contractual netting;

e) the bank shall have procedures in place to ensure that the substance of the law mentioned in subparagraph (a) is kept under review;
f) the bank maintains all required documentation concerning the respective contractual netting;
g) the effects of netting shall be factored into the bank's measurement of each counterparty's aggregate credit risk exposure and the bank manages its CCR on such a basis;
h) the credit risk to each counterparty is aggregated to arrive at a single legal exposure across transactions. This aggregation shall be factored into large exposure purposes and capital requirement purposes.

(4) For the purposes of risk mitigation under this Decree, in addition to the conditions set out in paragraph (3), the following criteria shall be met for contractual cross-product netting agreements:
a) the net sum referred to in paragraph (3)(a) shall be the net sum of the positive and negative values of any included individual bilateral master agreement and of the positive and negative market values of the individual transactions (hereinafter the ‘cross-product net amount’);
b) the written and reasoned legal opinions shall address the validity and enforceability of the entire contractual cross-product netting agreement vis-à-vis any included bilateral master agreement;
c) the bank shall have procedures in place under paragraph 3(c) to verify that any transaction which is to be included in a netting set is covered by a legal opinion;
d) included bilateral master agreements and related transactions shall meet the requirements laid down in Article 33a of the Banking Act; and
e) the bank has obtained the approval of the National Bank of Slovakia to use the internal model method; for the purposes of calculating capital requirements, contractual netting between members of a group of affiliated entities shall not be recognized.

(5) When calculating the effects of the recognition of a netting agreement, the standardized method for the calculation of exposure value or the internal model method for the calculation of exposure value shall be applied in accordance with the procedure set out in paragraphs (6) to (11).

(6) Where the mark-to-market method is used to obtain the market values of the contracts and the notional exposure amounts, the contract for novation shall be taken into account, and, to that end, the net values laid down in the contractual netting agreement shall be factored into the calculations. Where the original exposure method is used, the calculation of the notional exposure amount shall also take into account the net values laid down in the contractual netting agreement.

(7) Where netting agreements other than contracts for novation are taken into account and the mark-to-market method is applied, the exposure value shall be calculated as the sum:

a) of all the market values of transactions included in a bilateral netting agreement computed for the relevant counterparty, the negative value of which is treated as zero, and
b) the figure for potential future credit exposure PCE_{red} for all relevant transactions, according to the following formula:

$$PCE_{red} = 0{,}4 \cdot PCE_{gross} + 0{,}6 \cdot NGR \cdot PCE_{gross},$$

where:

PCE_{gross} = the sum of all products of the notional exposure amounts vis-à-vis the given counterparty and the respective coefficients set out in Table 1 for the contracts with that counterparty which are included in a bilateral netting agreement;
NGR =
1. the quotient of the sum of the market values for all transactions included in a bilateral netting agreement, calculated for the given counterparty, a negative value of which is treated as zero, and the sum of all the positive market values of the relevant contracts (transactions) for the respective counterparty;
2. the quotient of the sum of the market values of transactions included in a bilateral netting agreement, calculated for all counterparties, a negative value of which is treated as zero, and the sum of all positive market values of the respective transactions for all counterparties.

(8) A bank that has chosen a calculation method for the NGR ratio in accordance with paragraph 7(b) shall use that method consistently thereafter.

(9) For the calculation of the potential future credit exposure according to the formula in paragraph (7)(b), a bank may consider all perfectly matching contracts to be a single contract with a notional exposure amount equivalent to the net exposure amount corresponding to the claims and liabilities arising under the individual contracts.

(10) Perfectly matching contracts are forward contracts for foreign exchange contracts or gold if the cash flows thereunder fall due on the same date and fully or partly in the same currency.

(11) In the application of the original exposure method and the implementation of netting agreements other than contracts for novation:
a) for perfectly matching contracts, a bank may treat all the perfectly matching contracts as a single contract with a notional exposure amount equivalent to the net exposure amount corresponding to the claims and liabilities arising under the individual contracts, and the notional exposure amounts are multiplied by the coefficients in Table 3;
b) for contracts other than perfectly matching contracts, the coefficients in Table 3 may be reduced as indicated in Table 6.

Table 6

Exposure with an original or residual maturity	**Contracts concerning interest rates or debt securities**	**Contracts concerning foreign currencies and gold**
One year or less	0.0035	0.015
Over one year, not exceeding two years	0.0075	0.0375
Additional allowance for each additional year	0.0075	0.0225

Article 16

(1) For the purpose of calculating risk values under this Decree, the following selected contracts concerning interest rates and debt securities (hereinafter "interest rate derivatives) shall be recognized:

(a) interest rate forwards, meaning forward rate agreements, agreements on the future receipt or delivery of debt securities, and agreements on future time deposits;
(b) interest rate futures, meaning futures for the receipt or delivery of interest rates or debt securities;
(c) basis swaps;
(d) interest rate swaps;
(e) interest rate options, meaning options for the receipt or delivery of interest rates or debt securities;
(f) options for the receipt or delivery of financial instruments mentioned in subparagraphs (b), (d) and (g);
g) warrants for debt securities;,
h) other contracts the underlying instruments of which are interest rates or debt securities.

(2) For the purpose of calculating risk values under this Decree, the following selected contracts concerning foreign currencies or gold (hereinafter "currency derivatives") shall be recognized:
a) currency forwards, meaning agreements on the future receipt or delivery of foreign currency cash or gold;
b) currency futures, meaning futures for the receipt or delivery of foreign currency cash or gold;
c) currency swaps;
d) currency interest rate swaps;
e) cross-currency interest rate swaps,
f) currency options, meaning options for the receipt or delivery of foreign currency cash or gold;
g) other derivatives the underlying instruments of which are foreign currency cash or gold.

(3) For the purpose of calculating risk values under this Decree, the following selected contracts which are similar in nature or content to the contracts mentioned in paragraphs (1) and (2) and concern underlying instruments or indices other than those mentioned in paragraphs (1) and (2) shall be recognized:
a) options, futures, swaps, forwards and other derivatives concerning securities, currencies, interest rates or yields, or other derivates, financial indices or financial ratios which may be settled physically or in cash;
b) options, futures, swaps, forwards and other derivatives concerning commodities which must be settled in cash or which may be settled in cash at the option of the parties (other than by reason of insolvency or other termination event);
c) options, futures, swaps and other derivatives concerning commodities which must be settled physically, provided that they are traded on a regulated market and/or a multilateral trading facility;
d) options, futures, swaps, forwards and other derivative concerning commodities which can be physically settled in a manner not mentioned in subparagraph (c) and not being for commercial purposes, which have the characteristics of other derivatives, having regard to whether they are cleared and settled through recognized clearing houses or are subject to regular margin calls;
e) financial contracts for differences;
f) options, futures, swaps, forwards and any other derivates concerning climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of insolvency or other termination event), as well as any other derivatives concerning assets, rights, obligations, indices and measures not otherwise mentioned in this paragraph, having regard to whether they are traded on a regulated market or a multilateral trading facility, are cleared and settled through recognized trading houses or are subject to regular margin calls.

(4) For the purposes of this Decree:

a) 'forward rate agreement' means a transaction in which the counterparties have agreed to the payment of the difference between the agreed interest on the notional principal over a fixed notional maturity period commencing on a fixed date and the interest on the same notional principal over the same maturity period beginning on a stipulated date which will be offered on a stipulated date;
b) 'agreement on the future receipt or delivery of debt securities' means a transaction in which a counterparty undertakes to deliver or receive on a date and for a price fixed under the terms of the transaction a stipulated quantity of debt securities, or to pay a cash sum representing the difference between the fixed price and the market price of these debt securities;
c) 'agreement on the future receipt or delivery of foreign currency cash or gold' means a transaction in which a counterparty undertakes to deliver or receive on a date and at a rate of exchange against the Slovak koruna or other designated currency fixed under the terms of the transaction a stipulated quantity of foreign currency or gold, or to pay a cash sum in Slovak koruny representing the difference between the fixed price and market price of the foreign currency or gold vis-à-vis the Slovak koruna or other designated currency;
d) 'interest rate swap' means the exchange of a floating interest payment on a notional principal for a fixed interest payment on the notional principal, where both payments are made in the same currency;
e) 'basis swap' means the exchange of a floating interest payment on a notional principal for another floating interest payment on the notional principal, where both payments are made in the same currency;
f) 'currency swap' means the exchange of one currency for another currency at the spot rate against this currency on the origination date of the transaction or at the forward rate against this currency on transaction date, and the re-exchange of the same currencies after a fixed period and at the forward rate on transaction maturity date;
g) 'currency interest-rate swap' means the exchange of one currency for another currency at the spot rate against this currency on the origination date of the transaction, or at the forward rate against this currency on the transaction date, and the re-exchange of the same currencies after a fixed period at the forward rate on the transaction maturity date, while during the fixed period the counterparties make stipulated fixed interest payments on the exchanged amounts of foreign currencies. The exchange and re-exchange of currencies may also be notional;
h) 'cross-currency interest rate swap' means the exchange of one currency for another currency at the spot rate against this currency on the origination date of the transaction, or at the forward rate against this currency on the transaction date, and the re-exchange of the same currencies after a fixed period at the forward rate on the transaction maturity date, while during the fixed period the counterparties make the stipulated interest rate payments, at least one of which is a floating interest payment, on the exchanged amounts of foreign currencies. The exchange and re-exchange of currencies may also be notional.

Article 17

(1) For the purpose of calculating exposure values arising from off-balance sheet items (other than those mentioned in Article 10), the category of full-risk items shall include the following:
a) the bank's claims linked to the fulfilment of payment guarantees which the bank has issued or confirmed;
b) the bank's claims linked to its performance under bills of exchange endorsed with recourse, which have not been accepted or avalized or endorsed with recourse by another bank;
c) the bank's claims linked to payments under credit derivatives;
d) the value of bills of exchange accepted by the bank, provided that these are used to provide credit;

e) claims against principals under non-documentary letters of credit opened by the bank, and claims under confirmed non-documentary credits against banks which requested confirmation of the letter of credit;
f) the outstanding amount of subscribed debt securities;
g) claims arising from other spot transactions;
h) claims arising from other full-risk items which are in nature similar to the items mentioned in subparagraphs (a) to (g).

(2) For the purpose of calculating exposure values arising from off-balance sheet items (other than those mentioned in Article 10), the category of medium-risk items shall include the following:
a) the bank's claims linked to the fulfilment of guarantees other than payment guarantees which it has issued or confirmed;
b) future claims arising from the bank's lending liabilities, where the bank's commitment is for a period of longer than one year;
c) claims against the principals under documentary credits opened by the bank, and claims arising from documentary credits confirmed by the bank against those banks which requested confirmation of the documentary credit;
d) claims arising from other medium-risk items which are in nature similar to the items mentioned in subparagraphs (a) to (c).

(3) For the purpose of calculating exposure values arising from off-balance sheet items (other than those mentioned in Article 10), the category of medium/low-risk items shall include the following:
a) claims against the principals under documentary credits opened by the bank, and claims arising from documentary credits confirmed by the bank against those banks which requested confirmation of the documentary credit, where the documents related to goods and the claim under the documentary credit is secured by a lien on these goods;
b) claims arising from other medium/low-risk items which are in nature similar to the items mentioned in subparagraph (a).

(4) For the purpose of calculating exposure values arising from off-balance sheet items (other than those mentioned in Article 10), the category of low-risk items shall include the following:
a) future claims arising from the bank's lending liabilities, where the bank's commitment is for a period not longer than one year,
b) claims arising from currency derivatives the fixed period of which is shorter than 15 calendar days;
c) claims arising from foreign currency spot transactions;
d)) claims arising from other low-risk items which are in nature similar to the items mentioned in subparagraphs (a) to (c).

Details of assigning or determining risk weights vis-à-vis exposures

Article 18

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures to central governments and central banks in accordance with the procedure in paragraphs (2) to (7).

(2) Unless otherwise provided in paragraphs (3) to (7), exposures to central governments and central banks shall be assigned a 100% risk weight for the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk.

(3) Subject to paragraph (4), exposures to central governments and central banks for which a credit assessment by an eligible credit rating agency is available shall, for the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, be assigned a risk weight according to Table 1 in accordance with the assignment of the credit assessments of eligible credit rating agencies to six steps in a credit quality assessment scale.

Table 7

Credit quality step	1	2	3	4	5	6
Risk weight	0%	20%	50%	100%	100%	150%

(4) Exposures to the European Central Bank, central governments and national central banks denominated and funded in the domestic currency of that central government and central bank, shall be assigned a risk weight of 0%.

(5) When the competent authorities of a third country which apply supervisory and regulatory arrangements at least equivalent to those applied in the Member States of the European Union (hereinafter "Member States") assign a risk weight which is lower than that indicated in paragraphs (2) and (3) to exposures to their own central government and central bank denominated and funded in the domestic currency, such exposures may be assigned a risk weight in the same manner.

(6)) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, Export Credit Agency credit assessments shall be recognized if either of the following conditions is met:
(a) it is a consensus risk score from Export Credit Agencies participating in the OECD 'Arrangement on Guidelines for Officially Supported Export Credits' of the Organisation for Economic Co-operation and Development (OECD); or
(b) the Export Credit Agency publishes its credit assessments and subscribes to the OECD agreed methodology, and the credit assessment is associated with one of the eight minimum export insurance premiums (MEIP) that the OECD agreed methodology establishes.

(7) Exposures for which a credit assessment by an Export Credit Agency is recognized in accordance with paragraph (6) shall, under Article 34(4) to (8), be assigned a risk weight according to Table 8.

Table 8

Minimum export insurance premium	0	1	2	3	4	5	6	7
Risk weight	0%	0%	20%	50%	100%	100%	100%	150%

Article 19

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures to local authorities or other regional governments in accordance with this paragraph or paragraph (3). Unless otherwise provided in paragraph (3), exposures to local authorities or other regional

governments shall be risk-weighted as exposures to institutions. The preferential treatment for short-term exposures specified in Article 23(5), (6) and (10) shall not be applied.

(2) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, exposures to churches and religious communities which raise their own income shall be treated as exposures to local authorities or other regional governments.

(3) When competent authorities of a third country which apply supervisory and regulatory arrangements at least equivalent to those applied in Member States treat exposures to local authorities and other regional governments as exposures to their central government, exposures to such local authorities or other regional governments shall be assigned a risk weight in the same manner.

Article 20

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign exposures to other public authority bodies and non-commercial undertakings[11)] (Article 32(1)(c) of the Banking Act) a risk weight of 100%, unless otherwise provided in paragraphs (3) to (8).

(2) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, other public authority bodies shall be deemed to include:
a) public sector entities founded by the central government, a local authority or a regional government, or where the position of their founder is fulfilled by the central government, a local authority or a regional government (such public sector entities are included in the state budget, local authority's budget or regional government's budget);[12)]
b) legal persons founded by the central government, a local authority or a regional government for the purpose of fulfilling tasks in the public interest, or where the position of their founder is fulfilled by the central government, a local authority or a regional authority,[13)] and these legal persons are not included in the state budget, local authority's budget or regional government's budget and their founder bears full liability or fully guarantees their liabilities.

(3) Exposures to other public authority bodies specified in paragraph 2(a) shall be treated as exposures to a country where there is no difference in risk between such exposures because of the existence of the founder's appropriate liability or guarantee.

(4) Exposures to other public authority bodies shall be treated as exposures to institutions; the preferential treatment for short-term exposures specified in Article 23(5), (6) and (10) shall not be applied where:
a) the debt service does not exceed 10% of the actual current income for the previous budgetary year;

[11)] For example, Act no. 83/1990 Coll. on association of citizens, as amended; Act no. 308/1991 Coll. on freedom of religion and the position of churches and religious communities, as amended; Article 7 of Act no. 182/1993 Coll. on ownership of apartments and non-residential premises, as amended; Act no. 34/2002 Coll. on foundations and amending the Civil Code, as amended; Articles 66 to 75 of Act no. 586/2003 Coll. on the legal profession, as amended; Act no. 85/2005 Coll. on political parties and political movements, as amended.
[12)] Article 3 of Act no. 523/2004 Coll. on budgetary rules for general government, including consequential amendments to certain laws, as amended.
[13)] For example, Articles 23 to 26 of Act no. 111/1990 Coll. on state enterprises, as amended; Article 6 of Act no. 138/1991 Coll. on the property of local authorities, as amended; Article 6 of Act no. 446/2001 Coll. on the property of regional governments, as amended; Act no. 213/1997 Coll. on non-profit organizations providing services to the general benefit, as amended.

b) the total debt does not exceed 30% of the actual current income for the previous budgetary year; and
c) the funds for repaying the interest and the principal are linked to the founder's budget.

(5) Exposures to other public authority bodies specified in paragraph (2)(b) shall be treated as exposures to a central government where there is no difference in risk between such exposures because of the existence of the founder's appropriate liability or guarantee, and where
a) the debt service does not exceed 15% of the actual current income for the previous budgetary year; and
b) the total debt does not exceed 35% of the actual current income for the previous budgetary year.

(6) If the conditions laid down in paragraph (5) are not met, exposures to other public authority bodies mentioned in paragraph 2(b) shall be treated as exposures to institutions, and the preferential treatment for short-term exposures specified in Article 23(5), (6) and (10) shall not be applied.

(7) Where a Member State's competent supervisory authorities have decided that exposures to another public authority body shall be treated as exposures to institutions or as exposures to the central government in whose jurisdiction they are established, exposures to such other public authority bodies shall be assigned a risk weight in the same manner.

(8) When the competent authority of a third country applies supervisory and regulatory arrangements at least equivalent to those applied in Member States, exposures to other public authority bodies shall be treated as exposures to institutions. Exposures to such entities shall be assigned a risk weight in the same manner.

Article 21

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, the Inter-American Investment Corporation), the Black Sea Trade and Development Bank and the Central American Bank for Economic Integration are considered to be multilateral development banks.

(2)) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, and unless otherwise provided in paragraphs (3) and (4), exposures to multilateral development banks shall be treated in the same manner as exposures to institutions in accordance with Article 23(3) to (6). The preferential treatment for short-term exposures as specified in Article 23(5), (6) and (10) shall not apply.

(3) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, exposures to the following multilateral development banks shall be assigned a 0% risk weight:
a) the International Bank for Reconstruction and Development;
b) the International Finance Corporation;
c) the Inter-American Development Bank;
d) the Asian Development Bank;
e) the African Development Bank;
f) the Council of Europe Development Bank;
g) the Nordic Investment Bank;
h) the Caribbean Development Bank;
i) the European Bank for Reconstruction and Development;
j) the European Investment Bank;

k) the European Investment Fund;
l) the Multilateral Investment Guarantee Agency.

(4) A risk weight of 20% shall be assigned to the portion of unpaid capital subscribed to the European Investment Funds.

Article 22

For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, exposures to the following international organizations shall be assigned a 0% risk weight:
a) the European Community;
b) the International Monetary Fund;
c) the Bank for International Settlements.

Article 23

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for institutions in accordance with paragraphs (2) to (12). Unless otherwise provided in paragraphs (2) to (12), exposures to supervised and authorized financial institutions which are subject to prudential requirements equivalent to those applied to banks shall be risk-weighted as exposures to institutions.

(2) Exposures to an unrated institution shall not be assigned a risk weight lower than that applied to exposures to its central government.

(3) Exposures to institutions with an original effective maturity of more than three months for which a credit assessment by an eligible credit rating agency is available shall be assigned a risk weight according to Table 9 in accordance with the assignment of the credit assessments of eligible credit rating agencies to six steps in a credit quality assessment scale.

Table 9

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	50%	100%	100%	150%

(4) Exposures to unrated institutions with an original effective maturity of more than three months shall be assigned a risk weight of 50%.

(5) Exposures to institutions having an original effective maturity of three months or less for which a credit assessment by an eligible credit rating agency is available shall be assigned a risk weight according to Table 10 in accordance with the assignment of the credit assessments of eligible credit rating agencies to six steps in a credit quality assessment scale.

Table 10

Credit quality step	1	2	3	4	5	6
Risk weight	20%	20%	20%	50%	50%	150%

(6) Exposures to unrated institutions having an original effective maturity of three months or less shall be assigned a 20% risk weight.

(7) If there is no short-term exposure assessment, the general preferential treatment for short-term exposures as specified in paragraph (5) shall apply to all exposures to institutions of up to three months residual maturity.

(8) If there is a short-term assessment and such an assessment determines the application of a more favourable or identical risk weight than the use of the general preferential treatment for short-term exposures, as specified in paragraph (35), then the short-term assessment shall be used for that specific exposure only. Other short-term exposures shall follow the general preferential treatment for short-term exposures as specified in paragraph (5).

(9) If there is a short-term assessment and such an assessment determines a less favourable risk weight than the use of the general preferential treatment for short-term exposures, as specified in paragraph (5), then the general preferential treatment for short-term exposures shall not be used and all unrated short-term claims shall be assigned the same risk weight as that applied by the specific short-term assessment.

(10) Exposures to institutions of a residual maturity of 3 months or less denominated and funded in the national currency shall be assigned a risk weight that is one category less favourable than the preferential risk weight, as described in Article 18 (4) and (5), assigned to exposures to its central government.

(11) No exposures of a residual maturity of 3 months or less denominated and funded in the national currency of the borrower shall be assigned a risk weight less than 20%.

(12) Investments in equity or regulatory capital instruments issued by institutions shall be risk-weighted at 100% unless deducted from the own funds.

Article 24

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures to corporates in accordance with this paragraph and paragraph (2). Exposures to corporates for which a credit assessment by an eligible credit rating agency is available shall be assigned a risk weight according to Table 11 in accordance with the assignment of the credit assessments of eligible credit rating agencies to six steps in a credit quality assessment scale.

Table 11

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	150%	150%

(2) Exposures to corporates for which a credit assessment by an eligible credit rating agency is not available shall be assigned a 100% risk weight or the risk weight of its central government, whichever is the higher.

Article 25

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, exposures that comply with the criteria listed in Article 32(2) of the Banking Act (hereinafter "retail exposures") shall be assigned a risk weight of 75%.

(2) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk in respect of retail exposures, the current value of minimum retail

instalments of rent shall be eligible provided that the conditions set out in Article 32(2) of the Banking Act are met.

Article 26

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures to secured real estate in accordance with this paragraph and paragraphs (2) to (10). Unless otherwise provided in paragraphs (2) to (10), exposures fully secured by real estate shall be assigned a risk weight of 100%.

(2) Exposures or any part of an exposure fully secured in accordance with paragraph (5) by mortgages on residential real estate which is or will be occupied or let by the owner, or the beneficial owner in the case of personal investment companies, shall be assigned a risk weight of 35%.

(3) Exposures fully secured in accordance with paragraph (5) by shares in Finnish residential housing companies, operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation, in respect of residential real estate which is or will be occupied or let by the owner shall be assigned a risk weight of 35%.

(4) Exposures to a tenant under a property leasing transaction concerning residential real estate under which the bank is the lessor and the tenant has an option to purchase, shall be assigned a risk weight of 35% provided that the exposure of the bank is fully secured by its ownership of the property.

(5) For the purposes of paragraphs (2) and (3), exposures shall be considered to be fully secured only if the following conditions are met:
(a) the value of the property does not materially depend upon the credit quality of the borrower. This requirement does not preclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower;
(b) the risk of the borrower does not materially depend upon the performance of the underlying property or project, but rather on the underlying capacity of the borrower to repay the debt from other sources. As such, repayment of the facility does not materially depend on any cash flow generated by the underlying property serving as collateral;
(c) the minimum requirements set out in Article 110 and the valuation rules set out in Article 125(1) to (4) are met; and
(d) the value of the property exceeds the exposures by a substantial margin.

(6) Where a Member State's competent supervisory authorities have dispensed with the condition contained in paragraph 5(b) for exposures fully secured by mortgages on residential real estate which is situated within their territory, such exposures fully secured by mortgages on residential real estate shall be assigned a risk weight of 35%.

(7) Where a Member State's competent supervisory authorities have decided to assign a risk weight of 50% to exposures fully secured by mortgages on commercial premises which are situated in their territory or by shares in Finnish housing companies, and to exposures related to property leasing transactions concerning commercial premises situated in their territories under which the bank is the lessor and the tenant has an option to purchase, such exposures fully covered by mortgages on commercial premises shall be assigned a risk weight of 50%.

(8) Where a Member State's competent supervisory authorities have dispensed with the requirement that, for exposures fully secured by mortgages on commercial premises which are situated in their territory, the borrower's risk must not be dependent on the performance of the underlying property, such exposures fully secured by mortgages on commercial premises shall be assigned a risk weight of 50%.

(9) The 50% risk weight mentioned in paragraphs (7) and (8) shall be assigned to the part of the loan that does not exceed a limit set at 50% of the market value of the property serving as collateral.

(10) A risk weight of 100% shall be assigned to the part of the loan that exceeds the limit set out in paragraph (9).

Article 27

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures representing past due items in accordance with this paragraph and paragraphs (2) to (4). Unless otherwise provided in paragraphs (2) to (4), the unsecured part of any claim that is past due for more than 90 days shall be assigned a risk weight of:
a) 150%, if value adjustments are less than 20% of the unsecured part of the exposure gross of value adjustments;
b) 100%, if value adjustments are no less than 20% of the unsecured part of the exposure gross of value adjustments.

(2) For the purpose of defining the secured part of the past due claim, eligible collateral and guarantees shall be those eligible for credit risk mitigation purposes under this Decree.

(3) Exposures indicated in Article 26(2) to (6) shall be assigned a risk weight of 100% net of value adjustments if they are past due for more than 90 days.

(4) Exposures indicated in Article 26(7) to (10) shall be assigned a risk weight of 100% if they are past due for more than 90 days.

Article 28

For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, non past due claims which under the provisions of Articles 18 to 33 attract a risk weight of 150% and for which value adjustments have been established shall be assigned a risk weight of 100% if value adjustments are no less than 20% of the exposure value gross of value adjustments.

Article 29

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, bank shall assign and determine risk weights for exposures in the form of covered bonds in accordance with this paragraph and paragraphs (2) to (4). 'Covered bonds' shall mean bonds collateralized by any of the following:
a) exposures to or guaranteed by central governments, central banks, public sector entities, local authorities or regional governments in the EU;
b) exposures to or guaranteed by non-EU central governments, non-EU central banks, multilateral development banks, international organisations that qualify for the credit quality step 1 as set out in

Articles 18 to 40, and exposures to or guaranteed by non-EU public sector entities, non-EU local authorities and regional governments that are risk-weighted as exposures to institutions or central governments and central banks according to Article 20 and Article 19(1), respectively, and that qualify for the credit quality step 1 as set out in Articles 18 to 40, and exposures in the sense of this paragraph that qualify as a minimum for the credit quality step 2 as set out in Articles 18 to 40, provided that they do not exceed 20% of the nominal amount of outstanding covered bonds of issuing institutions;
c) exposures to institutions that qualify for the credit quality step 1 as set out in Articles 18 to 40. The total exposure of this kind shall not exceed 15% of the nominal amount of outstanding covered bonds of the issuing bank. Exposures caused by transmission and management of payments of the obligors of, or liquidation proceeds in respect of, loans secured by real estate to the holders of covered bonds shall not be comprised by the 15% limit. Exposures to institutions in the European Union with a maturity not exceeding 100 days shall not be comprised by the step 1 requirement but those institutions must as a minimum qualify for credit quality step 2 as set out in Articles 18 to 40;
d) loans secured by residential real estate or shares in Finnish residential housing companies as referred to in Article 26(3) up to the lesser of the principal amount of the liens that are combined with any prior liens and 80% of the value of the pledged properties or by senior units issued by French Fonds Communs de Créances or by equivalent securitisation entities governed by the laws of a Member State securitizing residential real estate exposures provided that at least 90% of the assets of such Fonds Communs de Créances or of equivalent securitisation entities governed by the laws of a Member State are composed of mortgages that are combined with any prior liens up to the lesser of the principal amounts due under the units, the principal amounts of the liens, and 80% of the value of the pledged properties and the units qualify for the credit quality step 1, as set out in Articles 18 to 40, where such units do not exceed 20% of the nominal amount of the outstanding issue. Exposures caused by transmission and management of payments of the obligors of, or liquidation proceeds in respect of, loans secured by pledged properties of the senior units or debt securities shall not be comprised in calculating the 90% limit;
e) loans secured by ships where the total value of the liens combined with any prior liens does not exceed 60%. The figure of 60% shall apply until 31 December 2010 and thereafter be replaced by a figure of 70%.

(2) For the purposes of paragraph (1), 'collateralized' includes situations where the assets as described in subparagraphs (a) to (e) are exclusively dedicated in law to the protection of the bondholders against losses. For real estate collateralizing covered bonds, banks shall meet the minimum requirements set out in Article 100 and the valuation rules set out in Article 125(1) to (4).

(3) Unless otherwise provided in paragraphs (1) and (2), covered bonds issued before 31 December 2007 are also eligible for the bank's preferential treatment until their maturity.

(4) Covered bonds shall be assigned a risk weight on the basis of the risk weight assigned to senior unsecured exposures to the bank which issues them. The following correspondence between risk weights shall apply:
a) if the exposures to the institution are assigned a risk weight of 20%, the covered bond shall be assigned a risk weight of 10%;
b) if the exposures to the institution are assigned a risk weight of 50%, the covered bond shall be assigned a risk weight of 20%;
c) if the exposures to the institution are assigned a risk weight of 100%, the covered bond shall be assigned a risk weight of 50%;
d) if the exposures to the institution are assigned a risk weight of 150%, the covered bond shall be assigned a risk weight of 100%.

Article 30

For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, exposure risk weights for securitization positions shall be determined in accordance with the relevant provisions of the Banking Act.

Article 31

For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, short-term exposures to a credit institution or corporate for which a credit assessment by an eligible credit rating agency is available shall be assigned a risk weight according to Table 12 in accordance with the mapping of the credit assessments of eligible credit rating agencies to six steps in a credit quality assessment scale.

Table 12

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	150%	150%	150%

Article 32

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures in the form of units in collective investment undertakings in accordance with this paragraph and paragraphs (2) to (8). Unless otherwise provided in paragraphs in (2) to (8), exposures in the form of units in collective investment undertakings shall be assigned a risk weight of 100%.

(2) Exposures in the form of units in collective investment undertakings for which a credit assessment by an eligible credit rating agency is available shall be assigned a risk weight according to Table 13, in accordance with the assignment of the credit assessments of eligible credit rating agencies to six steps in a credit quality assessment scale.

Table 13

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	150%	150%

(3) Exposures in the form of units in collective investment undertakings shall be assigned a risk weight of 150% where it is demonstrated that the collective investment undertaking is established in a country for which the available credit assessment of an eligible credit rating agency is of the fourth to sixth credit quality step.

(4) The risk weight for a collective investment undertaking shall be determined in accordance with paragraphs (6) to (8) where the following conditions are met:
(a) the collective investment undertaking is managed by a company which is subject to supervision in a Member State or, subject to approval of the credit institution's competent supervisory authority, if:
1. the collective investment undertaking is managed by a company which is subject to supervision that is considered equivalent to that laid down in a Member State's law; and
2. the competent authorities are cooperating with each other;
(b) the prospectus of the collective investment undertaking or equivalent document includes:
1. the categories of assets in which the collective investment undertaking is authorized to invest; and
2. if investment limits apply, the relative limits and the methodologies to calculate them; and

(c) the business of the collective investment undertaking is reported on at least an annual basis to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period.

(5) If a competent supervisory authority approves a third country's collective investment undertaking as eligible, as set out in paragraph 4(a), then this collective investment undertaking shall be recognized without a further assessment.

(6) Where a bank is aware of the underlying exposures of a collective investment undertaking, it may look through to those underlying exposures in order to calculate an average risk weight for the collective investment undertaking in accordance with the methods stipulated for the standardized approach for credit risk.

(7) Where a bank is not aware of the underlying exposures of a collective investment undertaking, it may calculate an average risk weight for the collective investment undertaking in accordance with the methods stipulated for the standardized approach for credit risk, subject to the following rules: it will be assumed that the collective investment undertaking first invests, to the maximum extent allowed under its mandate, in the exposure classes attracting the highest capital requirement, and then continues making investments in descending order until the maximum total investment limit is reached

(8) A bank may rely on a third party to calculate and report, in accordance with the methods set out in paragraphs (6) and (7), a risk weight for the collective investment undertaking provided that the correctness of the calculation and the report shall be adequately ensured.

Article 33

(1) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, a bank shall assign and determine risk weights for exposures not mentioned in Articles 18 to 32 in accordance with paragraphs (2) to (8).

(2) Tangible assets, prepayments and accrued income for which a bank is unable to determine the counterparty shall be assigned a risk weight of 100%.

(3) Cash items in the process of collection shall be assigned a risk weight of 20%. Cash in hand and equivalent cash items shall be assigned a 0% risk weight.

(4) Exposures to institutions specialising in the interbank and public-debt markets in their home Member States and subject to supervision by the competent supervisory authorities shall be assigned a risk weight of 10% where those asset items are fully and completely secured by items assigned a 0% or 20% risk weight and recognized by the competent supervisory authorities as constituting adequate collateral.

(5) Holdings of equity and other participations, except where deducted from own funds, shall be assigned a risk weight of 100%.

(6) Gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities shall be assigned a 0% risk weight.

(7) In the case of asset sale and repurchase agreements and outright forward purchases, the risk weight shall be that assigned to the assets in question and not to the counterparties to the transactions.

(8) Where a bank provides credit protection for a number of exposures under terms that the nth default among the exposures shall trigger payment and that this credit event shall terminate the contract, and where the product has a credit assessment from an eligible credit rating agency, the risk weights prescribed in the relevant provisions of the Banking Act for securitization positions shall be assigned. If the product is not rated by an eligible credit rating agency, the risk weights of the exposures included in the basket will be aggregated, excluding n-1 exposures, up to a maximum of 1,250 % and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted exposure amount. The n-1 exposures to be excluded from the aggregation shall be determined on the basis that they shall include those exposures each of which produces a lower risk-weighted exposure amount than the risk-weighted exposure amount of any of the exposures included in the aggregation.

Rules for the use of credit assessments of eligible credit rating agencies

Article 34

(1) For the purpose of including credit assessments in the calculation of risk-weighted exposure amounts using the standardized approach for credit risk, a bank may nominate one or more eligible credit rating agencies ("a nominated credit rating agency") the credit assessments of which shall be used to determine the risk-weighted exposure amounts. A bank shall apply the rules for the use of credit assessments of credit rating agencies in accordance with paragraphs (2) to (19).

(2) A bank shall not nominate an eligible credit rating agency that is its subsidiary or parent undertaking.

(3) A bank shall use only solicited and unsolicited credit assessments for central governments and central banks.

(4) The use of credit assessments by a bank shall be continuous and consistent over time. Where a bank uses credit assessments produced by an eligible credit rating agency or an export credit agency for a certain class of exposures, it shall use these credit assessments consistently for all exposures belonging to that class. Credit assessments shall not be used selectively with the purpose of achieving reduced minimum capital requirements.

(5) A bank can only use credit assessments that take into account all amounts both in principal and in interest owed to it.

(6) If only one credit assessment is available for an exposure, that credit assessment shall be used to determine the risk weight for that exposure.

(7) If two credit assessments are available for an exposure and the two correspond to different risk weights, the higher risk weight shall be assigned

(8) If more than two credit assessments are available for an exposure, the two assessments generating the two lowest risk weights shall be referred to. If the two lowest risk weights are different, the higher risk weight shall be assigned. If the two lowest risk weights are the same, that risk weight shall be assigned.

(9) Credit assessments assigned to subsidiaries or parent undertakings of a nominated credit rating agency shall not be used for the purpose of calculating capital requirements.

(10) Where a credit assessment exists for a specific issuing programme or other instrument to which the exposure belongs, this credit assessment shall be used to determine the risk weight to be assigned to that exposure.

(11) Where no directly applicable credit assessment exists for a certain exposure, but a credit assessment exists for a specific issuing programme or other instrument to which the exposure does not belong or a general credit assessment exists for the issuer, then that credit assessment shall be used if:
a) it produces a higher risk weight than would otherwise be the case; or
b) it produces a lower risk weight and the exposure in question ranks pari passu or senior in all respects to the specific issuing programme or other instrument or to senior unsecured exposures of that issuer, as relevant.

(12) Paragraphs (10) and (11) are not to prevent the application of Article 29.

(13) Credit assessments for issuers within a corporate group cannot be used as the credit assessment for another issuer within the same corporate group.

(14) Short-term credit assessments may only be used for exposures to institutions and corporates.

(15) Short-term credit assessments shall only apply to the exposure the short-term credit assessment refers to, and it shall not be used to derive risk weights for any other exposures, except for the cases set out in paragraphs (16) and (17).

(16) If a short-term claim is assigned a 150% risk weight, then all unrated unsecured exposures on that obligor whether short-term or long-term shall also be assigned a 150% risk weight.

(17) If a short-term claim is assigned a 50% risk weight, no unrated short-term exposure shall be assigned a risk weight lower than 100%.

(18) A credit assessment that refers to an exposure denominated in the obligor's domestic currency cannot be used to derive a risk weight for another exposure on that same obligor that is denominated in a foreign currency.

(19) For the purposes of this Decree, 'solicited credit assessment' means a credit assessment that meets the following conditions:
a) the credit assessment was initiated at the request of the assessed entity;
b) payment for the credit assessment has been made;
c) the assessed entity cooperated in the assessment process.

Article 35

(1) For the purpose of including credit assessments in the calculation of risk-weighted exposure amounts using the standardized approach for credit risk, a bank may nominate one or more eligible credit rating agencies (hereinafter a "nominated rating agency for securitization positions") the credit assessments of which shall be used to determine the risk-weighted exposure amounts for the purpose of assigning risk weights to securitization positions. A bank shall apply the

rules for the use of credit assessments of eligible credit rating agencies in respective of securitization positions in accordance with paragraphs (2) to (7).

(2) To be used for the purposes of calculating risk-weighted exposure amounts for securitization positions, a credit assessment shall comply with the following conditions:
a) there shall be no mismatch between the types of payments reflected in the credit assessment and the types of payment to which the bank is entitled under the contract giving rise to the securitization position in question;
b) the credit assessment shall be available publicly to the market. Credit assessments are considered to be publicly available only if they are published and they are included in the transition matrix of the nominated credit rating agency in respect of securitization positions. Credit assessments that are made available only to a limited number of entities shall not be considered to be publicly available.

(3) Notwithstanding the procedures set out in paragraphs (5) to (7), the use of credit assessments for a bank's securitization positions shall be consistent. Credit assessments shall not be used selectively.

(4) Notwithstanding paragraphs (5) and (6), a bank may not use credit assessments of a nominated credit rating agency in some tranches and credit assessments of another credit rating agency in other tranches within the same structure.

(5) Where two credit assessments are available for a securitization position and the two correspond to different risk weights, the higher risk weight shall be assigned.

(6) If more than two credit assessments are available for an exposure, the two assessments generating the two lowest risk weights shall be referred to. If the two lowest risk weights are different, the higher risk weight shall be assigned. If the two lowest risk weights are the same, that risk weight shall be assigned.

(7) Where, for the purposes of credit risk mitigation under this Decree, eligible credit protection is provided directly to the securitization special-purpose entity, and that protection is reflected in the credit assessment of a securitization position, the risk weight associated with that credit assessment may be used. The credit assessment shall not be recognized if the protection is not eligible for that purpose, nor if the protection is not provided to the securitization special-purpose entity but rather directly to a securitisation position.

Conditions for recognizing the eligibility of credit rating agencies in accordance with Article 32(5) and (6) of the Banking Act

Article 36

(1) To obtain the prior approval of the National Bank of Slovakia mentioned in Article 32 (5) and (6) of the Banking Act, a credit rating agency and its credit assessment methodology must meet the conditions set out in paragraphs (2) to (23).

(2) A rating agency shall have procedures and policies in place so as to ensure that the given methodology for assigning credit assessments is, in respect of the formulation and issuance of credit assessments, applied at least consistently across the respective group of assets broken down by types of counterparties, across its subgroups broken down by the industry in which the counterparties operate, and across different geographic regions.

(3) The credit assessment methodology shall reflect all material factors affecting the creditworthiness of the assessed entity.

(4) The credit assessment methodology for different types of companies, institutions or markets shall take into account individual factors, while the core factors identified in the main methodology for the respective market shall be assessed simultaneously.

(5) The accuracy of the credit assessment methodology shall be supported with statistical evidence clearly demonstrating the accuracy and soundness of credit assessments issued in the past. Quantitative evidence, such as studies of defaults, transition matrices and the differentiation capacity of the credit assessment methodology shall demonstrate the robustness, consistency and forecasting accuracy of the credit assessment over time within different market segments. Procedures shall be in place to ensure that any systemic rating errors or inaccuracies revealed by back-testing are corrected and that the corrections are reflected in the credit assessment methodology. Consistency shall mean that any two assessed entities with identical creditworthiness will be assigned the same rating regardless of who assesses them.

(6) A credit assessment methodology shall be free from any external influences that could affect the credit assessment.

(7) The independence of a credit assessment methodology shall be assessed according to factors such as the following:
a) ownership and organization structure of the credit rating agency;
b) financial resources of the credit rating agency;
c) staffing and expertise of the credit rating agency;
d) corporate governance of the credit rating agency.

(8) A credit rating agency shall have in place, monitor and successfully apply internal procedures to ensure that all credit assessments are assigned in consistent and objective manner, especially in situations where a conflict of interest could arise and objectivity and independence could be jeopardized.

(9) A credit rating agency shall have mechanisms in place, such as regulations, procedures, a fee policy, a remuneration policy, corporate governance rules and a code of conduct, all in written form, which make it possible to identify existing and potential conflicts of interest and to introduce appropriate measures to prevent, manage and eliminate them so that that they do not jeopardize the independence, objectivity and quality of the credit assessment.

(10) A credit rating agency shall demonstrate that it has in place and uses adequate preventive measures to ensure its independence in respect of ownership structure and to prevent the objectivity of the credit assessment process from being jeopardized by external influences.

(11) A credit rating agency shall demonstrate that its organizational structure separates credit assessment activities in their operational, personnel and, where appropriate, legal aspects from the other activities and services which it performs and offers such that could cast doubt on the objectivity of its credit assessments.

(12) A credit rating agency shall demonstrate that it has in place and uses adequate preventive measures to ensure its financial independence from its customers.

(13) As regards its staffing and expertise, a credit rating agency shall demonstrate that its employees possess the qualifications and experience needed to perform activities related to the

credit assessment process, and, in particular, that at least one person involved in decisions related to the assigning of credit assessments has worked for a minimum of three years' as a credit assessment analyst or in a similar position, for example, a banking analyst. A credit rating agency shall have sufficient resources in order to carry out consistent credit assessments and credit assessment reviews and to ensure frequent contact with the assessed entity, where so required by the credit assessment methodology.

(14) A credit rating agency shall have in place an independent internal audit function or similar function that serves the same purpose and perform the same tasks.

(15) In order to demonstrate its independence through transparency and market oversight, a rating agency shall consider disclosing situations where a conflict of interest has arisen or could arise and disclosing the mechanisms put in place to identify, prevent, manage and eliminate any conflict of interests.

(16) A credit assessment methodology and credit assessments shall be subject to ongoing control and review and shall be modified to reflect changes in market conditions; the assessments shall also be adjusted for changes in the financial position of the assessed entity. Such a review shall be carried out after any event which could affect the credit assessment, or at least once a year.

(17) A credit rating agency shall have procedures and policies in place so as to ensure that its ratings remain appropriate during different time periods and under different market conditions. These shall reliably recognize changes in the conditions which the assessed entity faces and which have sufficient potential to result in a change to the assigned credit assessment. At the same time, they shall ensure that the credit assessment is reviewed and modified as soon as possible after any such change occurs.

(18) A rating agency shall demonstrate that it has been performing back-testing on previously assigned credit assessments for at least one year. Such back-testing shall be performed separately for each market segment for which the credit rating agency has applied to be recognized as eligible.

(19) A credit rating agency shall, upon request, submit evidence of the regularity of its credit assessment reviews to the National Bank of Slovakia.

(20) A credit rating agency shall, upon request, inform the National Bank of Slovakia of the scope of its contacts with the senior management of the entities which it rates.

(21) A credit rating agency shall inform the National Bank of Slovakia of any material changes in the methodology it uses for assigning credit assessments.

(22) A credit rating agency shall ensure that the principles of the methodology for the formulation of its credit assessments are publicly available in order that the justification of its credit assessments may be verified.

(23) A credit rating agency shall promptly disclose any changes in the principles of its methodology for assigning credit assessments.

Article 37

(1) To obtain the prior approval of the National Bank of Slovakia mentioned in Article 32 (5) and (6) of the Banking Act, a credit rating agency and its credit assessment methodology must

meet the conditions set out in paragraphs (2) to (5). A credit rating agency shall meet the requirement for credibility and market acceptance where it demonstrates that its individual credit assessments are recognized by their users in the market as credible and reliable.

(2) Credibility shall be demonstrated and assessed according to factors such as the following:
a) market share of the credit rating agency;
b) revenues generated by the credit rating agency, and more in general financial resources of the credit rating agency;
c) whether there is any pricing on the basis of the credit assessment; and
d) at least two banks state that they use the credit rating agency's individual credit assessment for bond issuing and/or assessing credit risks.

(3) Credit assessments shall be publicly accessible at equivalent terms at least to all entities that use the credit assessments in the calculation of their capital requirements.

(4) Credit assessments are available to non-domestic entities on equivalent terms as to domestic entities having a legitimate interest in these credit assessments.

(5) After assigning a new credit assessment or revising an earlier credit assessment, a credit rating agency shall confirm to the following that a complete and up to date list of its published credit assessments is made available to:
a) all banks, where the credit rating agency does not require subscribers to pay an access charge for the credit assessment;
b) all subscribers that pay for access to the credit assessment of the relevant market segments.

Article 38

For the purpose of assigning risk weights to securitization positions, the requirements for a credit rating agency, its assessment methodology and the credibility and transparency of its credit assessments must be met where the credit rating agency demonstrates its fulfilment of the requirements for the standardized approach for credit risk as set out in Article 36 and 37 and requirements for expertise in the field of securitization.

Article 39

(1) An application for the recognition, modification or termination of the eligibility of a credit rating agency, submitted by the credit rating agency to the National Bank of Slovakia in order to obtain the prior approval of the National Bank of Slovakia referred to in Article 32 (5) and (6) of the Banking Act and for the purpose of calculating capital requirements, shall be clear and easily analysable so as to enable the National Bank of Slovakia to:
a) assess whether the requirements laid down by this Decree are met;
b) assess whether the applicant employs processes and procedures to ensure that its credit assessments meet the standards and requirements laid down by this Decree;
c) assess whether the applicant assigns credit assessments of a sufficiently high quality, consistency and robustness and whether these are sufficiently stable to be used for the calculation of capital requirements;
d) assign the applicant's rating grades to the credit quality steps.

(2) The application mentioned in paragraph (1) shall be submitted in one counterpart, in paper and electronic form, and in either the Slovak, Czech or English language.

(3) The application mentioned in paragraph (1) may be submitted at the individual or group level. In the case of a group-level submission, the applicant shall for the purposes of this Decree be considered to comprise the whole group of rating agencies included in the application, in order that the submitted information relates to all the credit rating agencies included in the application and not only to the credit rating agency that submits the application.

(4) If the application mentioned in paragraph (1) is submitted at the group level, the credit rating agency may only include entities which are its subsidiaries. The rating grades of these entities must be identical in respect of the creditworthiness of the assessed entity, regardless of the geographic location where the credit assessment was assigned. A credit rating agency shall demonstrate that all entities stated in the application use the same procedures, policies and principles in their assessment methodology.

(5) For the purpose of calculating risk-weighted exposure amounts using the standardized approach for credit risk, the principles set out in paragraphs (6) to (13) shall be applied when assigning rating grades to credit quality steps.

(6) For the purpose of using credit assessment within the standardized approach for credit risk and for credit assessments of securitization positions, the assignment to credit quality steps shall be carried out separately.

(7) In order to differentiate between the relative degrees of risk expressed by each credit assessment, the following shall be taken into account:
a) quantitative factors, such as three-year cumulative default rates and the long-term default rate, and in particular the ten-year average of the three-year default rate associated with individual credit assessments and, for recently established credit rating agencies and for credit rating agencies that have compiled only a short record of default data, an estimate of the long-term default rate associated with all items assigned the same credit assessment;
b) qualitative factors, such as the pool of issuers that the credit rating agency covers, the range of assessments that the credit rating agency assigns, each credit assessment meaning, the credit rating agency's definition of default.

(8) A three-year cumulative default rate shall be calculated from the sum of all defaults within the relevant three-year period in respect of all entities in the respective segments which are assigned a credit assessment within the respective rating grade.

(9) Default rates shall be presented for each credit assessment in comparison with a benchmark according to paragraph (11) that is built on the basis of default rates experienced by other credit rating agencies on a population of issuer which are believed to present an equivalent level of credit risk.

(10) If the default rates experienced for credit assessment of a credit rating agency are materially and systematically higher than the benchmark in paragraph (11), the credit rating agency shall notify the National Bank of Slovakia of this fact.

(11) The ten-year average of three-year cumulative default rates and the three-year cumulative default rates have the following benchmarks:

Table 14

Credit assessment: Standard&Poor's Moody's	AAA – AA Aaa – Aa	A A	BBB Baa	BB Ba	B B
Benchmark for the ten-year average	0.10%	0.25%	1.00%	7.50%	20.00%

of three-year cumulative default rates					

Table 15

Credit assessment: Standard&Poor's Moody's	AAA – AA Aaa – Aa	A A	BBB Baa	BB Ba	B B
Monitoring benchmark for three-year cumulative default rates	0.8%	1.0%	2.4%	11.0%	28.6%
Warning benchmark for three-year cumulative default rates	1.2%	1.3%	3.0%	12.4%	35.0%

(12) An eligible credit rating agency shall allow the National Bank of Slovakia to inspect whether it fulfils at all times the requirement laid down in this Decree. For this purpose, any information which is material to the conduct of such a comprehensive inspection and arises after the previous inspection shall be submitted to the National Bank of Slovakia every five years.

(13) In order that the assigning of credit assessments to credit quality steps may be reassessed and examined, a credit rating agency shall submit to the National Bank of Slovakia the cumulative default rates and other data related to such assigning, as mentioned in paragraph (12).

Article 40

(1) The application mentioned in paragraph 39(1) shall include the following:
a) the business name and registered office of the applicant;
b) the identification number of the applicant;
c) information on whether the application is submitted at the individual or group level;
d) if the application is submitted at the group level, a list of the credit rating agencies included in the group, including the business name, registered office and identification number of each;
e) the name of at least one contact person, the contact information and this person's area of responsibility;
f) a structural summary of the consolidated group of which the applicant is a member, including in particular:
1. information on the ownership relations, including a list of the shareholders that own more than 10% of the applicant's capital;
2. the subsidiaries of the applicant;
3. a list and description of the activities performed by the applicant;
4. the number of people employed by applicant;
5. the total amount and percentage of the applicant's revenues from all customers that individually account for more than 5% of the applicants total revenues;
6. information demonstrating the financial stability of the applicant, in particular financial statements for the last three accounting periods and a forecast of the applicant's financial position for the next three accounting periods, or a statement on the applicant's financial stability provided by its parent undertaking;
g) a list of the countries in which the applicant operates;
h) a list and definition of the market segments for which the applicant is applying for recognition of its credit assessments;
i) information on the types of credit assessments which the applicant assigns, in particular, whether it assigns solicited or unsolicited, or solicited and unsolicited, credit assessments and whether it assigns credit assessments with or without cooperation from the assessed entity, and definitions of the types of credit assessments;
j) information on whether the applicant is applying to have credit assessments recognized also for the purpose of calculating a bank's risk-weighted exposure amounts for securitization positions;

k) a list of the Member States in which the applicant has requested or plans to request the respective supervisory authority to recognize its credit assessment, or has already had its credit assessments recognized by this authority, for the purpose of calculating capital requirements;
l) a list of documents submitted for the purpose of meeting requirements, including specification of those requirements.

(2) Annexes to the application mentioned in Article 39(1) shall include the following documents:
a) a declaration of at least one bank that is authorized by the National Bank of Slovakia to perform activities set out under a separate law that it will use the applicant's credit assessment in the calculation of capital requirements; the National Bank of Slovakia may dispense with the requirement for the submission of this document if it has received from at least one bank a written declaration of this bank's intention to use the applicant's credit assessment in the calculation of capital requirements;
b) a declaration by the applicant that it complies with a code of conduct that is comparable with the standards recognized in the market or that is in accordance with internationally recognized standards;
c) a description of the relevant assessment processes especially for each market segment or securitization position and for each geographic region in respect of which the applicant is applying for recognition of its credit assessments;
d) an explanation of how the applicant ensures that its methodology for assigning credit assessments is accurate, systematic, continuous and subject to validation based on historical experience;
e) a description of the assessment and process methodology, including in particular:
    1. an explanation of the processes that ensure consistent use of the methodology in the assigning of all credit assessments;
    2. the role of credit assessment committees and the internal regulations under which they operate;
    3. the extent of inputs from assessed entities and access to information that is not publicly available;
f) a description of how the methodology used in the assigning of credit assessments is determined, adopted and reviewed;
g) a description of quantitative inputs, such as the key variable indicators, data sources, quantitative techniques and the scope of inputs from assessed entities for each market segment or securitization position;
h) a description of the qualitative inputs, such as the strategy and business plans of the assessed entity and its management for each market segment or securitization position;
i) a description of those differences in the principal methodologies for the assignment of credit assessments which arise from different geographic regions;
j) a description of the methodology used for the validation of credit assessment systems' adequacy, consistency and capacity to differentiate, including details of the results and conclusions arising from these analyses;
k) an explanation of how the applicant ensures that the methodology for assigning credit assessments is independent from economic and political influences;
l) a description of the processes designed to ensure proper and objective assessments, in particular, the mechanisms for identifying, preventing, managing and eliminating existing or potential conflicts of interest;
m) a description of the existing credit protection and guarantees used for the assessment of the applicant's shareholders, subsidiaries or other companies belonging to the applicant's group;
n) a declaration on the existence of an internal audit function and effective adoption of internal regulations, including an explanation and description of them;

o) a declaration that members of the assessment teams and committees have the required expertise and experience in assigning credit assessments, and that this expertise is maintained and improved through an appropriate training programme;
p) a description of the main features of the applicant's code of conduct;
q) a declaration that the remuneration policy for employees involved in the credit assessment process does not affect the independence and objectivity of the credit assessments, as well as a declaration that the remuneration of an analyst is not related to the credit assessment decision, to issuers' fees or to revenues from investors and subscribers;
r) a description of the applicant's fee policy;
s) a declaration that persons involved in the credit assessment process do not have any other business relationship with assessed entities such that could jeopardize the independence and quality of a credit assessment;
t) a declaration that credit assessments are subject to continuous review and reassessment on at least an annual basis;
u) information on the reviews of credit assessments, such as the procedure, main characteristics, scope and frequency of reviews, a list of persons participating in the reviews, a description of the main stages in the monitoring of credit assessments, information on the methods and procedures for updating data used in the assessment process, information from assessed entities which is taken into account in this regard, and information on the functionality of the automatic warning system within reviews of credit assessments;
v) a summary of the results of credit assessment reviews;
x) a declaration that the applicant has for at least one year been applying a functioning system of back-testing to its credit assessments;
y) a description of the internal regulations which ensure that both the National Bank of Slovakia and the bank with an interest in the applicant's credit assessments are promptly informed of any material changes in the methodologies employed by the applicant in the assessment process;
z) a description of how, where, for whom, in which language and under what conditions the applicant's methodologies are employed in the assessment process and any amendments or supplementations are disclosed and made available;
za) a declaration and demonstration that the applicant's methodologies for assigning credit assessments are disclosed to all potential users under the same conditions;
zb) examples of the main methodologies used to assess each market segment and securitization position;
zc) a declaration and demonstration that the credit assessments are recognized by their users in the market as credible and reliable, and the applicant's own opinion on the credit assessments;
zd) information on the applicant's market share, the number of entities assessed by the applicant, how long the applicant has been operation in market, and other information essential to assessing the applicant's credibility in the market;
ze) a description of how, where, for whom, in which language, under what conditions, and with what additional information individual credit assessments are disclosed or accessible, including a description of the procedures followed by the applicant in regard to such disclosure;
zf) a declaration and demonstration that the applicant's individual credit assessments are accessible under the same conditions to any banks, foreign banks or other entities which have an interest in them;
zg) an explanation of the applicant's policy concerning the disclosure of information on individual credit assessments according to type, and an explanation of differences in the structure and content of the information disclosed or provided to customers, in the case of solicited or unsolicited credit assessments or credit assessments assigned with or without cooperation from the assessed entity;
zh) information on the number of unsolicited credit assessments, or any credit assessments assigned without the cooperation of the assessed entity, and their ratio to the total number of credit assessments;
zi) the applicant's definition of default;

zj) information on the three-year cumulative default rates associated with each rating grade, but at least the two most current cumulative default rates, if available;
zk) the figure for the ten-year average of the three-year cumulative default rates, and if this figure is not available, the expected long-term default rate;
zl) a description of the methodology for the calculation of cumulative default rates;
zm) the target default rate for each rating grade, if used;
zn) the level of statistical significance of the default rates;
zo) a description of the dynamic characteristic of the credit assessment methodology;
zp) an evaluation of the credit assessment meaning represented by a specific rating grade;
zq) information on the time horizon of credit assessments;
zr) the transmission matrices used;
zs) a description of the geographic coverage of the credit assessments;
zt) an internal proposal for the assignment of its long-term and short-term rating grades to credit quality steps, including the rationale of such assignment. Where the applicant rates collective investment undertakings and the cumulative default rates of the credit assessments for the collective investment undertakings are materially different from other cumulative default rates, a separate proposal for the assignment of rating grades to credit quality steps, including rationale, shall be submitted in respect of these collective investment undertakings.

(3) Annexes to the application mentioned in Article 39(1) for assessments in respect of securitization positions shall additionally include the following:
a) the definitions of default and loss given default which are stipulated by the applicant and are used to calculate default rates and to determine loss rates;
b) information on the performance of credit assessments, including an explanation of the main features of the credit assessments, such as the reasons determining the time horizon over which the study was produced and how modified or retracted credit assessments affected the study of the credit assessments' performance;
c) performance-related data;
d) an internal proposal for the assignment of its long-term and short-term rating grades to credit quality steps, separately for the standardized approach for credit risk and the internal ratings based approach, including the rationale of such assignment. When making an assignment, a distinction shall be drawn between the relative grades of credit risk expressed by each credit assessment; quantitative factors such as default rate or loss rate shall be taken into account, as shall quantitative factors, including the scope of the transactions assessed by the applicant and the credit assessment meaning.

(4) Where an eligible credit rating agency applies to change any facts on the basis of which it was recognized as eligible for the calculation of capital requirements, the application shall include an annex comprising the materials and relevant documentation that demonstrate or describe the respective change.

(5) If an eligible credit rating agency applies to terminate its eligibility for the calculation of capital requirements, it shall submit only an application containing the grounds for the termination and the date from which it requests the termination of its eligibility.

CHAPTER THREE
INTERNAL RATINGS BASED APPROACH

The calculation of risk-weighted exposure amounts using the internal ratings based approach

Article 41

(1) For the purposes of the internal ratings based approach:
a) 'probability of default (PD)' means the probability that a bank's counterparty will default in the meaning of Article 73 within one year after signing the contract;
b) 'loss given default (LGD)' means the ratio of the loss on an exposure due to the default of a bank's counterparty in accordance with Article 73 to the amount outstanding at default;
c) 'expected loss (EL)' means the ratio of the loss expected on an exposure from a default of the bank's counterparty in accordance with Article 73 or dilution of the exposure's monetary value over a one-year period to the amount outstanding at default;

(2) Unless otherwise provided by this Decree, the input parameters for a calculation based on the internal ratings based approach – probability of default, loss given default, and maturity – shall, for the purposes of calculating risk-weighted exposures using that approach, be determined as set out in Articles 49 to 52 and the exposure value shall be determined as set out in Articles 53 to 55.

(3) The risk-weighted exposure amount for each exposure shall be calculated in accordance with the formulae set out in Articles 42 to 48.

Article 42

(1) Risk-weighted exposure amounts for exposures to corporates, institutions, central governments and central banks shall be calculated as follows:
a) Risk-weighted exposure amount = $RW \times EAD$.
b) If the exposure meets the requirements set out in Article 103 and Article 119, the following formula may be used:
risk-weighted exposure amount = $RW \times EAD \times (0.15 + 160 PD_{pp})$
where:
PD_{pp} is the PD of the protection provider;
RW shall be calculated using the relevant risk weight formula for the exposure, the PD of the obligor and the LGD of a comparable direct exposure to the protection provider.
The maturity factor *(b)* shall be calculated using the lower of the PD of the protection provider and the PD of the obligor.
c) For their purchased corporate receivables, banks shall comply with the minimum requirements set out in Article 87(2) and (3). For purchased corporate receivables that comply in addition with the requirements set out in Article 43(1)(c), and where it would be unduly burdensome for a bank to use the risk quantification standards for corporate exposures as set out in Articles 56 to 94 for these receivables, the risk quantification standards for retail exposures as set out in Articles 56 to 94 may be used.
d) For purchased corporate receivables, refundable purchase discounts, funded credit protection or partial guarantees that provide first-loss protection for default losses, dilution losses, or both, may be treated as first-loss positions under the securitization framework for the internal ratings based approach.

(2) The risk weight (RW) for exposures to corporates, institutions, central governments and central banks shall be calculated as follows:
a) Where the calculation of the RW does not follow the procedure in subparagraphs (b) to (f), the RW shall be calculated according to the formula:

$$RW = 12.5 \times 1.06 \times \left(LGD \times N\left(\frac{1}{\sqrt{1-R}} \times G(PD) + \sqrt{\frac{R}{1-R}} \times G(0.999) \right) - PD \times LGD \right) \times \frac{1 + (M - 2.5) \times b}{1 - 1.5b}$$

where:

$N(x)$ denotes the cumulative distribution function for a standard normal random variable (i.e. the probability that a normal random variable with mean zero and variance of one is less than or equal to x);
$G(z)$ denotes the inverse cumulative distribution function for a standard normal random variable (i.e. the value x such that $N(x) = z$).
b) For $PD = 0$, RW shall be 0.
c) For $PD = 1$, RW shall be 0 in the case of defaulted exposures where a bank applies the LGD values set out in Article 50.
d) For $PD = 1$, RW shall be $\text{Max}\{0, 12.5 \times (LGD\text{-}EL_{BE})\}$ in the case of defaulted exposures where a bank uses own estimates of LGDs:
where EL_{BE} shall be the bank's best estimate of expected loss for the defaulted exposure according to Article 77(8).
e) For specialized lending exposures in respect of which the bank cannot demonstrate that its PD estimates meet the minimum requirements set out in Articles 56 to 94, it shall assign risk weights to these exposures according to Table 16, as follows.

Table 16

Residual maturity	Category 1	Category 2	Category 3	Category 4	Category 5
Less than 2.5 years	50%	70%	115%	250%	0%
Equal or more than 2.5 years	70%	90%	115%	250%	0%

According to Table 16, a bank may generally assign preferential risk weights of 50% to exposures in category 1, and a 70% risk weight to exposures in category 2, provided that the bank's underwriting characteristics and other risk characteristics are substantially strong for the relevant category. In assigning risk weights to specialized lending exposures, a bank shall take into account the following factors: financial strength, political and legal environment, transaction and/or asset characteristics, strength of the sponsor and developer, including any public private partnership income stream, and security package.
f) Where a bank provides credit protection for a number of exposures under terms that the nth default among the exposures shall trigger payment and that this credit event shall terminate the contract, if the product has an external credit assessment from an eligible credit rating agency the risk weights set out in the relevant provisions of the Banking Act will be applied. If the product is not rated by an eligible credit rating agency, the risk weights of the exposures included in the basket will be aggregated, excluding n-1 exposures where the sum of the expected loss amount multiplied by 12.5 and the risk-weighted exposure amount shall not exceed the nominal amount of the protection provided by the credit derivative multiplied by 12.5. The n-1 exposures to be excluded from the aggregation shall be determined on the basis that they shall include those exposures each of which produces a lower risk-weighted exposure amount than the risk-weighted exposure amount of any of the exposures included in the aggregation.

(3) The correlation *(R)* for exposures to exposures to corporates, institutions, central governments and central banks shall be calculated as follows:

a) $$R = 0.12\frac{1-e^{-50PD}}{1-e^{-50}} + 0.24\left(1-\frac{1-e^{-50PD}}{1-e^{-50}}\right)$$

b) For exposures to companies where the total annual sales for the consolidated group of which the firm is a member is less than EUR 50 million, a bank may use the following formula for the calculation of risk weights for corporate exposures:

$$R = 0.12\frac{1-e^{-50PD}}{1-e^{-50}} + 0{,}24\left(1-\frac{1-e^{-50PD}}{1-e^{-50}}\right) - 0.04\left(1-\frac{S-5}{45}\right)$$

In this formula S is expressed as total annual sales in millions of euros with EUR 5 million <= S <= EUR 50 million. Reported sales of less than EUR 5 million shall be treated as if they were equivalent to EUR 5 million. For purchased receivables the total annual sales shall be the weighted average by individual exposures of the pool. A bank shall substitute total assets of the consolidated group for total annual sales when total annual sales are not a meaningful indicator of firm size and total assets are a more meaningful indicator than total annual sales.

(4) For exposures to corporates, institution, central governments and central banks, maturity factor $b = (0.11852 - 0.05478\ln(PD))^2$.

Article 43

(1) Risk-weighted exposure amounts for retail exposures shall be calculated as follows:
a) Risk-weighted exposure amount = $RW \times EAD$.
b) The risk weighted exposure amount for each exposure to small and medium-sized entities as defined in Article 33(9) of the Banking Act which meets the requirements set out in Article 11(2) may be calculated according to Article 42(1)(b).
c) To be eligible for the retail treatment, purchased receivables shall comply with the minimum requirements set out in Article 87 and the following conditions:

1. the bank has purchased the receivables from unrelated, third-party sellers, and its exposure to the obligor of the receivable does not include any exposures that are directly or indirectly originated by the bank itself;
2. the purchased receivables shall be generated on an arm's-length basis between the seller and the obligor. As such, inter-company accounts receivables and receivables subject to contra-accounts between firms that buy and sell to each other are ineligible;
3. the purchasing bank has a claim on all proceeds from the purchased receivables or a pro rata interest in the proceeds; and
4. the portfolio of purchased receivables is sufficiently diversified.

d) For purchased receivables, refundable purchase discounts, funded credit protection or partial guarantees that provide first-loss protection for default losses, dilution losses, or both, may be treated as first-loss positions under the securitization framework for the internal ratings based approach.
e) For hybrid pools of purchased retail receivables where the purchasing bank cannot separate exposures secured by real estate and qualifying revolving retail exposures from other retail exposures, the retail risk weight function producing the highest capital requirements for those exposures shall apply.

(2) The risk weight *(RW)* for retail exposures shall be calculated as follows:
a) Where the calculation of RW does not follow the procedure in subparagraph (b), RW shall be calculated according to the formula:

$$RW = 12.5 \times 1.06 \times \left(LGD \times N\left(\frac{1}{\sqrt{1-R}} \times G(PD) + \sqrt{\frac{R}{1-R}} \times G(0.999)\right) - PD \times LGD\right)$$

where:

$N(x)$ denotes the cumulative distribution function for a standard normal random variable (i.e. the probability that a normal random variable with mean zero and variance of one is less than or equal to x);
$G(z)$ denotes the inverse cumulative distribution function for a standard normal random variable (i.e. the value x such that $N(x) = z$).
b) For $PD = 1$ (defaulted exposure), RW shall be $\text{Max}\{0, 12.5 \times (LGD\text{-}EL_{BE})\}$;
where EL_{BE} shall be the bank's best estimate of expected loss for the defaulted exposure according to Article 77(7).

(3) The correlation R for retail exposures shall be calculated as follows:
a) Where the calculation of R does not use the approach in subparagraphs (b) or (c), the value of R shall be calculated using the formula:

$$R = 0.03 \frac{1 - e^{-35PD}}{1 - e^{-35}} + 0{,}16 \left(1 - \frac{1 - e^{-35PD}}{1 - e^{-35}} \right)$$

b) For retail exposures secured by real estate, a correlation (R) of 0.15 shall be used.
c) For qualifying revolving retail exposures, a correlation (R) of 0.04 shall be used.

(4) 'A qualifying revolving retail exposure' shall mean an exposure which meets the following conditions:
a) the exposure is to an individual;
b) the exposure is revolving and unsecured (with the exception of a collateralized credit facility linked to a current account), and to the extent it is not drawn is immediately and unconditionally cancellable by the bank. Collateral shall not be taken into account when calculating own estimates of loss given defaults;
c) the maximum exposure to a single individual in the sub-portfolio is EUR 100,000;
d) the bank can demonstrate that the use of the correlation of this point is limited to portfolios that have exhibited low volatility of loss rates, relative to their average level of loss rates, especially within the low PD bands.

Article 44

(1) For the purpose of calculating risk-weighted exposures, a bank may employ different approaches to different portfolios where the bank itself uses different approaches internally. Where a bank uses different approaches, it shall demonstrate to the National Bank of Slovakia that the choice is made consistently and is not determined in order to circumvent capital requirements.

(2) Risk-weighted exposure amounts may be attributed to equity exposures to ancillary services undertakings according to the treatment of other non credit-obligation assets.

(3) Risk-weighted exposure amounts for equity exposures may be calculated using the simple risk weight approach, as follows:
a) Risk-weighted exposure amount = $RW \times EAD$;
$RW = 190\%$ for private equity exposures in sufficiently diversified portfolios;
$RW = 290\%$ for exchange traded equity exposures;
$RW = 370\%$ for all other equity exposures.
b) Short cash positions and derivative instruments held in the non-trading book are permitted to offset long positions in the same individual stocks provided that these instruments have been explicitly designated as hedges of specific equity exposures and that they provide a hedge for at least another year. Other short positions are to be treated as if they are long positions with the

relevant risk weight assigned to the absolute value of each position. In the context of maturity mismatched positions, the method is the same as that for corporate exposures.
c) A bank may recognize unfunded credit protection obtained on an equity exposure in accordance with credit risk mitigation methods.

(4) Risk-weighted exposure amounts for equity exposures shall be calculated according to the PD/LGD approach, as follows:
a) risk-weighted exposure amounts shall be calculated according to the procedure laid down for corporates in Article 42(2)(a). If a bank does not have sufficient information to use the definition of default set out in Article 73, a scaling factor of 1.5 shall be assigned to the risk weights;
b) at the individual exposure level the sum of the expected loss amount multiplied by 12.5 and the risk-weighted exposure amount shall not exceed the exposure value multiplied by 12.5;
c) a bank may recognize unfunded credit protection obtained on an equity exposure in accordance with credit risk mitigation methods. This shall be subject to an LGD of 90% on the exposure to the provider of the hedge. For private equity exposures in sufficiently diversified portfolios, an LGD of 65% may be used. For these purposes the maturity shall be 5 years.

(5) The risk-weighted exposure amount for equity exposures according to the internal models approach shall be the potential loss on the bank's equity exposures as derived using internal value-at-risk models subject to the 99th percentile, one-tailed confidence interval of the difference between quarterly returns and an appropriate risk-free rate computed over a long-term sample period, multiplied by 12.5. The risk-weighted exposure amounts at the individual exposure level shall not be less than the sum of minimum risk-weighted exposure amounts required under the PD/LGD approach and the corresponding expected loss amounts multiplied by 12.5 and calculated on the basis of the PD values set out in Article 52(1)(a) and the corresponding LGD values set out in Article 52(2). A bank may recognize unfunded credit protection obtained on an equity position.

Article 45

Risk-weighted exposure amounts for other non credit-obligation assets shall be calculated as follows:
a) risk-weighted exposure amount = 100% $\times$EAD;
b) when the exposure is a residual value, it should be provisioned for each year, as follows:

$$\text{risk-weighted exposure amount} = \frac{1}{t} \times 100\% \times EAD$$

where t is the number of years of the lease contract term.

Article 46
Risk-weighted exposure amounts for dilution risk of purchased receivables

For the purpose of calculating risk-weighted exposure amounts of purchased receivables, risk weights shall be calculated according to the formula in Article 42(2)(b). The input parameters PD and LGD shall be determined as set out in Articles 49 to 52, the exposure value shall be determined as set out in Articles 53 to 55 and the maturity shall be 1 year. If a bank can demonstrate to the National Bank of Slovakia that dilution risk is immaterial, it need not be recognized.

Article 47

(1) Unless otherwise provided by this Decree, the input parameters for a calculation based on the internal ratings based approach – probability of default, loss given default, and maturity –

shall, for the purposes of calculating risk-weighted exposures using that approach, be determined as set out in Articles 49 to 53 and the exposure value shall be determined as set out in Articles 53 to 55.

(2) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach, the expected loss amount shall be calculated according to the following formula:
expected loss amount = $EL \times EAD$;
where EL is expected loss and EAD is exposure at default.

(3) The expected loss amounts for exposures to corporates, institutions, central governments and central banks shall be calculated as follows:
a) when the calculation of EL is not subject to subparagraphs (b) to (e), $EL = PD \times LGD$;
where: PD is probability of default and LGD is loss given default;
b) for defaulted exposures (PD = 1) where a bank uses own estimates of LGDs, $EL = EL_{BE}$, the bank's best estimate of expected loss for the defaulted exposure according to Article 77(8).
c) for exposures subject to the treatment set out in Article 42(1)(b), $EL = 0$.
d) the EL values for specialized lending exposures where a bank uses the methods set out in Article 42(2)(e) point 6 for assigning risk weights shall be assigned according to Table 17. Where the National Bank of Slovakia has authorized a bank generally to assign preferential risk weights of 50% to exposures in category 1, and 70% to exposures in category 2, the EL value for exposures in category 1 shall be 0%, and for exposures in category 2 shall be 0.4%.

Table 17

Residual maturity	Category 1	Category 2	Category 3	Category 4	Category 5
Less than 2.5 years	0%	0.4%	2.8%	8%	50%
Equal to or more than 2.5 years	0.4%	0.8%	2.8%	8%	50%

(4) The expected loss amounts for equity exposures shall be calculated as follows:
a) for equity exposures where the risk-weighted exposure amounts are calculated according to the simple approach (Article 44(3)), the EL values shall be the following:
$EL = 0.8\,\%$ for private equity exposures in sufficiently diversified portfolios;
$EL = 0.8\,\%$ for exchange traded equity exposures;
$EL = 2.4\,\%$ for all other equity exposures;
b) for equity exposures where the risk-weighted exposure amounts are calculated according to the PD/LGD approach (Article 44(4)), the expected loss amount shall be:
$EL = PD \times LGD$;
c) for equity exposures where the risk-weighted exposure amounts are calculated according to the internal models approach (Article 44(5)), the expected loss amount shall be:
$EL = 0$.

(5) For dilution risk of purchased receivables, the expected loss amount shall be: $EL = PD \times LGD$.

Article 48

The expected loss amounts calculated in accordance with Article 47(2), (3) and (5) shall be subtracted from the sum of value adjustments and provisions related to these exposures. Discounts on balance sheet exposures purchased when in default according to Article 53(1) shall be treated in the same manner as value adjustments. Expected loss amounts for securitized exposures and value adjustments and provisions related to these exposures shall not be included in this calculation.

Probability of default, loss given default and maturity

Article 49

The input parameters PD, LGD and maturity in the calculation of risk-weighted exposure amounts and expected loss amounts specified in Articles 41 to 48 shall be those estimated by the bank using an internal model in accordance with Articles 56 to 94 and subject to the provisions of Articles 50 to 55.

Article 50

(1) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, institutions, central governments and central banks, PD values shall be acquired or determined as follows:
a) the PD of an exposure to a corporate or an institution shall be at least 0.03%;
b) the PD of obligors in default shall be 100%;
c) a bank may recognize unfunded credit protection in the PD in accordance with this Decree;
d) a bank using own LGD estimates may recognize unfunded credit protection by adjusting PDs subject to Article 50(3);
e) for corporate receivables acquired by assignment in respect of which a bank cannot demonstrate that its PD estimates meet the minimum requirements set out in Articles 56 to 94, the PDs for these exposures shall be determined as follows:

1. for senior claims on corporate receivables acquired by assignment, the PD shall be the bank's estimate of EL divided by LGD for these receivables;
2. for subordinated claims on corporate receivables acquired by assignment, the PD shall be the bank's estimate of EL;
3. if the bank is permitted by the National Bank of Slovakia to use own LGD estimates for corporate exposures and it can decompose its EL estimates for purchased corporate receivables into PDs and LGDs, the PD estimate may be used;

f) for dilution risk of a bank's corporate receivables acquired by assignment, the PD shall be set equal to the EL estimate for dilution risk. If a bank is permitted to use own LGD estimates for corporate exposures and it can decompose its EL estimates for dilution risk of receivables acquired by assignment into PDs and LGDs, the PD estimate may be used.

(2) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, where a bank is not permitted by the National Bank of Slovakia to use own LGD estimates, it shall use the following LGD values:
a) senior exposures without funded credit protection: 45%;
b) subordinated exposures without funded credit protection: 75%;
c) for senior exposures in the form of corporate receivables acquired by assignment where the bank cannot demonstrate that its PD estimates are in accordance with Articles 56 to 94: 45%;
d) for subordinated exposures in the form of corporate receivables acquired by assignment where the bank cannot demonstrate that its PD estimates are in accordance with Articles 56 to 94: 100%;
e) for dilution risk of purchased corporate receivables: 75%;
f) covered bonds as defined in Article 29:12.5%.
In determining LGD values a bank may, in accordance with this Decree, recognize the effects of funded and unfunded credit protection.

(3) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, where a bank is permitted by the National Bank of Slovakia to use own LGD estimates and it can decompose its EL estimates into PDs and LGDs, the LGD value may be estimated; for dilution risk, the own LGD estimate may be calculated as an own estimate under conditions analogous to those mentioned in the sentence before the semicolon.

(4) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, institutions, central governments and central banks, a bank's recognition of unfunded credit protection may lead to an adjustment in PD and/or LGD estimates only if:
a) the bank is permitted to use own LGD estimates;
b) the requirements set out in Articles 56 to 94 are met;
c) approval for the aforementioned has been issued by the National Bank of Slovakia;
The respective exposure shall not be assigned an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the provider of the unfunded credit protection.

(5) For the purposes of Article 42(1)(b) and notwithstanding paragraphs (2) to (4), the LGD of a comparable exposure to the provider of credit protection shall either be the LGD for a comparable unhedged exposure to the respective provider of the unfunded credit protection, or the LGD for the exposure to the original obligor regardless of the effect of the credit protection; the former option shall only be taken where the nature of the credit protection or other relevant facts mean that, even if the unfunded credit protection is terminated prematurely and the originally hedged exposure is not subsequently repaid, it is possible to claim the outstanding liabilities from the original provider of the unfunded credit protection.

(6) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, institutions, central governments and central banks, where a bank is not permitted to use own LGD estimates, it shall assign a maturity *(M)* of six months to exposures arising from repurchase transactions or from securities or commodities lending or borrowing transactions, and 30 months for all other exposures.

(7) For the purpose of calculating risk-weighted asset amounts, a bank permitted to use own LGD estimates or own estimates of conversion factors for exposures to corporates, institutions, central governments and central banks shall calculate the maturity for each of these exposure as set out in subparagraphs (a) to (e) and subject to paragraphs (8) and (9). In no case shall the maturity be greater than five years:
a) for an instrument subject to a cash flow schedule, the maturity shall be calculated according to the following formula:

$$M = \max\left(1, \min\left(\sum_t t \times CF_t \Big/ \sum_t CF_t , 5\right)\right)$$

where CF_t denotes the cash flows (principal, interest payments and fees) contractually payable by the obligor in period t;
b) for derivatives subject to a master netting agreement, *M* shall be the weighted average residual maturity of the exposure, where *M* shall be at least 1 year. The notional amount of each exposure shall be used for weighting the maturity;
c) for exposures arising from fully or nearly-fully collateralized credit derivative transactions and fully or nearly-fully collateralized margin lending transactions which are subject to a master netting agreement in accordance with Article 99, *M* shall be the weighted average residual maturity of the transactions where *M* shall be at least 10 days. The notional amount of each transaction shall be used for weighting the maturity;
d) if a bank is permitted to use own PD estimates for corporate exposures, for the drawn amount under a master commitment to provide a credit or other payment, *M* shall equal the exposures' average maturity based on the master commitment, where *M* shall be at least 90 days. This same

value of M shall also be used for undrawn amounts under the master credit facility provided that the respective master agreement allows the bank to require prepayment of any exposures established thereunder and simultaneously authorized the bank to act to prevent a reduction in the market value of the respective exposure. If the master agreement does not allow for such actions, the value of *M* for undrawn amounts shall be calculated as the sum of the longest-dated potential exposure under the master agreement, where M shall be at least 90 days;
e) for any instrument other than those mentioned in this paragraph or when a bank is not in a position to calculate *M* as set out in subparagraph (a), *M* shall be the maximum remaining time (in years) that the obligor is permitted to take to fully discharge its contractual obligations, where M shall be at least 1 year;
f) for a bank using the internal model method set out in Article 14 to calculate the exposure values, *M* shall be calculated for exposures to which they apply this method and for which the maturity of the longest-dated contract contained in the netting set is greater than one year according to the following formula:

$$M = \min\left(\frac{\sum_{k=1}^{tk \le 1\,year} EffectiveEE_k * \Delta t_k * df_k + \sum_{tk > 1\,year}^{maturity} EE_k * \Delta t_k * df_k}{\sum_{k=1}^{tk \le 1\,year} EffectiveEE_k * \Delta t_k * df_k} ; 5 \right)$$

where:
df_k = the risk-free discount factor for future time period t_k and the remaining symbols are defined in Article 14.
Notwithstanding the first sentence, a bank that uses an internal model to calculate a one-sided credit valuation adjustment (CVA) may use, subject to the approval of the National Bank of Slovakia, the effective credit duration estimated by the internal model as *M*. Subject to paragraph (8), for netting sets in which all contracts have an original maturity of less than one year the formula in subparagraph (a) shall apply;
g) For the purposes of Article 42(1)(b), *M* shall be the effective maturity of the credit protection but at least 1 year.

(8) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, institutions, central governments and central banks, *M* shall be at least one-day for:
a) fully or nearly-fully collateralized derivatives, other than credit derivatives;
b) fully or nearly-fully collateralized margin lending transactions; and
c) repurchase transactions, securities or commodities lending or borrowing transactions;
provided that the documentation requires daily re-margining and daily revaluation and includes provisions that allow for the prompt liquidation of collateral in the event of default or failure to re-margin. This is without prejudice to paragraph (7).

(9) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for exposures to corporates, institutions, central governments and central banks, maturity mismatches shall be treated as specified in the provisions on credit risk mitigation.

Article 51

(1) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for retail exposures, PD values shall be acquired or determined as follows:
a) the PD of a retail exposure shall be at least 0.03%;
b) the PG of obligors or, where an obligation approach is used, of exposures in default shall be 100%;

c) for dilution risk of purchased receivables PD shall be set equal to EL estimates for dilution risk. If a bank can decompose its EL estimates for dilution risk into PDs and LGDs in a reliable manner, it may use its own PD estimate;
where a bank does not use own estimates of LGDs, it may, in accordance with paragraph (2) take into account the effects of unfunded credit protection. For dilution risk, where the bank does not use own estimates of LGDs, this shall be subject to compliance with the provisions on credit risk mitigation.

(2) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for retail exposures, own estimates of LGDs shall be calculated in accordance with Articles 56 to 94. For dilution risk of purchased receivables the LGD estimate will be reduced by 25%. If a bank can decompose its EL estimates for dilution risk of purchased receivables into PDs and LGDs in a reliable manner, it may use its own LGD estimate.

(3) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for retail exposures, a bank's recognition of unfunded credit protection may lead to an adjustment in PD and/or LGD estimates only if:
a) the requirements set out in Articles 84 to 86 are met;
b) approval for the aforementioned has been issued by the National Bank of Slovakia;
The respective exposure shall not be assigned an adjusted PD or LGD such that the adjusted risk weight would be lower than that of a comparable, direct exposure to the provider of the unfunded credit protection.

(4) For the purposes of Article 43(1)(b) and notwithstanding paragraph (3), the LGD of a comparable exposure to the provider of credit protection shall either be the LGD for a comparable unhedged exposure to the respective provider of the unfunded protection, or the LGD for the exposure to the original obligor regardless of the effect of the credit protection; the former option shall only apply where the nature of the credit protection or other relevant facts mean that, even if the unfunded credit protection is terminated prematurely and the originally hedged exposure is not subsequently repaid, it is possible to claim the outstanding liabilities from the original provider of the unfunded credit protection.

Article 52

(1) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for equity exposures subject to the PD/LGD method, the PD shall be determined in accordance with the method for exposures to corporates, where the following minimum PDs shall apply:
a) 0.09% for exchange traded equity exposures where the investment is part of a long-term customer relationship;
b) 0.09% for non-exchange traded equity exposures where the returns on the investment are based on regular and periodic cash flows not derived from capital gains;
c) 0.40% for exchange traded equity exposures including other short positions as set out in Article 44(3)(b);
d) 1.25% for all other equity exposures including other short positions as set out in Article 44(3)(b).

(2) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for equity exposures subject to the PD/LGD method, LGD shall be determined as follows:
a) private equity exposures in sufficiently diversified portfolios may be assigned an LGD of 65%;
b) all other exposures shall be assigned an LGD of 90%.

(3) For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for equity exposures subject to the PD/LGD method, the maturity *(M)* assigned to all exposures shall be five years.

Calculation of exposure value using the internal ratings based approach

Article 53

(1) For the purpose of calculating risk-weighted exposure amounts using the internal ratings-based approach, a bank shall calculate the value of exposures to corporates, institutions, central governments and central banks and calculate retail exposure values in accordance with this paragraph and paragraphs (2) to (11). Unless otherwise provided by this Decree, the exposure value of on-balance sheet exposures shall be measured gross of value adjustments. This rule also applies to assets purchased at a price different than the amount owed. For purchased assets, the difference between the amount owed and the net value recorded on the balance sheet of banks is denoted discount if the amount owed is larger, and premium if it is smaller.

(2) Where banks use master netting agreements in relation to repurchase transactions or securities or commodities lending or borrowing transactions, the exposure value shall be calculated in accordance with the provisions on credit risk mitigation.

(3) For on-balance sheet netting of loans and deposits, a bank shall apply for the calculation of the exposure value the methods of credit risk mitigation.

(4) The exposure value for leases shall be the discounted minimum lease payments. ‘Minimum lease payments’ are the payments over the lease term that the lessee is or can be required to make and any option the exercise of which is reasonably certain. Any guaranteed residual value fulfilling the set of conditions in Article 102 regarding the eligibility of protection providers as well as the minimum requirements for recognizing other types of guarantees provided in Articles 115 to 117 should also be included in the minimum lease payments.

(5) In the case of derivatives other than credit derivates, the exposure value shall be determined by the methods set out in Articles 10 to 15.

(6) The exposure value for the calculation of risk weighted exposure amounts of purchased receivables shall be the outstanding amount minus the capital requirements for dilution risk prior to credit risk mitigation.

(7) Where an exposure takes the form of securities or commodities sold, posted or lent under repurchase transactions or securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions, the exposure value shall be the value of the securities or commodities determined in accordance with Article 30(6) of the Banking Act. Where the comprehensive method for using funded credit protection as set out under Articles 120 to 129 is used, the exposure value shall be increased by the volatility adjustment appropriate to such securities or commodities, as set out therein. The exposure value of repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions may be determined either in accordance with Articles 10 to 15 or Article 123(8) to (17).

(8) The exposure value of credit risk exposures outstanding, as determined by the National Bank of Slovakia, with a central counterparty shall be determined in accordance with Article 10(6)

provided that the central counterparty's counterparty credit risk exposures with all participants in its arrangements are fully collateralized on a daily basis.

(9) The exposure value for the following items shall be calculated as the committed but undrawn amount multiplied by a conversion factor.
Banks not meeting the minimum requirements for using own estimates of conversion factors shall use the following conversion factors:
(a) for credit lines which are uncommitted, that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, a conversion factor of 0% shall apply. To apply a conversion factor of 0%, a bank shall actively monitor the financial condition of the obligor, and its internal control system shall enable it to immediately detect a deterioration in the credit quality of the obligor. Undrawn retail credit lines may be considered as unconditionally cancellable if the terms permit the bank to cancel them to the full extent allowable under consumer protection and related legislation;
(b) for short-term letters of credit arising from the movement of goods, a conversion factor of 20% shall apply for both the issuing and confirming institutions;
(c) for undrawn purchase commitments for revolving purchased receivables that are unconditionally cancellable or that effectively provide for automatic cancellation at any time by the institution without prior notice, a conversion factor of 0% shall apply. To apply a conversion factor of 0%, a bank shall actively monitor the financial condition of the obligor, and its internal control system shall enable it to immediately detect a deterioration in the credit quality of the obligor;
(d) for other credit lines, note issuance facilities, and revolving exposures, a conversion factor of 75 % shall apply.

(10) Where a commitment refers to the extension of another commitment, the lower of the two conversion factors associated with the individual commitment shall be used.

(11) Off-balance sheet items other than those mentioned in paragraphs (1) to (9) shall be assigned to the risk categories as indicated in Article 17 and the exposure value shall be the following percentage of the item's value:
a) 100% if it is a full risk item;
b) 50% if it is a medium-risk item;
c) 20% if it is a medium/low-risk item; and
d) 0% if it is a low-risk item.

(12) A bank that meets the minimum requirements for using own estimates of conversion factors in accordance with paragraphs 56 to 94 may use its own estimates of conversion factors for different types of products set out in paragraph 9(a) to (d), subject to the approval of the National Bank of Slovakia issued under Article 33(9) of the Banking Act.

Article 54

For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach for equity exposures, the exposure value shall be the value presented in the financial statements. Admissible equity exposure measures of equity exposures are the following:
a) for investments held at fair value with changes in value flowing directly through income and into own funds, the exposure value is the fair value presented in the balance sheet;
b) for investments held at fair value with changes in value not flowing through income but into a tax-adjusted separate component of equity, the exposure value is the fair value presented in the balance sheet;

c) for investments held at cost or market value, according to whichever is lower, the exposure value is the cost or market value presented in the balance sheet

Article 55

For the purpose of calculating risk-weighted exposure amounts using the internal ratings based approach, the exposure value of other non credit-obligation assets shall be the value presented in the financial statements.

Technical requirements for assigning internal ratings

Article 56

(1) For a bank assigning internal ratings for the purpose of calculating risk-weighted exposure amounts, a basic technical requirement is that it has in place a rating system that comprises all of the methods, processes, controls, data collection and IT systems that support the assessment of credit risk, the assignment of exposures to grades or pools (rating), and the quantification of default and loss estimates for a certain type of exposure. Other technical requirements for assigning internal ratings are set out in paragraphs (2) and (3) and in Articles 57 to 71.

(2) If a bank uses multiple rating systems, the rationale for assigning an obligor or a transaction to a rating system shall be documented and applied in a manner that appropriately reflects the level of risk.

(3) Assignment criteria and processes shall be periodically reviewed to determine whether they remain appropriate for the current portfolio and external conditions.

Article 57

Where a bank uses direct estimates of risk parameters in rating systems, these may be seen as the outputs of grades on a continuous rating scale.

Article 58

(1) For exposures to corporates, institutions, central governments and central banks, a rating system shall take into account obligor and transaction risk characteristics as set out in paragraphs (2) to (8).

(2) A rating system shall have an obligor rating scale which reflects exclusively quantification of the risk of obligor default. Notwithstanding paragraph (8), the obligor rating scale shall have a minimum of 7 grades for non-defaulted obligors and one for defaulted obligors.

(3) An ‘obligor grade’ shall mean a risk category within a rating system's obligor rating scale, to which obligors are assigned on the basis of a specified and distinct set of rating criteria, from which estimates of PD are derived. A bank shall document the relationship between obligor grades in terms of the level of default risk each grade implies and the criteria used to distinguish that level of default risk.

(4) A bank with portfolios concentrated in a particular market segment and range of default risk shall have enough obligor grades within that range to avoid undue concentrations of obligors in a particular grade. Significant concentrations within a single grade shall be supported by convincing

empirical evidence that the obligor grade covers a reasonably narrow PD band and that the default risk posed by all obligors in the grade falls within that band

(5) To qualify for recognition by the competent authorities of the use for capital requirement calculation of own estimates of LGDs, a rating system shall incorporate a distinct rating scale which exclusively reflects LGD-related transaction characteristics.

(6) A ‘rating grade’ shall mean a risk category within a rating system's rating scale, to which exposures are assigned on the basis of a specified and distinct set of rating criteria from which own estimates of LGDs are derived. The grade definition shall include both a description of how exposures are assigned to the grade and of the criteria used to distinguish the level of risk across grades.

(7) Significant concentrations within a single rating grade shall be supported by convincing empirical evidence that the rating grade covers a reasonably narrow LGD band and that the risk posed by all exposures in the grade falls within that band.

(8) A bank using the methods set out in Article 42(2)(e) for assigning risk weights for specialized lending exposures are exempt from the requirement to have an obligor rating scale which reflects exclusively quantification of the risk of obligor default for these exposures. These institutions shall have for these exposures at least four grades for non-defaulted obligors and at least one grade for defaulted obligors.

Article 59

(1) For retail exposures, rating systems shall reflect both obligor and transaction risk, and shall capture all relevant obligor and transaction characteristics as set out in paragraphs (2) to (4).

(2) The level of risk differentiation shall ensure that the number of exposures in a given grade or pool is sufficient to allow for quantification and validation of the loss characteristics at the grade or pool level. The distribution of exposures and obligors across grades or pools shall be such as to avoid excessive concentrations.

(3) A bank shall demonstrate that the process of assigning exposures to grades or pools provides for differentiation of risk, provides for a grouping of homogenous exposures, and allows for accurate and consistent estimation of loss characteristics at grade or pool level. For purchased receivables the grouping shall reflect the seller's underwriting practices and the heterogeneity of its customers.

(4) A bank shall consider the following risk drivers when assigning exposures to grades or pools:
a) obligor risk characteristics;
b) transaction risk characteristics, including type of product or collateral or both. A bank shall explicitly address cases where several exposures benefit from the same collateral; and
c) delinquency, unless the bank demonstrates that delinquency is not a material risk driver for the exposure.

Article 60

(1) A bank shall have specific definitions, processes and criteria for assigning exposures to grades or pools within a rating system, as follows:
a) the grade or pool definitions and criteria shall be sufficiently detailed to allow those charged with assigning ratings to consistently assign obligors or pools of obligors posing similar risk to the same

grade or pool. This consistency shall exist across lines of business, departments and geographic locations;
b) the documentation of the rating process shall allow third parties to understand the assignments of exposures to grades or pools, to replicate grade and pool assignments and to evaluate the appropriateness of the assignments to a grade or pool; and
c) the criteria shall also be consistent with the bank's internal lending standards and its policies for handling troubled obligors and pools of obligors.

(2) A bank shall take all relevant information into account in assigning obligors and pools of obligors to grades or pools. Information shall be current and shall enable the bank to forecast the future performance of the exposure. The less information a bank has, the more conservative shall be its assignments of exposures to obligor and rating grades or pools. If a bank uses an external rating as a primary factor determining an internal rating assignment, the bank shall ensure that it considers other relevant information.

Assigning exposures to a rating grade within the rating system

Article 61

(1) As part of the credit approval process, each obligor that is a corporate, institution, central government or central bank shall be assigned to an obligor grade.

(2) For banks permitted to use own estimates of LGDs and/or conversion factors, each exposure referred to in paragraph (1) shall also be assigned to a rating grade as part of the credit approval process.

(3) A bank using the methods set out in Article 42(2)(e) for assigning risk weights for specialized lending exposures shall assign each of these exposures to a grade in accordance with Article 58(8).

(4) Each separate legal entity to which a bank is exposed shall be separately rated. A bank shall demonstrate that it has acceptable policies regarding the treatment of individual obligors and pools of obligors.

(5) Separate exposures to the same obligor shall be assigned to the same obligor grade, irrespective of any differences in the nature of each specific transaction. Exceptions, where separate exposures are allowed to result in multiple grades for the same obligor are:
a) country transfer risk, this being dependent on whether the exposures are denominated in local or foreign currency;
b) where the treatment of associated guarantees to an exposure may be reflected in an adjusted assignment to an obligor grade; and
c) where consumer protection, bank secrecy or other legislation prohibit the exchange of customer data.

Article 62

Each exposure shall be assigned to a grade or pool as part of the credit approval process.

Article 63

For grade and pool assignments, a bank shall document the situations in which human judgment may override the inputs or outputs of the assignment process and the personnel

responsible for approving these overrides. The bank shall document these overrides and the personnel responsible. The bank shall analyse the performance of the exposures whose assignments have been overridden. This analysis shall include assessment of the performance of exposures whose rating has been overridden by a particular person, accounting for all the responsible personnel.

Article 64

(1) For exposures to corporates, institutions, central governments and central banks, assignments and periodic reviews of assignments shall be completed or approved by an independent party that does not directly benefit from decisions to extend the credit.

(2) A bank shall update assignments at least annually. High-risk obligors and problem exposures shall be subject to more frequent review. The bank shall undertake a new assignment if material information on the obligor or exposure becomes available

(3) A bank shall have an effective process to obtain and update relevant information on obligor characteristics that affect PDs, and on transaction characteristics that affect LGDs and/or conversion factors.

Article 65

For retail exposures, a bank shall at least annually update assignments of obligors and pools of obligors or review the loss characteristics and delinquency status of each identified risk pool, whichever is applicable. The bank shall also at least annually review in a representative sample the status of individual exposures within each pool as a means of ensuring that exposures continue to be assigned to the correct pool.

Article 66

If a bank uses statistical models and other mechanical methods to assign exposures to obligors and rating or pools, then:
a) the bank shall demonstrate that the model has good predictive power and that capital requirements are not distorted as a result of its use. The input variables shall form a reasonable and effective basis for the resulting predictions. The model shall not have material biases;
b) the bank shall have in place a process for vetting data inputs into the model, which includes an assessment of the accuracy, completeness and appropriateness of the data;
c) the bank shall demonstrate that the data used to build the model is representative of the population of the bank's actual obligors or exposures;
d) the bank shall have a regular cycle of model validation that includes monitoring of model performance and stability; review of model specification; and testing of model outputs against outcomes; and
e) the bank shall complement the statistical model by human judgment and human oversight to review model-based assignments and to ensure that the models are used appropriately. Review procedures shall aim at finding and limiting errors associated with model weaknesses. Human judgments shall take into account all relevant information not considered by the model, and the bank shall document how human judgment and model results are to be combined.

Article 67

(1) A bank shall document the design and operational details of its rating systems. The documentation shall evidence compliance with the minimum requirements in this chapter, and

address topics including portfolio differentiation, rating criteria, responsibilities of parties that rate obligors and exposures, frequency of assignment reviews, and management oversight of the rating process.

(2) A bank shall document the rationale for and analysis supporting its choice of rating criteria. A bank shall document all major changes in the risk rating process, and such documentation shall support identification of changes made to the risk rating process subsequent to the last review by the competent supervisory authorities. The organization of rating assignment including the rating assignment process and the internal control structure shall also be documented.

(3) A bank shall document the specific definitions of default and loss used internally and demonstrate consistency with the definitions set out in Article 9(2)(a) and (c) and Article 73.

(4) If a bank employs statistical models in the rating process, it shall document their methodologies. This material shall:
a) provide a detailed outline of the theory, assumptions and/or mathematical and empirical basis of the assignment of estimates to grades, individual obligors, exposures, or pools, and the data source(s) used to estimate the model;
b) establish a rigorous statistical process for validating the model; and
c) indicate any circumstances under which the model does not work effectively.

(5) A bank shall take measures to ensure that any copyright protection of a model and the respective documentation does not preclude the production of own documentation related to the model, compliance with this Decree or the fulfilment of other requirements of the National Bank of Slovakia.

Article 68

A bank shall collect and store data on aspects of its internal ratings as required under Article 37 of the Banking Act.

Article 69

(1) For exposures to corporates, institutions, central governments and central banks, a bank shall collect and store:
a) complete rating histories on obligors and recognized guarantors;
b) the dates the ratings were assigned;
c) the key data and methodology used to derive the rating;
d) data on the person responsible for the rating assignment;
e) the identity of obligors and exposures that defaulted;
f) the date and circumstances of such defaults; and
g) data on the PDs and realized default rates associated with rating grades and ratings migration.
A bank not using own estimates of LGDs and/or conversion factors shall collect and store data on comparisons of realized LGDs to the values as set out in Article 50(2) and realized conversion factors to the values as set out in Article 53(9).

(2) A bank using own estimates of LGDs and/or conversion factors shall collect and store:
a) complete histories of data on the ratings and LGD and conversion factor estimates associated with each rating grade;
b) the dates the ratings were assigned and the estimates were done;
c) the key data and methodology used to derive the ratings and LGD and conversion factor estimates;

d) data on the person who assigned the rating and the person who provided LGD and conversion factor estimates;
e) data on the estimated and realized LGDs and conversion factors associated with each defaulted exposure;
f) data on the LGD of the exposure before and after evaluation of the effects of unfunded credit protection, for those banks that reflect the credit risk mitigating effects of guarantees or credit derivatives through LGD; and
(g) data on the components of loss for each defaulted exposure.

Article 70

For retail exposures, a bank shall collect and store:
a) data used in the process of allocating exposures to grades or pools;
b) data on the estimated PDs, LGDs and conversion factors associated with grades or pools of exposures;
c) the identity of obligors and exposures that defaulted;
d) for defaulted exposures, data on the grades or pools to which the exposure was assigned over the year prior to default and the realized outcomes on LGD and conversion factors; and
e) data on loss rates for qualifying revolving retail exposures.

Article 71

(1) A bank shall have in place sound stress testing processes for use in the assessment of its capital requirements. Stress testing shall involve identifying possible events or future changes in economic conditions that could have unfavourable effects on a bank's credit exposures and assessment of the bank's ability to withstand such changes.

(2) A bank shall regularly perform a credit risk stress test to assess the effect of certain specific conditions on its total capital requirements for credit risk. The test to be employed shall consider at least the effect of mild recession scenarios. A bank shall assess migration in its ratings under the stress test scenarios. Stressed portfolios shall contain the vast majority of a bank's total exposure.

(3) A bank using the treatment set out in Article 42(1)(b) shall consider as part of its stress testing framework the impact of a deterioration in the credit quality of protection providers, in particular the impact of protection providers falling outside the eligibility criteria.

Calculation of credit risk using the internal ratings based approach

Article 72

For the purpose of calculating risk-weighted assets using the internal ratings based approach, a bank shall apply the requirements set out in Articles 73 to 88 when determining the risk parameters to be associated with rating grades or pools.

Article 73

(1) A default shall be considered to have occurred with regard to a particular obligor when:
a) the bank considers that the obligor is unlikely to pay its obligations to the bank, the parent undertaking or any of its subsidiaries, without recourse by the bank to actions such as realizing security; or

b) the obligor is past due more than 90 days on any material obligation to the bank, the parent undertaking or any of its subsidiaries. For overdrafts, days past due commence once the obligor has breached an advised limit, has been advised a limit smaller than current outstandings, or has drawn credit without authorisation and the underlying amount is material. An ‘advised limit’ shall mean a limit which has been brought to the knowledge of the obligor. Days past due for credit cards commence on the first repayment date.

(2) Elements to be taken as indications of unlikeliness to pay an obligation mentioned in paragraph 1(a) shall include:
(a) the bank ceases to exercise its right to interest on the receivable;
(b) the bank makes a value adjustment resulting from a significant perceived decline in credit quality subsequent to the bank taking on the exposure;
(c) the bank assigns the receivable at a material economic loss arising from the decline in its market value,
(d) the bank consents to a distressed restructuring of the debt where this is likely to result in forgiveness of a material part of the debt or postponement of the repayment of the principal, interest or (where relevant) fees. This includes, in the case of equity exposures assessed under a PD/LGD approach pursuant to Article 44(4), distressed restructuring of the equity itself;
(e) the bank has filed for the obligor's bankruptcy or a similar order in respect of an obligor's obligation to the bank, the parent undertaking or any of its subsidiaries; and
(f) the obligor has sought or has been placed in bankruptcy or restructuring where this would avoid or delay repayment of the obligation to the bank, the parent undertaking or any of its subsidiaries.

(3) A bank that uses external data that is not itself consistent with the definition of default, shall demonstrate that appropriate adjustments have been made to achieve broad equivalence with the definition of default.

(4) If the bank considers that a previously defaulted exposure is such that no trigger of default continues to apply, the bank shall rate the obligor or pool of obligors as they would for a non-defaulted exposure. Should the definition of default subsequently be triggered, another default would be deemed to have occurred.

Article 74

(1) A bank's own estimates of the risk parameters PD, LGD, conversion factor and estimated loss shall incorporate all relevant data, information and methods. The estimates shall be derived using both historical experience and empirical evidence, and not based purely on judgmental considerations. The estimates shall be plausible and shall be based on the material drivers of the respective risk parameters. The less data a bank has, the more conservative it shall be in its estimation.

(2) A bank shall be able to identify, within its historical data concerning default frequency, LGD, conversion factor, or loss where EL estimates are used, the factors it sees as the drivers of the respective risk parameters.

(3) Any changes in lending practice or the process for pursuing recoveries over the observation periods referred to in Article 75(8), Article 76(5), Article 78, Article 79(4), Article 81 and Article 82(2) shall be taken into account. The bank's estimates shall reflect new data processed by the latest technology. The bank shall review its estimates when new information comes to light but at least on an annual basis.

(4) The population of exposures represented in the data used for estimation, the lending standards used when the data was generated and other relevant characteristics shall be comparable with those of the bank's exposures and standards. The bank shall also demonstrate that the economic or market conditions that underlie the data are relevant to current and foreseeable conditions. The number of exposures in the sample and the data period used for quantification shall be sufficient to provide the bank with confidence in the accuracy and reliability of its estimates.

(5) For assigned receivables the estimates shall reflect all relevant information available to the assignee bank regarding the quality of the underlying receivables, including data for receivables of a similar type provided by the assignor, by the assignee bank, or by external sources. The assignee bank shall evaluate any data relied upon which is provided by the assignor.

(6) A bank shall include in its estimates a margin of conservatism that is related to the expected range of estimation errors. Where methods and data are less satisfactory and the expected range of errors is larger, the margin of conservatism shall be larger.

(7) If a bank uses different estimates for the calculation of risk weights and for internal purposes, it shall be documented and their reasonableness shall be demonstrated to the National Bank of Slovakia.

(8) If a bank can demonstrate that for data that have been collected prior to the effective date of this Decree appropriate adjustments have been made to achieve broad equivalence with the definitions of default or loss, it may be permitted some flexibility in the application of the required standards for data.

(9) If a bank uses data that is pooled across banks it shall demonstrate that:
a) the rating systems and criteria of the other banks in the pool are similar to its own;
b) the pool is representative of the portfolio for which the pooled data is used; and
c) the pooled data is used consistently by the bank for its own estimates.

(10) If a bank uses data that is pooled across credit institutions, it shall remain responsible for the integrity of its rating systems. The bank shall demonstrate that it has sufficient in-house understanding of its rating systems, including effective ability to monitor and audit the rating process.

Article 75

(1) For exposures to corporates, institutions, central governments and central banks, PDs by obligor grade shall be estimated from long-run averages of one-year default rates.

(2) For corporate receivables, a bank may estimate ELs by obligor grade from long-run averages of one-year realized default rates.

(3) If a bank derives long-run average estimates of PDs and LGDs for corporate receivables from an estimate of EL, and an appropriate estimate of PD or LGD, the process for estimating total losses shall meet the overall standards for estimation of PD and LGD set out in Article 56 to 94, and the outcome shall be consistent with the concept of LGD as set out in Article 77(1).

(4) A bank shall use PD estimation techniques only with supporting analysis. A bank shall recognize the importance of judgmental considerations in combining results of techniques and in making adjustments for limitations of techniques and information.

(5) To the extent that a bank uses data on internal default experience for the estimation of PDs, it shall demonstrate in its analysis that the estimates reflect internal standards on lending and any differences in the rating system that generated the data and the current rating system. Where internal lending standards or rating systems have changed, the bank shall add a greater margin of conservatism in its estimate of PD.

(6) To the extent that a bank maps its internal grades to the scale used by a credit rating agency or similar organizations and then attributes the default rate observed for the external organization's grades to the bank's grades, mappings shall be based on a comparison of internal rating criteria to the criteria used by the external organization and on a comparison of the internal and external ratings of any common obligors. Biases or inconsistencies in the mapping approach or underlying data shall be avoided. The external organization's criteria underlying the data used for quantification shall be oriented to default risk only and not reflect transaction characteristics. The bank's analysis shall include a comparison of the default definitions used, subject to the requirements in Article 73. The mapping method shall be documented.

(7) To the extent that a bank uses statistical default prediction models it is allowed to estimate PDs as the simple average of PD estimates for individual obligors in a given grade. The bank's use of default probability models for this purpose shall meet the standards specified in Article 66.

(8) Irrespective of whether a bank is using external, internal, or pooled data sources, or a combination of the three, for its PD estimation, the length of the underlying historical observation period used shall be at least five years for at least one source. If the available observation period spans a longer period for any source, and these data are relevant, this longer period shall be used. This paragraph also applies to default in respect of equity exposures under Article 52. A bank which is not permitted to use own estimates of LGDs or conversion factors may use, when it implements the internal ratings based approach, relevant data covering a period of two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

Article 76

(1) For retail exposures, PDs shall be estimated by obligor grade or pool from long-run averages of one-year default rates.

(2) Notwithstanding paragraph (1), PD estimates may also be derived from realized losses and appropriate estimates of LGDs.

(3) A bank shall regard internal data for assigning exposures to grades or pools as the primary source of information for estimating loss characteristics. The bank is permitted to use external data or statistical models for quantification provided that a strong link can be demonstrated between:
(a) the bank's process of assigning exposures to grades or pools and the process used by the external data source; and
(b) the bank's internal risk profile and the composition of the external data.

(4) If a bank derives long run average estimates of PD and LGD for retail from an estimate of total losses and an appropriate estimate of PD or LGD, the process for estimating total losses shall meet the overall standards for estimation of PD and LGD set out in Articles 56 to 94, and the outcome shall be consistent with the concept of LGD as set out in Article 77(1).

(5) Irrespective of whether a bank is using external, internal or pooled data sources or a combination of the three, for their estimation of loss characteristics, the length of the underlying historical observation period used shall be at least five years for at least one source. If the available observation spans a longer period for any source, and these data are relevant, this longer period shall be used. A bank need not give equal importance to historical data if it can prove that more recent data is a better predictor of loss rates. When implementing the internal ratings based approach, it may suffice to use relevant data covering a period of two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

(6) A bank shall identify and analyse expected changes of risk parameters over the life of credit exposures.

(7) For purchased retail receivables, a bank may use external and internal reference data. A bank shall use all relevant data sources as points of comparison.

Article 77

(1) A bank shall estimate LGDs by rating grade or pool on the basis of the average realized LGDs by rating grade or pool using all observed defaults within the data sources (default weighted average).

(2) A bank shall use LGD estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. To the extent a rating system is expected to deliver realized LGDs at a constant level for each grade or pool, a bank shall make adjustments to its estimates of risk parameters for each grade or pool to limit the capital impact of an economic downturn.

(3) A bank shall consider the extent of any dependence between the risk of the obligor with that of the collateral or collateral provider. Cases where there is a significant degree of dependence shall be addressed in a conservative manner.

(4) Currency mismatches between the underlying obligation and the collateral shall be treated conservatively in the bank's assessment of LGD.

(5) To the extent that LGD estimates take into account the existence of collateral, these estimates shall not solely be based on this collateral's estimated market value. LGD estimates shall take into account the effect of the potential inability of credit institutions to expeditiously gain control of their collateral and liquidate it.

(6) To the extent that LGD estimates take into account the existence of funded credit protection, a bank shall comply with internal requirements for credit protection management, legal certainty and risk management that are generally consistent with those set out in Article 106 to 119.

(7) To the extent that a bank recognizes collateral for determining the exposure value for counterparty credit risk according to Article 13 or 14, any amount expected to be recovered from the collateral shall not be taken into account in the LGD estimates.

(8) For the specific case of exposures already in default, the bank shall use the sum of its best estimate of expected loss for each exposure given current economic circumstances and exposure status and the possibility of additional unexpected losses during the recovery period.

(9) To the extent that unpaid late fees have been capitalized in the bank's income statement, they shall be added to the bank's measure of exposure and loss.

Article 78

For exposures to corporates, institutions, central governments and central banks, LGD estimates shall be based on data over an observation period of at least five years, increasing by one year each year after implementation until a minimum of seven years is reached, for at least one data source. If the available observation period spans a longer period for any source, and these data are relevant, this longer period shall be used.

Article 79

(1) Unless otherwise provided in Article 77(1), LGD estimates for retail exposures may be derived from realized losses and appropriate estimates of PDs.

(2) Unless otherwise provided in Article 80(3), a bank may reflect future drawings either in its conversion factors or in its LGD estimates.

(3) For purchased retail receivables, a bank may use external and internal reference data to estimate LGDs.

(4) Estimates of LGD shall be based on data over an observation period of at least five years. Unless otherwise provided in Article 77(1), a bank needs not give equal importance to historical data if it can prove that more recent data is a better predictor of loss rates. When implementing the internal ratings based approach, it may suffice to use relevant data covering a period of at least two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

Article 80

(1) With the exception mentioned in Article 82(2), a bank shall estimate conversion factors for each faculty grade or pool on the basis of the average realized conversion factors for each facility grade or pool using all observed defaults within the data sources (default weighted average).

(2) A bank shall use conversion factor estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. To the extent a rating system is expected to deliver realized conversion factors at a constant level for each grade or pool over time, a bank shall make adjustments to its estimates of risk parameters for each grade or pool to limit the capital impact of an economic downturn.

(3) Banks' estimates of conversion factors shall reflect the possibility of additional drawings by the obligor up to and after the time a default event is triggered. The conversion factor estimate shall take account of negative effects of a positive correlation between the default frequency and the magnitude of conversion factor.

(4) In arriving at estimates of conversion factors, banks shall consider their specific policies and strategies adopted in respect of account monitoring and payment processing. Banks shall also consider their ability and willingness to prevent further drawings in circumstances short of payment default, such as covenant violations or other technical default events.

(5) A bank shall have adequate systems and procedures in place to monitor debt amounts, current outstandings against committed lines and changes in outstandings per obligor and per grade. The bank shall be able to monitor outstanding balances on a daily basis.

(6) If different estimates of conversion factors are used for the calculation of risk-weighted exposure amounts and internal purposes, it shall be documented and their reasonableness shall be demonstrated.

Article 81

For exposures to corporates, institutions, central governments and central banks, estimates of conversion factors shall be based on data over an observation period of at least five years, increasing by one year each year after implementation until a minimum of seven years is reached, for at least one data source. If the available observation period spans a longer period for any source, and these data are relevant, this longer period shall be used.

Article 82

(1) For retail exposures, unless otherwise provided in Article 80(3), a bank may reflect future drawings either in its conversion factors or in its LGD estimates.

(2) Estimates of conversion factors shall be based on data over an observation period of at least five years. A bank need not give equal importance to historical data if it can demonstrate that more recent data is a better predictor of drawings. When implementing the internal ratings based approach, it may suffice to use relevant data covering a period of at least two years. The period to be covered shall increase by one year each year until relevant data cover a period of five years.

Article 83

(1) The requirements in this paragraph, paragraph (2) and Articles 84 to 86 shall not apply to guarantees provided by institutions, central governments and central banks if the bank has received approval from the National Bank of Slovakia to apply the standardized approach for credit risk to exposures to corporates, institutions, central governments and central banks, where own estimates of LGDs are used, and to retail exposures. In this case, the requirements for credit risk mitigation shall apply.

(2) For collateral related to retail exposures, the requirements of this provision, paragraph (1) and Articles 84 to 86 shall also apply to the assignment of exposures to grades or pools, and the estimation of PD.

Article 84

(1) A bank shall have clearly specified criteria for the types of guarantors it recognizes for the calculation of risk-weighted exposure amounts.

(2) For guarantors recognized by the bank, the same rules as for obligors as set out in Articles 60 to 62 shall apply.

(3) The guarantee shall be evidenced in writing, non-cancellable on the part of the guarantor, in force until the obligation is satisfied in full (to the extent of the amount and tenor of the guarantee) and legally enforceable against the guarantor in a jurisdiction where the guarantor has assets to attach and enforce a judgment. Guarantees prescribing conditions under which the

guarantor may not be obliged to perform may be recognized subject to the approval of the National Bank of Slovakia. It shall be demonstrated that the assignment criteria adequately address any potential reduction in the risk mitigation effect.

Article 85

(1) A bank shall have clearly specified criteria for adjusting grades, pools or LGD estimates, and, in the case of retail and eligible purchased receivables, the process of allocating exposures to grades or pools, to reflect the impact of guarantees for the calculation of risk-weighted exposure amounts. These criteria shall comply with the minimum requirements set out in Articles 60 to 62.

(2) The criteria shall address the guarantor's ability and willingness to perform under the guarantee, the likely timing of any payments from the guarantor, the degree to which the guarantor's ability to perform under the guarantee is correlated with the obligor's ability to repay, and the extent to which residual risk to the obligor remains.

Article 86

(1) The minimum requirements for guarantees in this chapter shall apply also for single-name credit derivatives. In relation to a mismatch between the underlying obligation and the reference obligation of the credit derivative or the obligation used for determining whether a credit event has occurred, the requirements set out under Article 118(2) shall apply. For retail exposures and eligible purchased receivables, this paragraph applies to the process of allocating exposures to grades or pools.

(2) The criteria shall address the payout structure of the credit derivative and conservatively assess the impact this has on the level and timing of recoveries. Consideration shall be given to the extent to which other forms of residual risk remain.

Article 87

(1) A bank shall ensure that under all foreseeable circumstances it is entitled to the cash remittances from receivables. When the obligor makes payments directly to a seller or servicer, the bank shall verify regularly that payments are forwarded completely and within the contractually agreed terms.

(2) ‘Servicer’ shall mean an entity that manages a pool of purchased receivables or the underlying credit exposures on a day-to-day basis. A bank shall have procedures to ensure that ownership over the receivables and cash receipts is protected against bankruptcy proceedings or legal challenges that could materially delay the lender's ability to liquidate or assign the receivables or retain control over cash receipts.

(3) A bank shall monitor both the quality of the purchased receivables and the financial condition of the seller and servicer. In particular:
a) the bank shall assess the correlation among the quality of the purchased receivables and the financial condition of both the seller and servicer, and have in place internal policies and procedures that provide adequate safeguards to protect against any contingencies, including the assignment of an internal risk rating for each seller and servicer;

b) the bank shall have clear and effective policies and procedures for determining seller and servicer eligibility. The bank or its agent shall conduct periodic reviews of sellers and servicers in order to verify the accuracy of reports from the seller or servicer, detect fraud or operational weaknesses,

and verify the quality of the seller's credit policies and servicer's collection policies and procedures. The findings of these reviews shall be documented;
c) the bank shall assess the characteristics of the purchased receivables pools, including over-advances; the history of the seller's arrears, bad debts, and bad debt allowances; payment terms, and potential contra accounts;
d) the bank shall have effective policies and procedures for monitoring on an aggregate basis single-obligor concentrations both within and across purchased receivables pools; and
e) the bank shall ensure that it receives from the servicer timely and sufficiently detailed reports of receivables ageings and dilutions to ensure compliance with the bank's eligibility criteria and advancing policies governing purchased receivables, and provide an effective means with which to monitor and confirm the seller's terms of sale and dilution.

(4) The bank shall have systems and procedures for detecting deteriorations in the seller's financial condition and purchased receivables quality at an early stage, and for addressing emerging problems proactively.

(5) The bank shall have clear and effective policies and procedures governing the control of purchased receivables, credit, and cash. In particular, written internal policies shall specify all material elements of the receivables purchase programme, including the advancing rates, eligible funded credit protection, necessary documentation, concentration limits, and the way cash receipts are to be handled. These elements shall take appropriate account of all relevant and material factors, including the seller and servicer's financial condition, risk concentrations, and trends in the quality of the purchased receivables and the seller's customer base, and internal systems shall ensure that funds are advanced only against specified supporting collateral and documentation.

(6) The bank shall have an effective internal process for assessing compliance with all internal policies and procedures. The process shall include regular audits of all critical phases of the bank's receivables purchase programme, verification of the separation of duties between firstly the assessment of the seller and servicer and the assessment of the obligor and, secondly, between the assessment of the seller and servicer and the field audit of the seller and servicer, and evaluations of back office operations, with particular focus on qualifications, experience, staffing levels, and supporting automation systems.

Article 88

(1) Banks shall have reliable systems in place to validate the accuracy and consistency of rating systems, processes, and the estimation of all relevant risk parameters. A bank shall demonstrate that the internal validation process enables it to assess the performance of internal rating and risk estimation systems consistently and meaningfully.

(2) A bank shall regularly compare realized default rates with estimated PDs for each grade and, where realized default rates are outside the expected range for that grade, the bank shall specifically analyse the reasons for the deviation. A bank using own estimates of LGDs and/or conversion factors shall also perform analogous analysis for these estimates. Such comparisons shall make use of historical data that cover as long a period as possible. The bank shall document the methods and data used in such comparisons. This analysis and documentation shall be updated at least annually.

(3) A bank shall also use other quantitative validation tools and comparisons with relevant external data sources. The analysis shall be based on data that are appropriate to the portfolio, are updated regularly, and cover a relevant observation period. The bank's internal assessments of the performance of its rating systems shall be based on as long a period as possible.

(4) The methods and data used for quantitative validation shall be consistent through time. Changes in estimation and validation methods and data shall be documented.

(5) A bank shall have sound internal standards for situations where deviations in realized PDs, LGDs, conversion factors and total losses, where EL is used, from expectations, become significant enough to call the validity of the estimates into question. These standards shall take account of business cycles and similar systematic variability in default experience. Where realized values continue to be higher than expected values, the bank shall revise estimates upward to reflect their default and loss experience.

Calculation of risk-weighted exposure amounts for equity exposures under the internal models approach

Article 89

(1) **For the purpose of calculating risk-weighted exposure amounts for equity exposures under the internal models approach, a bank shall proceed in accordance with paragraphs (2) to (8) and Articles 90 and 91.**

(2) The estimate of potential loss shall be robust to adverse market movements relevant to the long-term risk profile of the bank's specific holdings. The data used to represent return distributions shall reflect the longest sample period for which data is available and meaningful in representing the risk profile of the bank's specific equity exposures. The data used shall be sufficient to provide conservative, statistically reliable and robust loss estimates that are not based purely on subjective or judgmental considerations. The resulting estimate of potential losses over a relevant long-term market or business cycle shall be conservative. The bank shall combine empirical analysis of available data with adjustments based on a variety of factors in order to attain model outputs that achieve appropriate realizm and conservatism. In constructing Value at Risk (VaR) models estimating potential quarterly losses, a bank may use quarterly data or convert shorter horizon period data to a quarterly equivalent using an analytically appropriate method supported by empirical evidence and through a well-developed and documented thought process and analysis. Such an approach shall be applied conservatively and consistently over time. Where only limited relevant data is available, the bank shall add appropriate margins of conservatism

(3) The models used shall be able to capture adequately all of the material risks embodied in equity returns including both the general market risk and specific risk exposure of the bank's equity portfolio. The internal models shall adequately explain historical price variation, capture both the magnitude and changes in the composition of potential risk concentrations, and be robust to adverse market environments. The population of risk exposures represented in the data used for estimation shall be closely matched to or at least comparable with those of the bank's equity exposures.

(4) The internal model shall be appropriate for the risk profile and complexity of a bank's equity portfolio. Where the bank has material holdings with values that are highly non-linear in nature the internal models shall be designed to capture appropriately the risks associated with such instruments

(5) The mapping of individual positions to proxies, market indices, and risk factors shall be plausible, intuitive, and conceptually sound.

(6) A bank shall demonstrate through empirical analyses the appropriateness of risk factors, including their ability to cover both general and specific risk.

(7) The estimates of the return volatility of equity exposures shall incorporate relevant and available data, information, and methods. Independently reviewed internal data or data from external sources shall be used.

(8) A rigorous and comprehensive stress-testing programme shall be in place.

Article 90

With regard to the development and use of internal models for capital requirement purposes, a bank shall establish policies, procedures, and controls to ensure the integrity of the model and modelling process. These policies, procedures, and controls shall include the following:
a) full integration of the internal model into the overall management information systems of the bank and in the management of the banking book equity portfolio. Internal models shall be fully integrated into the bank's risk management infrastructure if they are particularly used in measuring and assessing equity portfolio performance, allocating economic capital to equity exposures and evaluating overall capital adequacy and the investment management process;
b) established management systems, procedures, and control functions for ensuring the periodic and independent review of all elements of the internal modelling process, including approval of model revisions, vetting of model inputs, and review of model results, such as direct verification of risk computations. These reviews shall assess the accuracy, completeness, and appropriateness of model inputs and results and focus on both finding and limiting potential errors associated with known weaknesses and identifying unknown model weaknesses. Such reviews may be conducted by an internal independent unit, or by an independent external third party;
c) adequate systems and procedures for monitoring investment limits and the risk exposures of equity exposures;
d) information that the units responsible for the design and application of the model are functionally independent from the units responsible for managing individual investments; and
e) information that the parties responsible for any aspect of the modelling process shall be adequately qualified.

Article 91

(1) Banks shall have a reliable system in place to validate the accuracy and consistency of their internal models and modelling processes. All material elements of the internal models and the modelling process and validation shall be documented.

(2) A bank shall use the internal validation process to assess the performance of its internal models and model processes in a consistent and meaningful way.

(3) The methods and data used for quantitative validation shall be consistent through time. Changes in estimation and validation methods and data shall be documented.

(4) A bank shall regularly compare actual equity returns (computed using realized and unrealized gains and losses) with modelled estimates. Such comparisons shall make use of historical data that cover as long a period as possible. The bank shall document the methods and data used in such comparisons. This analysis and documentation shall be updated at least annually

(5) A bank shall make use of other quantitative validation tools and comparisons with external data sources. The analysis shall be based on data that are appropriate to the portfolio, are

updated regularly, and cover a relevant observation period. The bank's internal assessments of the performance of its models shall be based on as long a period as possible

(6) A bank shall have sound internal standards for situations where comparison of actual equity returns with the models estimates calls the validity of the estimates or of the models as such into question. These standards shall take account of business cycles and similar systematic variability in equity returns. All adjustments made to internal models in response to model reviews shall be documented and consistent with the bank's model review standards.

(7) The internal model and the modelling process shall be documented, including the responsibilities of parties involved in the modelling, and the model approval and model review processes.

Technical requirements for the internal ratings management system

Article 92

(1) For the purposes of assigning internal ratings and calculating risk-weighted exposure amounts using the internal ratings based approach, all material aspects of the rating and estimation processes shall be approved by the bank's statutory body or a designated committee thereof and senior management. These parties shall possess a general understanding of the bank's rating systems and detailed comprehension of its associated management reports.

(2) Senior management shall provide notice to the bank's statutory body or a designated committee thereof of material changes or exceptions from established policies that will materially impact the operations of the bank's rating systems.

(3) Senior management shall have a good understanding of the rating systems designs and operations. Senior management shall ensure, on an ongoing basis that the rating systems are operating properly. Senior management shall be regularly informed by the credit risk control units about the performance of the rating process, areas needing improvement, and the status of efforts to improve previously identified deficiencies.

(4) Internal ratings-based analysis of the bank's credit risk profile shall be an essential part of the management reporting to the bank's relevant bodies. Reporting shall include at least risk profile by grade, migration across grades, estimation of the relevant parameters per grade, and comparison of realized default rates, and to the extent that own estimates are used of realized LGDs and realized conversion factors against expectations and stress-test results. Reporting frequencies shall depend on the significance and type of information.

Article 93

(1) The credit risk control unit shall be independent from the personnel and management functions responsible for originating or renewing exposures and shall report directly to the bank's senior management. The unit shall be responsible for the design or selection, implementation, oversight and performance of the rating systems. It shall regularly produce and analyse reports on the output of the rating systems.

(2) The areas of responsibility for the credit risk control unit shall include:
a) testing and monitoring grades and pools;
b) production and analysis of summary reports from the bank's rating systems;

c) implementing procedures to verify that grade and pool definitions are consistently applied across departments and geographic areas;
d) reviewing and documenting any changes to the rating process, including the reasons for the changes;
e) reviewing the rating criteria to evaluate if they remain predictive of risk. Changes to the rating process, criteria or individual rating parameters shall be documented and retained;
f) active participation in the design or selection, implementation and validation of models used in the rating process;
g) oversight and supervision of models used in the rating process; and
h) ongoing review and alterations to models used in the rating process.

(3) Unless otherwise provided in paragraph (2), a bank using pooled data according to Article 74(9) and (10) may outsource the following tasks:
a) production of information relevant to testing and monitoring grades and pools;
b) production of summary reports from the bank's rating systems;
c) production of information relevant to review of the rating criteria to evaluate if they remain predictive of risk;
d) documentation of changes to the rating process, criteria or individual rating parameters; and
e) production of information relevant to ongoing review and alterations to models used in the rating process.

(4) Banks proceeding according to paragraph (3) shall ensure that the National Bank of Slovakia has access to all relevant information from the third party that is necessary for examining compliance with the minimum requirements and that the National Bank of Slovakia may perform on-site inspections to the same extent as within the bank.

Article 94

The internal control and internal audit department or another comparable independent auditing unit shall review at least annually the bank's rating systems and its operations, including the operations of the credit function and the estimation of PDs, LGDs, ELs and conversion factors. Areas of review shall include adherence to all applicable minimum requirements.

Particulars of an application for prior approval to use the internal ratings based approach

Article 95

A bank's application for the prior approval of the National Bank of Slovakia to use the internal ratings based approach shall include the following particulars:
a) the business name and registered office of the applicant;
b) the identification number of the applicant;
c) whether the bank plans to use the internal credit risk model to calculate, in addition, estimates of LGDs or conversion factors, or other parameters set out in the Banking Act;
d) whether the internal credit risk model that the bank is seeking to use:
1. is own designed;
2. is designed by a supplier;
3. is designed or used also for the calculation of capital requirements by the parent undertaking, another bank or financial institution of the consolidated group in which the bank is included or which the bank itself heads;
4. is designed or procured in a way not mentioned in points 1 to 3, and an outline of this method;

f) the name of a contact person;
g) a list of documents submitted for the purpose of meeting requirements under the Banking Act, including specification of those requirements;
h) a list of other documents which the Bank deems to be material in respect of the approval of the internal ratings based approach.

Article 96

(1) For the purpose of making a general evaluation of the internal ratings based approach, annexes to the application mentioned in Article 95 shall include the following documents:
a) an implementation plan stating:
1. from when the internal ratings based approach is used, archival records on the rating systems used over the previous three years, and from when the bank plans to use the rating systems as the internal ratings based approach for the calculation of capital requirements;
2. the ratio of individual exposure classes to risk weighted exposures and to the total asset value;
3. the reasons for the permanent, partial use of the internal ratings based approach, if the bank plans to use it;
4. the procedure for verifying compliance with the plan for the sequential introduction of the internal ratings based;
b) an own evaluation of the internal ratings based approach;
c) a schematic description of all rating systems and methods used for the rating of parameters, including a description, which exposure classes, legal entities and geographic areas are or will be covered by which rating system, including their ratio to the total asset value.

(2) For the purpose of rating the bank's organization and management, annexes to the application mentioned in Article 95 shall include the following documents:
a) a description of the bank's organizational structure;
b) a list of the persons involved in the credit approval, credit management and risk management, and the competence manual including in particular a breakdown of the competences related to:
1. assigning ratings;
2. credit approval;
3. valuing collateral;
4. managing problem credits;
c) a risk management strategy;
d) a transaction management strategy;
e) documentation on the credit approval process, including the authorization to decide on extending credit;
f) the credit committee's rules of procedure;
g) criteria for assigning exposures to exposure classes;
h) the bank's internal regulations related to the use of rating systems;
i) a specification of the responsibilities and duties related to the internal ratings based approach.

(3) For the purpose of rating the development process of the bank's internal ratings based approach, annexes to the application mentioned in Article 95 shall include the documents set out in paragraphs (4) to (9).

(4) Documents for the collection of data shall comprise:
a) a glossary of the terms used by the bank in the description of data processing;
b) a description of the data processing policy under which the bank ensures the quality of data in all material aspects, for both inputs and outputs of the internal ratings based approach;

c) a description of the sources of the data used in the development of the internal ratings based approach;
d) a description of the processes used to acquire data and to enter them into database, and the filters used in creating the database;
e) a general description of the database, including, for example, an entity-relational model, tables, keys, size, security and access rights, and administration method;
f) a description of the procedure for verifying the quality of data for the database's input thresholds and for its subsequent operation;
g) reports on data quality reviews;
h) the set of data used to develop the internal ratings based approach;
i) documents characterizing the content of the data sets used to develop the internal ratings based approach and the data set for the bank's current portfolio.

(5) Documents for the internal ratings based approach shall comprise:
a) the development procedure for the internal ratings based approach, including archival records on the development of the internal ratings based approach;
b) a description of the risk calculation methods and the type and construction of internal ratings based approach;
c) the reasons for the choice of the particular type of internal ratings based approach;
d) documentation for the rating systems and related documents describing the rating systems, and an estimate of the credit risk parameters;
e) the choice of input variables of the internal ratings based approach: quantitative and qualitative rating criteria, a detailed description of the judgmental considerations, and an evaluation of the parameters of the internal ratings based approach;
f) the algorithms, descriptions of the models, the original raw data, interim results within the process;
g) documentation for the setting of criteria for PD rating and estimates;
h) a description of the internal ratings based approach and its basic assumptions:
1. internal definitions of default and criteria for the recovery of an exposure from default;
2. the definition of loss;
3. the definition of default for different external or pooled data originating from various sources;
4. the reasoning and analysis in regard to the selection of rating criteria;
5. the number of rating grades and their verbal definition;
6. the procedure for assigning exposures to rating grades;
7. a description of situations in which the internal ratings based approach does not work effectively;
8. a description of the strengths and weaknesses of the internal ratings based approach;

i) calibration documentation for the internal ratings based approach;
j) the division of exposures into rating grades;
k) original and adjusted data used with different definitions of default, including a note on how and why these data were adjusted;
l) documentation for all functions of the internal ratings based approach;
m) a description of the bank's use of judgmental considerations in rating systems;
n) a description of the rating process, including any change in the rating or rating update process.

(6) Documents for the estimation of risk parameters shall comprise:
a) a description of the sources of the data used to estimate the parameters of PD, LGD, exposure at default and maturity;
b) documentation of all the rating methods used for each rating system, or each exposure class, including a description of the data based on which these data are calculated;

c) analysis documentation and a description of procedures related to how the bank deals with any uncertainty in estimates and with systematic variability;
d) evidence of the appropriateness of the estimation methods, where data from a data pool is used;
e) for PD estimates:

1. evidence that the requirements in Article 75 are met, in particular, the requirement concerning mappings on to external data (especially in regard to the comparison of rating criteria and the comparison of default definitions), and documentation demonstrating that the criteria for assigning ratings are sufficiently conservative;
2. documentation demonstrating that the requirements in Article 76 are met;

f) for exposure at default estimates:

1. documentation demonstrating that the requirements in Article 79(4) and Article 80 are met, if the bank uses own estimates of LGDs and exposure at default;
2. documentation demonstrating that the requirements in Articles 81 and 82 are met;

g) for LGD estimates:

1. documentation of all estimation methods used, including analyses of the calculation of LGDs appropriate for an economic downturn;
2. the breakdown used in estimating LGDs (hereinafter "LGD segmentation");
3. a description of data used in regard to LGD segmentation;
4. documentation relating to the determination of performance rates in regard to LGD segmentation;
5. a description of the calculation of adjusted LGDs;

h) documentation of the differences between ratings, estimated risk parameters and final internal parameters, and the reasons for differences in the use of estimates in different areas.

(7) Documents for the use of collateral shall comprise:
a) a description of all types of collateral used in the calculation of capital requirements, including to which exposure classes the respective type of security is linked, or for which it is eligible;
b) documentation of verification procedures for the eligibility of collateral;
c) documentation of the collateral valuation procedures used in the calculation of capital requirements, including the revaluation and monitoring procedure;
d) documentation of the collateral realization procedures in the event of default.

(8) Documents for the performance of stress testing shall comprise:
a summary of the processes and methods of the implemented stress tests, as well as their integration into risk management in accordance with Article 71(2) and (3).

(9) Documents for validation shall comprise:
a) own procedures for reviewing the overall appropriateness of the model and weaknesses identified in the internal ratings based approach or techniques at the time of the application's submission, including a plan for their rectification;
b) a description of the sources of data used to evaluate the performance of the internal ratings based approach, particularly to the extent that it concerns benchmarking;
c) a description of the set of data used for validating the internal ratings based approach;
d) a document describing how provision is made for the accessibility and replicability of all material data required during the operation and validation of systems;
e) relevant plans for unforeseen circumstances related to data collection, rating systems, the estimation of parameters and the calculation of capital requirements;
f) a global overview of all weaknesses in the data and in the information processes which were revealed during internal review, an evaluation of the impact of these weaknesses on the final calculation, and a plan for the expected elimination of the weaknesses;
g) a procedure for the overall regular assessment of the internal ratings based approach, and a description of the quantitative and qualitative methods used in the validation of the model;

h) validation of the rating systems;
i) validation of the calibration of the model for the calculation of credit risk parameters;
j) documentation on the review of calibration;
k) the results of all previous validations;
l) historical data on the realized risk parameters and the estimates of risk parameters;
m) procedures for determining the materiality of differences between the estimates and realized values;
n) rules for changing the internal ratings based approach;
o) evaluation of the materiality of the criteria used in the internal ratings based approach;
p) validation of the internal ratings based approach over its development, including, at minimum, out-of-time or out-of-sample performance tests of the internal ratings based approach, based on which the approach is fine-tuned;
r) the back-testing methodology;
s) benchmarking or other ways of evaluating the quality of the internal ratings based approach.

(10) For the purposes of rating the calculation method for a bank's internal ratings based approach, annexes to the application mentioned in Article 95 shall include a description of the algorithms and methodologies used to:
a) classify exposures and instruments for credit risk mitigation and risk parameters;
b) calculate of risk weighted assets
c) calculate capital requirements.

CHAPTER FOUR
CREDIT RISK MITIGATION

Eligible forms of credit risk mitigation

Article 97

(1) For the purposes of credit risk mitigation:
a) 'secured transaction' means a transaction based on which a bank takes on an exposure where the risk is mitigated by funded credit protection and this protection is not provided under a margin agreement;
b) 'capital market-driven transaction' means a transaction giving rise to an exposure where the risk is mitigated under a margin agreement;
c) 'cash assimilated instrument' means a bank book, certificate of deposit or other similar instrument issued by the lending bank.

(2) The eligible forms of credit risk mitigation and the requirements in this regard, details of funded and unfunded credit protection, and the calculation of the effects of credit risk mitigation, including the possibility to modify risk-weighted exposure amounts, are set out in Articles 98 to 137.

Article 98

(1) Contractual netting agreements on which credit risk mitigation is based shall meet the requirements laid down in this Decree.

(2) Only loans and deposits of the lending bank may be subject to a reduction in risk-weighted exposure amounts vis-à-vis a counterparty, or in expected loss amounts, as a result of a contractual netting agreement.

Article 99

Credit risk arising from repurchase transactions, securities or commodities lending or borrowing, and/or other capital market-driven transactions may be mitigated by a bank on the basis of a bilateral netting agreement, provided that the bank applies the comprehensive method for using collateral (or the object of a pledged right or an assigned receivable) in accordance with Article 100(2) and (6). For credit risk to be mitigated under the first sentence, the collateral (or the object of a pledged right or an assigned receivable), and the securities or commodities transferred on the basis of securities or commodities lending or borrowing shall meet the requirements set out in Article 100(2) to (8). This is without prejudice to Article 156 and 157.

Article 100

(1) For the purposes of credit risk mitigation, the eligibility of collateral (or the object of a pledged right or an assigned receivable) shall depend on whether the risk-weighted exposure amount and, as relevant, the expected loss amount are calculated under the standardized approach for credit risk or under the internal ratings based approach. Eligibility further depends on whether the simple method or comprehensive method is used to calculate the effects of credit protection under Articles 120 to 129. In relation to repurchase transactions and securities or commodities lending or borrowing transactions, eligibility also depends upon whether the transaction is booked in the banking book or the trading book.

(2) For the purposes of credit risk mitigation, a bank may, under all approaches and methods, recognize the following exposures, securities and commodities accepted by the bank as collateral (or the object of a pledged right or an assigned receivable):
a) cash on deposit with, or cash assimilated instruments held by, the bank authorized under the secured exposure;
b) debt securities issued by central governments or central banks, which securities have a credit assessment by a credit rating agency or export credit agency recognized as eligible for the purposes of the standardized approach for credit risk, which has been determined by the National Bank of Slovakia to be associated with credit quality step 4, or above, under the rules for the risk-weighting of exposures to central governments and central banks using the standardized approach for credit risk;
c) debt securities issued by public sector entities, which securities have a credit assessment by an eligible credit rating agency which has been determined by the National Bank of Slovakia to be associated with credit quality step 3 or above under the rules for the risk weighting of exposures to institutions using the standardized approach for credit risk;
d) debt securities issued by other entities, which securities have a credit assessment by an eligible credit rating agency which has been determined by the National Bank of Slovakia to be associated with credit quality step 3, or above, under the rules for the risk weighting of exposures to corporates using the standardized approach for credit risk;
e) debt securities with a short-term credit assessment by an eligible credit rating agency which has been determined by the National Bank of Slovakia to be associated with credit quality step 3, or above, under the rules for the risk weighting of short term exposures using the standardized approach for credit risk;
f) equities or convertible bonds that are included in a main index; and
g) gold.

(3) For the purpose of paragraph 2(b), debt securities issued by central governments or central banks shall include:

a) debt securities issued by local authorities or other regional governments, exposures to which are treated as exposures to the central government in whose jurisdiction they are established under the standardized approach for credit risk;
b) debt securities issued by public sector entities which are treated as exposures to central governments in accordance with Article 20(4);
c) debt securities issued by multilateral development banks to which a 0% risk weight is assigned under the standardized approach for credit risk; and
d) debt securities issued by international organizations which are assigned a 0% risk weight under the standardized approach for credit risk.

(4) For the purpose of paragraph 2(c), debt securities issued by public sector entities include:
a) debt securities issued by local authorities or other regional governments other than those exposures to which are treated as exposures to the central government in whose jurisdiction they are established under the standardized approach for credit risk;
b) debt securities issued by public sector entities, exposures to which are treated as exposures to credit institutions under the standardized approach for credit risk;
c) debt securities issued by multilateral development banks other than those to which a 0% risk weight is assigned under the standardized approach for credit risk.

(5) Debt securities issued by public sector entities which securities do not have a credit assessment by an eligible credit rating agency may be recognized as collateral (or the object of a pledged right or an assigned receivable) if they fulfil the following criteria:
a) they are listed on a recognized exchange;
b) they qualify as senior debt;
c) the same issuer's other debt securities, the owners of which would have the same seniority as owners of unrated securities in the event of the issuer's bankruptcy, have a credit assessment by an eligible credit rating agency which is associated with credit quality step 3, or above, under the rules published by the National Bank of Slovakia for the risk-weighting of exposures to public sector entities or for the risk weighting of short term exposures using the standardized approach for credit risk;
d) the bank authorized under the secured exposure has no information to suggest that the issue would justify a credit assessment below that indicated in subparagraph (c); and
e) the bank authorized under the secured exposure can demonstrate to the National Bank of Slovakia that the market liquidity of the instrument is sufficient for these purposes.

(6) Units in collective investment undertakings may be recognized as collateral (or the object of a pledged right or an assigned receivable) if the following conditions are satisfied:
a) they have a daily public price quote; and
b) the collective investment undertaking is limited to investing in instruments mentioned in paragraphs (2) to (5).

(7) The use or potential use by a collective investment undertaking of derivatives to hedge permitted investments shall not prevent units in that undertaking from being eligible.

(8) In relation to paragraph 2(b) to (e), where a security has two credit assessments by eligible credit rating agencies, the less favourable assessment shall be deemed to apply. In cases where a security has more than two credit assessments by eligible credit rating agencies, the two most favourable assessments shall be deemed to apply. If the two most favourable credit assessments are different, the less favourable of the two shall be deemed to apply.

(9) In addition to the exposures, commodities, securities and other property rights set out in paragraphs (2) to (7), where a bank uses the comprehensive method to calculate the effects of credit protection under Articles 120 to 129, the following financial items may, for the purposes of credit risk mitigation, be recognized as collateral (or the object of a pledged right or an assigned receivable):
a) equities or convertible bonds not included in a main index but traded on a recognized exchange;
b) units in collective investment undertakings if the following conditions are met:

1. they have a daily public price quote; and
2. the collective investment undertaking is limited to investing in instruments that are eligible for recognition under paragraphs (5) and (6) and the securities mentioned in subparagraph (a).

(10) Where a bank calculates risk-weighted exposure amounts and expected loss amounts under the internal ratings based approach, it may recognize assets other than the assets mentioned in paragraphs (1) to (8) or in paragraphs (11) to (13), including the effects of credit risk mitigation, as collateral (or the object of a pledged right or an assigned receivable).

(11) Residential real estate which is or will be occupied or let by the owner, or the beneficial owner in the case of personal investment companies, may be recognized for the purposes of credit risk mitigation as collateral (or the object of a pledged right or an assigned receivable), provided that the following conditions are met:
a) the value of the property does not materially depend upon the credit quality of the obligor. This requirement does not preclude situations where the same macroeconomic factors affect both the value of the property and the performance of the borrower; and
b) the risk of the borrower does not materially depend upon the performance or market value of the underlying property or project (or the purpose of securing the transferred property), meaning, in particular, that the borrower has the capacity to repay the debt from other sources.

(12) Credit risk may also be reduced by pledging, or establishing a lien on, shares in Finnish residential housing companies operating in accordance with the Finnish Housing Company Act of 1991 or subsequent equivalent legislation, where the borrower has a share in such a company's residential real estate which is or will be occupied or let.

(13) For the purposes of credit risk mitigation, receivables linked to commercial transactions with an original maturity of less than or equal to one year may be recognized as collateral (or receivables assigned as security). The first sentence shall not apply for exposures to affiliated entities under Article 33e (11) of the Banking Act, nor to receivables associated with securitizations, credit derivatives or risk participation agreements..

(14) Unless otherwise provided in Article 124(11) and provided that the requirements set out in Article 112 are met, where a bank leases an asset, its risk arising under the lease agreement shall be mitigated by treating the leased asset as collateral (or the object of a pledged right). For the purposes of this Decree, 'leasing' means the lease of a certain asset in return for regular payments, where payment of the last instalment means that the lessor is obliged to transfer the right of ownership in the leased asset to the lessee. The lessee shall be required to protect and maintain the leased asset and to undertake the risk of its damage or destruction.

Article 101

A bank's counterparty credit risk may be mitigated in the following ways:

a) by establishing a lien on an exposure arising from an account opened with an institution other than the borrower or creditor (i.e. a bank in favour of the bank), or by assigning such an exposure to the bank, or by establishing a lien on a cash assimilated instrument placed in safekeeping (without simultaneous administration or management of the portfolio) with an institution other than the borrower or creditor (i.e. a bank in favour of the bank), or by the transfer of a property right in such a cash assimilated instrument to the bank;
b) by establishing a lien on a contingent exposure arising from a life insurance policy;
c) by establishing a lien on, or pledging, a right to a financial instrument issued by an institution other than the borrower or the bank, as creditor, where that institution shall repurchase such instrument when requested.

Article 102

For the purposes of credit risk mitigation, unfunded credit protection may be provided by:
a) central governments and central banks;
b) local authorities or other regional governments;
c) multilateral development banks;
d) international organizations exposures to which a 0% risk weight is assigned under provisions on the standardized approach for credit risk;
e) public sector entities, claims on which are treated by the competent authorities as claims on institutions or central governments under provisions on the standardized approach for credit risk;
f) institutions (Article 31(2) of the Banking Act);
g) other corporates, including parent and subsidiary entities and affiliated entities as defined in Article 33e (11) of the Banking Act, which:

1. have a credit assessment by a recognized credit rating agency which has been determined by the National Bank of Slovakia to be associated with credit quality step 2, or above, under the rules for the risk-weighting of exposures to corporates under the provisions on the standardized approach for credit risk; and
2. do not have a credit assessment by a recognized credit rating agency and are internally rated as having a PD equivalent to that associated with credit quality step 2, or above, under the rules published by the National Bank of Slovakia for the risk-weighting of exposures to public sector entities or rules for the risk-weighting of exposures to corporates using the standardized approach for credit risk.

(2) Where risk-weighted exposure amounts and expected loss amounts are calculated under the internal ratings based approach, the obligation of an entity other than the borrower to satisfy the creditor's claim (where the borrower itself does not provide satisfaction) shall have the effect of credit risk mitigation provided that the entity providing this credit protection is internally rated by the bank in accordance with the provisions of Articles 56 to 94.

Article 103

(1) Institutions, insurance and reinsurance companies and export credit agencies which fulfil the following conditions may be recognized as providers of unfunded credit protection which qualify for the treatment set out in Article 42(1)(b):
a) they have sufficient expertise in providing unfunded credit protection;
b) they are regulated in a manner equivalent to the rules laid down in the Banking Act, or had, at the time the credit protection was provided, a credit assessment by a recognized credit rating agency which is associated with credit quality step 3, or above, under the rules published by the National Bank of Slovakia for the risk-weighting of exposures to corporates using the standardized approach for credit risk;

c) they had, at the time the credit protection was provided and for the duration of the credit protection, an internal rating with a PD which is equivalent to or lower than that associated with credit quality step 2, or above, under the rules published by the National Bank of Slovakia for the risk-weighting of exposures to corporates using the standardized approach for credit risk.
d) they have an internal rating with a PD which is equivalent to or lower than that associated with credit quality step 3, or above, under the rules published by the National Bank of Slovakia for the risk-weighting of exposures to corporates using the standardized approach for credit risk.

(2) For the purpose of this paragraph (1), credit protection provided by export credit agencies shall not benefit from any explicit central government counter-guarantee.

Credit protection through credit derivatives

Article 104

The following credit derivatives shall mitigate credit risk:
a) a bilateral agreement under which the counterparty undertakes to pay the bank a monetary sum, which amount or method of calculation is fixed in advance, if a pre-defined event occurs in relation to a third party, i.e. a borrower from the bank, and this is demonstrated in the agreed way (credit default swap);
b) a bilateral agreement under which the counterparty undertakes to pay the bank regularly, for the duration of the agreement, a monetary sum equivalent to a fixed or variable interest rate, or combination thereof, on the nominal value of the bank's exposure to a third party, if a pre-defined event occurs in relation to the third party, i.e. a borrower from the bank, and this is demonstrated in the agreed way; conversely, the bank undertakes to pay the counterparty regularly, for the duration of the agreement, a monetary sum equivalent to the net income from the bank's exposure (also in the case that it is a security) to the third party less an amount corresponding to the decline in the market value of this exposure between dates when the bank acquires the respective income and when it previously acquired such income (total return swaps); or
c) a debt security under which bank that issues it undertakes to pay the principal and interest less the payment that the transferee of the debt security has undertaken to make to the bank in accordance with subparagraph (a) (credit linked notes).

Article 105

A credit risk exposure recorded in the banking book shall be mitigated if a credit derivative recorded in the trading book and meeting the conditions set out in Articles 118 and 155, transfers the respective credit risk to a third party. In the case of such credit risk mitigation, the risk-weighted exposure amount and expected loss amount shall be computed in accordance with Articles 120 to 137.

Article 106

(1) A bank shall demonstrate to the National Bank of Slovakia that it has adequate risk management processes to control those risks to which the bank may be exposed as a result of carrying out credit risk mitigation.

(2) Concerning a bank's exposure and use of credit protection under this Decree, the bank shall calculate the risk-weighted exposure amount and the expected loss amount both with and without regard to the use of credit protection. In the case of repurchase transactions and/or securities or commodities lending or borrowing transactions the exposure shall, for the purposes of the previous sentence, be deemed to be the net amount of the exposure arising from such transactions.

Article 107

For contractual netting agreements – other than master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions and/or other capital market-driven transactions – to be recognized for the purposes of credit risk mitigation under this Decree, the following conditions shall be met:
(a) the bank shall, on the basis thereof, have a right that is legally effective and enforceable in the jurisdictions mentioned in Article 15(4)(b), including in the event of the insolvency or bankruptcy of a counterparty;
(b) the bank shall be able to determine at any time those assets and liabilities that are subject to the collateral netting agreement;
(c) the bank shall monitor the risks associated with the termination of the credit protection; and
(d) the bank shall monitor the relevant exposures on a net basis.

Article 108

(1) For master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions to be recognized for the purposes of credit risk mitigation under this Decree, the following conditions shall be met:
(a) the bank shall, on the basis thereof, have a right that is legally enforceable in the jurisdictions mentioned in Article 15(4)(b), including in the event of the bankruptcy or insolvency of the counterparty;
(b) the master netting agreement shall allow the bank, where the counterparty fails to meet its obligation, to close-out and settle immediately all transactions under the agreement, including in the event of the bankruptcy or insolvency of the counterparty;
(c) in the event that the bank or counterparty withdraws from a contract subject to a contractual netting agreement, the master agreement shall ensure that mutual claims and obligations will be automatically amalgamated in such a way that the net sum is treated as a new obligation or exposure which at once extinguishes and replaces the former obligations or exposures.

(2) For a master netting agreement covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions to be recognized for the purpose of credit risk mitigation under this Decree, the related requirements set out in Article 109(1) shall be met.

Article 109

(1) Collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) may be recognized for the purposes of credit risk mitigation only if the following conditions are met:
a) there is a low correlation between the secured exposure and the collateral (or the object of a pledged right or an assigned receivable), meaning that:

1. the credit quality of the obligor and the value of the collateral (or the object of a pledged right or an assigned receivable) does not have a material positive correlation;
2. securities issued by the obligor or by any related group entity as defined in Article 33e(11) of the Banking Act are not eligible. The obligor's own issues of covered bonds falling within the terms of Article 29(1) to (3), may be recognized as eligible when they are provided as the object of a pledged right or an assigned receivable for repurchase transactions, provided that the requirement of low correlation mentioned in point 1 is complied with;

b) legal certainty exists, meaning that:

1. the bank's right arising under an agreement on establishing a lien or under an agreement on pledging a right or assigning a receivable is enforceable in all jurisdictions relevant in regard to the collateralizing and payment function of the respective credit protection;

2. a legal review has been conducted to demonstrate the enforceability of the lien, or the pledge of a right or assignment of a receivable, and such review is kept updated;

c) operational requirements are met, meaning that:

1. the origination of the lien, or of the pledge of a right or assignment of a receivable, is properly documented with a clear and reliable procedure for the timely enforcement of the lien or realization of the security (the pledge of a right or assignment of a receivable);

2. a mechanism is in place to control risks arising from the use of the collateral (or the object of a pledged right or an assigned receivable) – including the risk of partial or complete termination of the credit protection, valuation risk or depreciation risk in respect of the collateral (or the object of a pledged right or an assigned receivable), the risk of unsuccessful realization of the collateral or attached to the realization of the collateral, and the risk in relation to the bank's overall risk profile;

3. policies concerning the types and amounts of collateral are documented;

4. the market value of the collateral (or the object of a pledged right or an assigned receivable) is calculated, and it is revalued at least once every six months or whenever there are indications that the market value has declined;

5. where securities comprising the collateral securing the bank's exposure are in the safekeeping or under the administration of a third party, the lienor's right to realize the collateral must not be jeopardized by any execution proceedings, enforcement proceedings, bankruptcy proceedings, or similar proceedings abroad conducted against the third party.

(2) In order to use the simple method to calculate the effects of credit protection on the collateral (or the object of a pledged right or an assigned receivable), the following conditions must be met:

a) the requirements set out in paragraph (1) are complied with;

b) the residual maturity of the protection was at least as long as the residual maturity of the exposure.

Article 110

For collateral (or the object of a pledged right) to be recognized for the purposes of credit risk mitigation as mentioned in Article 100(11), the following conditions shall be met:

a) legal certainty exists, meaning that the bank's right arising under an agreement on establishing a lien or under an agreement on pledging a right or assigning a receivable is enforceable in all jurisdictions relevant in regard to the collateralizing and payment function of the respective credit protection;

b) the property values are monitored, meaning that the value of the property is monitored on a sufficiently frequent basis and at a minimum once every once every three years for residential real estate estate. More frequent monitoring is carried out where the market is subject to significant changes in market conditions. Statistical methods may be used to monitor the value of the property and to identify property that needs revaluation. The property valuation shall be reviewed by an independent valuer when information indicates that the value of the property may have declined materially relative to general market prices. For loans exceeding EUR 3 million or 5% of the own funds of the bank, the property valuation shall be reviewed by an independent valuer at least every three years.

c) the types of residential real estate accepted by the bank under its lending policy are documented;

d) procedures are in place to monitor that the property taken as collateral (or the object of a pledged right) is adequately insured against damage.

Article 111

For collateral (or a receivable assigned as security) to be recognized for the purposes of credit risk mitigation as mentioned in Article 100(13), the following conditions shall be met:

a) legal certainty exists, meaning that

1. the bank's right arising under an agreement on establishing a lien or under an agreement to pledge a right or receivable is enforceable in all jurisdictions relevant in regard to the collateralizing and payment function of the respective credit protection; for the purposes of this paragraph, an agreement shall be recognized only if it allows the bank, as lienor, to have a first priority claim;
2. the bank has conducted sufficient legal review confirming the enforceability of the lien or the assignment of a receivable as security;
3. the lien or assignment of a receivable as security is properly documented, with details of the procedure for realizing the collateral. The bank has procedures in place to ensure monitoring of the solvency of the borrower and the conditions for the timely realization of the collateral. In the event of the borrower's default, the bank has the right, without the prior consent of the lienee, to assign to a third party the receivable constituting the collateral;

b) risk management is carried out, meaning that:

1. a sound process is in place for determining the credit risk associated with the receivables. Such a process includes, among other things, analyses of the borrower's business and industry and the types of customers with whom the borrower does business. Where the bank relies on the borrower to ascertain the credit risk of the customers, the bank reviews the borrower's credit practices to ascertain their soundness and credibility
2. the margin between the amount of the exposure and the current monetary value of the receivables reflects all material factors, including the cost of realizing the collateral, the concentration of the receivables constituting the collateral (or the receivable assigned as security) and provided by the same borrower, and the potential exposure vis-à-vis the obligor under the receivables beyond that controlled by the bank's risk management system. The bank maintains continuous monitoring of the receivables according to their nature. In addition, the fulfilment of the obligor's commitment and compliance with contractual conditions concerning environmental protection are reviewed on a regular basis;
3. the composition of the receivables constituting the collateral (or the receivable assigned as security) complies with the principle of risk diversification and the receivables are not unduly correlated with the borrower. Where there is material positive correlation, the attendant risks are taken into account in the setting monetary amount for coverage of the margin mentioned in point 2;
4. receivables from affiliated entities as defined in Article 33e(11) of the Banking Act and from employees are not recognized as collateral (or a receivable assigned as security) which mitigates the bank's credit risk;
5. the bank has a documented process for addressing the borrower's default and for enforcing the lien.

Article 112

1. For the exposures arising from leasing transactions to be treated as collateralized, the following conditions shall be met:

a) the leased asset is residential real estate in which regard the requirements set out in Article 110(b) are met

b) the bank, as lessor, ensures reliable risk management with respect to the use to which the leased asset is put, its age and the planned duration of its use, including appropriate monitoring of the value of the leased asset;

c) the lessor's legal ownership of the leased asset is established under the relevant jurisdiction; and
d) where this has not already been ascertained in calculating the LGD level, the difference between the value of the unamortized amount and the market value of the leased asset is not so large as to overstate the credit risk mitigation attributed to the leased asset.

Article 113

For a bank to proceed in accordance with Article 127(1), the collateral (or the object of a pledged right or an assigned receivable) under Article 101(1) shall meet the following conditions:
a) the borrower's claim against the third party institution is a lien established in favour of the bank or a receivable assigned to the bank. The bank's right arising under the agreement on establishing the lien or under the agreement on pledging a right or assigning a receivable is enforceable in all jurisdictions relevant in regard to the collateralizing and payment function of the respective credit protection;
b) the third party institution is notified of the establishment of the lien or assignment of the receivable under subparagraph (a);
c) as a result of the notification mentioned in subparagraph (b), the third party institution may make payments solely to the bank or to other parties with the bank's consent; and
d) the respective agreement does not permit the lienee or assignor to withdraw from or repudiate the agreement, and the bank's right to enforce the lien or retain the assigned receivable is contingent solely on the borrower defaulting.

Article 114

For collateral (or a receivable assigned as security under Article 101(2)(b)) to be recognized for the purposes of credit risk mitigation, the following conditions shall be met:
a) the company providing the life insurance would be recognized as an eligible unfunded credit protection provider under Article 102(1);
b) the receivable arising under the insurance policy is subject to a lien in favour of the bank or is assigned to the bank as security;
c) the company providing the life insurance is notified of the lien or the assignment of the receivable under subparagraph (b), and as a result may make payments solely to the bank or to other parties with the bank's consent;
d) the declared surrender value of the insurance policy is non-reducible;
e) the bank has the right to cancel the insurance policy and receive the surrender value in a timely way in the event of the default of the borrower;
f) the lending bank is informed of any non-payments under the policy by the policy-holder;
g) the receivable arising under the insurance policy is the collateral (or receivable assigned as security) for the duration of the credit relationship. Where the insurance relationship ends before the credit relationship expires, the bank ensures that the amount deriving from the insurance policy serves the bank as collateral until repayment of the obligation originally secured by the receivable under the policy; and
h) the bank's right arising under the agreement on establishing a lien or under the agreement on pledging a right or assigning a receivable is enforceable in all jurisdictions relevant in regard to the collateralizing and payment function of the respective credit protection.

Article 115

(1) Unless otherwise provided in Article 116(1), for agreements representing unfunded credit protection to be recognized for the purposes of credit risk mitigation, the following conditions shall be met:
a) the agreement is concluded between the lending bank and the protection provider;

b) the extent of the credit protection is clearly defined;
c) the agreement does not contain any clause that:

1. would allow the protection provider unilaterally to withdraw from the agreement or to cancel the agreement before termination of the main protected exposure;
2. would increase the cost of protection as a result of deteriorating credit quality of the protected exposure;
3. could prevent the protection provider from being obliged to pay the lending bank in a timely manner in the event that the original obligor defaults or another condition precedent is satisfied; or
4. could allow the period of the credit protection to be reduced unilaterally by the protection provider; and

d) the bank's right arising under these agreements is legally enforceable in all jurisdictions relevant in regard to the collateralizing and payment function of the respective credit protection.

(2) The bank shall have systems in place to manage the potential concentration of risk arising upon the non-satisfaction of the receivable to which the unfunded protection applies. The bank shall be able to demonstrate how its strategy in respect of its use of unfunded protection interacts with its risk management system.

Article 116

(1) Where unfunded protection is counter-guaranteed by an entity different from the original obligor and the protection provider in order to satisfy the bank's receivable that has not been satisfied by the protection provider (hereinafter a "counter-guarantee"), such counter-guarantee may be recognized for the purposes of credit risk mitigation as if it were directly provided unfunded protection, provided that the following conditions are met:
a) the entity providing the counter-guarantee is:

1. a central government, central bank, local authority or other regional government;
2. a public sector entity, claims on which are, under the provisions on the standardized approach for credit risk, treated as claims on the central government in whose jurisdiction they are established;
3. a public sector entity, claims on which are, under the provisions on the standardized approach for credit risk, treated as claims on credit institutions; or
4. a multilateral development bank to which a 0% risk weight is assigned under or by virtue of the provisions on the standardized approach for credit risk;

b) the counter-guarantee covers all credit risk elements of the bank's claim;
c) the counter-guarantee meets the requirements set out in Article 115(1)(b) and (c) and (2) and Article 117(1);
d) the counter-guarantee or the contractual framework in which it is included shall afford the same level of protection as if it were the unfunded protection provided by the entities mentioned in paragraph (1)(a). In the event that the provider of the unfunded protection enters into bankruptcy or is subject to execution proceedings, it should be agreed that the counter-guarantee provider assumes the position of the provider of the direct unfunded protection.

(2) The provision of paragraph (1) shall not apply to an exposure which is counter-guaranteed by an entity outside the group of entities mentioned in paragraph (1)(a), provided that the counter-guarantee itself is protected in accordance with paragraph (1).

Article 117

(1) To be recognized for the purposes of credit risk mitigation, the obligation of a third party to satisfy the creditor's claim when the obligor has failed to do so, the following conditions shall be met:

a) on the default by the counterparty:

1. the bank shall have the right, in a timely manner, to pursue the third party after written notice has been given to the third party by the creditor;
2. payment by the third party is not subject to the bank first having to pursue the obligor. It is not treated as pursuit where the bank notifies the obligor of its duty to pay;
3. in the case of unfunded credit protection covering residential mortgage loans, the requirements in Article 115(1)(c), point 3, and in this subparagraph have only to be satisfied within 24 months;

b) the third party's obligation to pay the bank in the event of the obligor's default is properly documented;

c) the third party's obligation to pay the bank in the event of the obligor's default covers all types of payments the obligor is expected to make in respect of the bank's secured claim. Where certain types of payment are excluded from the third party's obligation, the credit risk mitigating value of this obligation shall be adjusted to reflect the limited coverage.

(2) In the case of multiple guarantor relationships or counter-guarantees in the form of a third party's obligation to pay the bank or another creditor upon default by the obligor, the requirements in paragraph 1(a) shall be considered to be satisfied where either of the following conditions are met:

a) in the event of default by the counterparty, the bank has the right to obtain in a timely manner from the protection provider a provisional payment corresponding to the bank's estimated loss, including losses resulting from the non-payment of interest, proportional to the coverage of the protection; or

b) documentation exists demonstrating that the third party's obligation to pay the bank in the event of default by the obligor also covers losses resulting from the non-payment of interest.

Article 118

(1) For agreements under Article 104(1) (hereinafter "credit derivatives") to be recognized for the purposes of credit risk mitigation, the following conditions shall be met:

a) unless otherwise provided in subparagraph (b), the credit events specified under the credit derivative shall at a minimum include:

1. the failure to pay the amounts due;
2. the bankruptcy or insolvency of the obligor, or its admission in writing of its inability to pay its debts;
3. the forgiveness or postponement of principal, interest or fees that results in a decline in the market value of the underlying obligation (hereinafter "restructuring of the underlying obligation"). The underlying obligation represents the bank's exposure to the obligor in the form of a debt security;

b) where the credit events specified under the credit derivative do not include restructuring of the underlying obligation as described in subparagraph (a), point 3, the credit protection may nonetheless be recognized subject to a reduction in the recognized value as specified in Article 123(1);

c) in the case of credit derivatives allowing for cash settlement, a reliable valuation process is in place in order to estimate loss. There is a clearly specified period for obtaining post-credit-event valuations of the underlying obligation;

d) settlement of the credit derivative is subject to the assignment of the underlying obligation and this assignment is not prevented by a prior agreement between the bank and obligor; and

e) the method of demonstrating the credit event is clearly defined. The assessment of whether a given fact constitutes a credit event as defined is not the sole responsibility of the protection provider. The protection provider verifies any notification by the bank that a credit event has occurred.

(2) The underlying obligation may be mismatched with the reference obligation under the credit derivative (i.e. the obligation the proceeds from which represent the bank's payment for the provision of unfunded protection) or with the obligation used for the purposes of determining whether a credit event has occurred, and still constitute a credit risk-mitigating credit derivative, only if the following conditions are met:
a) the reference obligation or the obligation used for purposes of determining whether a credit event has occurred, as the case may be, ranks pari passu with or is junior to the underlying obligation; and
b) the underlying obligation and the reference obligation or the obligation used for purposes of determining whether a credit event has occurred, as the case may be, share the same obligor (i.e. the same legal entity), and they include an arrangement to construe from a failure to satisfy the underlying obligation that the reference obligation or the obligation used for purposes of determining whether a credit event has occurred is prepayable or unsatisfied.

Article 119

For the effect of a third party's obligation to pay the bank in the event of default by the obligor and for the credit derivative effect to be recognized for the calculation mentioned in Article 42(1)(b), the following conditions shall be met:
a) the underlying obligation is an exposure to a corporate entity under the provisions on the internal ratings based approach, excluding insurance and reinsurance undertakings, or an exposure to a local authority or other regional government, or public sector entity which is not treated as an exposure to a central government or a central bank under the provision on the internal ratings based approach, or an exposure to a small or medium-sized entity which is classified as a retail exposure under provisions on the internal ratings based approach;
b) the underlying obligors are not members of the same group of affiliated entities (under Article 33e(11) of the Banking Act) as the protection provider;
c) the exposure is hedged by one of the following instruments:

1. a single-name unfunded credit derivative or a third party's obligation to satisfy the bank's claim on not more than one defaulting obligor;
2. a credit derivative in respect of which a credit event is defined as first to default in a predetermined portfolio of assets – the protected asset is that asset within the portfolio which has the lowest risk weight; or
3. a credit derivative in respect of which a credit event is defined as nth to default within a pre-arranged tranche in a predetermined portfolio of assets. Such protection is only recognized if eligible protection has also been obtained for assets within the subordinate tranche or where any assets within this tranche have already defaulted. The protected asset is that asset within the portfolio that has the lowest risk weight;

d) the credit protection meets the requirements set out in Article 115(1) and (2), Article 117(1) and Article 118(1) and (2);
e) the risk weight that is a variable in the calculation set out in Article 42(1)(b) does not already factor in any aspect of the credit protection;
f) the protection provider is required to pay the bank, within a reasonable period, after it has been demonstrated in the agreed manner that a credit event has occurred or the bank has notified the protection provider of default by the obligor, where a third party is obliged to pay the bank in the event of default by the obligor. The protection provider's ability and willingness to meet its obligation is reviewed by the bank;
g) the provided credit protection covers all possible losses on the exposures to which it applies;

h) in connection with the settlement of the credit derivative, a right or receivable is to be transferred or assigned, and the respective transfer or assignment of the right and contingent receivable included in the credit derivative is legally enforceable. In regard to the settlement of the credit derivative, the bank undertakes to assign a receivable or transfer a right other than the underlying obligation only if there is a sufficiently liquid market in relation to such rights or receivables which allows for the fulfilment of the bank's obligation or the acquisition of the rights or receivables agreed in advance;
(i) the credit protection agreement is in writing;
(j) the bank has a process in place to detect excessive correlation between the solvency of the protection provider and the obligor of the underlying exposure due to the dependence on common factors affecting solvency, with the exception of macroeconomic factors; and
(k) in the case of protection against dilution risk of assigned receivables, the assignor of the receivables assigned to the bank is not a member of the same group of affiliated entities as the protection provider.

Calculating the effects of credit risk mitigation

Article 120

(1) Unless otherwise provided in Articles 130 to 137, where the provisions in Articles 97 to 119 are satisfied, the calculation of risk-weighted exposure amounts under the standardized approach for credit risk and the calculation of risk-weighted exposure amounts and expected loss amounts under the internal ratings based approach shall be carried out in accordance with the provisions of this Chapter.

(2) Cash, securities or commodities acquired under a repurchase transaction or securities or commodities lending or borrowing transaction shall be treated as credit protection under Article 100.

Article 121

Credit protection under Article 104(c) shall have the same effects as credit protection under Article 100(2)(a).

Article 122

A contractual netting agreement shall have the same effects as credit protection under Article 100(2)(a).

Article 123

(1) Unless otherwise provided in paragraphs (8) to (17), in calculating the ‘fully adjusted exposure value’ (E*) for exposures subject to a master netting agreement covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions, the volatility determined in accordance with Article 124(13) to (18) or the volatility determined on the basis of own estimates mentioned in Article 124(19) to (33) shall be applied. For the use of the own estimates approach, the same conditions and requirements shall apply as apply under the comprehensive method for calculating credit protection effects.

(2) The net position of a security or commodity shall represent the difference between the total values of the lent or otherwise acquired securities or commodities of the same type.

(3) For the purposes of paragraph (2), the same type of security means securities which are issued by the same entity, have the same issue date, the same maturity and are subject to the same terms and conditions, and are subject to the same liquidation periods as indicated in Article 124 (11) to (35).

(4) The net position in a currency, other than the settlement currency of the master netting agreement, shall represent the difference between the total values of lent or otherwise acquired securities denominated in that currency under the master netting agreement or between the values of cash in that currency lent under the master netting agreement.

(5) The volatility adjustment appropriate to a given security or cash position shall be applied to the short or long net position in the securities of that type.

(6) The foreign exchange risk (fx) volatility adjustment shall be applied to the short or long net position in each currency other than the settlement currency of the master netting agreement.

(7) E* shall be calculated according to the following formula:

$$E^* = \max \{0, [(\sum(E) - \sum(C)) + \sum(|\text{net position in each security}| \times Hsec) + (\sum|Efx| \times Hfx)]\}.$$

Where risk-weighted exposure amounts are calculated under the standardized approach for credit risk, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.

Where risk-weighted exposure amounts and expected loss amounts are calculated under the internal ratings based approach, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.

C is the value of the securities or commodities borrowed or otherwise acquired, or the cash borrowed or otherwise acquired, in respect of each such exposure.

$\sum(E)$ is the sum of all Es under the agreement.

$\sum(C)$ is the sum of all Cs under the agreement.

Efx is the net position (short or long) in a given currency other than the settlement currency of the agreement as calculated under paragraph (4).

Hsec is the volatility adjustment appropriate to a particular type of security.

Hfx is the foreign exchange volatility adjustment.

E* is the fully adjusted exposure value.

(8) As an alternative to determining volatility under Article 124(13) to (18) or to determining volatility under Article 124(19) to (33), in calculating the fully adjusted exposure value (E*) resulting from the application of a master netting agreement covering repurchase transactions, securities or commodities lending or borrowing transactions, and/or other capital market-driven transactions other than derivative transactions referred to in Article 16, a bank may use an internal models approach which takes into account correlation effects between security positions subject to the master netting agreement as well as the liquidity of the instruments concerned. Internal models used in this approach shall provide estimates of the potential change in value of the unsecured exposure amount ($\sum(E) - \sum(C)$). Banks may also use their internal models for margin lending transactions, if the transactions are covered under master netting agreement that meets the requirements set out in Article 15.

(9) A bank may use an internal models approach independently of whether risk-weighted exposure amounts are calculated under the standardized approach for credit risk or the internal ratings based approach. If a bank uses an internal models approach, it must do so for all counterparties and securities, excluding immaterial portfolios where the exposure value may be adjusted using the volatility determined under paragraphs (1) to (7).

(10) The internal models approach is available to banks that have received approval from the National Bank of Slovakia to use an internal market risk model.

(11) A bank which has not received approval from the National Bank of Slovakia to use an internal market risk model may, for the purposes of paragraphs (8) to (17), use a substitute internal model for market risk provided that the conditions set out in paragraph (12) are met.

(12) The recognition referred to in paragraph (11) shall be subject to whether the bank's risk-management system for managing the risks arising on the transactions covered by the master netting agreement is conceptually sound and implemented with integrity and that, in particular, the following conditions are met:
a) the substitute internal market risk model used to calculate potential price volatility for the transactions is closely integrated into the daily risk-management process of the bank and serves as the basis for reporting risk exposures to members of the bank's statutory body;
b) the bank has a risk control unit that is independent from business trading units and reports directly to members of the bank's statutory body. The unit is responsible for designing and implementing the bank's risk-management system. It produces and analyses daily reports on the outputs of the risk-measurement model and on the appropriate measures to be taken in terms of position limits;
c) the daily reports produced by the risk-control unit are reviewed by a level of management with sufficient authority to enforce reductions of positions taken and of overall risk exposure;
d) the bank has sufficient staff skilled in the use of sophisticated models in the risk control unit;
e) the bank has established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of the risk-measurement system;
f) the reasonable accuracy of the bank's models in measuring risks has been demonstrated through the back-testing of its output using at least one year of data;
g) the bank frequently conducts a rigorous programme of stress testing and the results of these tests are reviewed by senior management and reflected in the policies and limits it sets;
h) the bank must conduct, as part of its regular internal auditing process, an independent review of its risk-measurement system. This review must include both the activities of the business trading units and of the independent risk-control unit;
i) at least once a year, the bank must conduct a review of its risk management system; and
j) the internal market risk model shall meet the requirements set out in Article 14(40) to (42).

(13) The calculation of the potential change in value shall be subject to the following minimum standards:
a) at least daily calculation of the potential change in value;
b) a 99th percentile, one-tailed confidence interval;
c) a 5-day equivalent liquidation period, except in the case of transactions other than repurchase transactions or securities lending or borrowing transactions where a 10-day equivalent liquidation period shall be used;
d) an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility; and
e) three-monthly data set updates.

(14) The substitute internal market risk model shall capture a sufficient number of risk factors in relation to all material price risks.

(15) A bank may use empirical correlations within risk categories and across risk categories if the bank's system for measuring correlations is sound and implemented with integrity.

(16) The fully adjusted exposure value (E*) for banks using the internal models approach shall be calculated according to the following formula:
$E^* = \max \{0, [(\sum(E) - \sum(C)) + (\text{internal market risk model output})]\}$.
Where risk-weighted exposure amounts are calculated under the standardized approach for credit risk, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.
Where risk-weighted exposure amounts and expected loss amounts are calculated under the internal ratings based approach, E is the exposure value for each separate exposure under the agreement that would apply in the absence of the credit protection.
C is the value of the securities borrowed or otherwise acquired, or the cash borrowed or otherwise acquired, in respect of each such exposure.
$\sum(E)$ is the sum of all Es under the agreement.
$\sum(C)$ is the sum of all Cs under the agreement.

(17) Where risk-weighted exposure amounts are calculated using internal models, the previous business day's model output shall be used.

(18) E* as calculated under paragraphs (1) to (17) shall, for the purposes of the standardized approach for credit risk, be taken as the exposure value of the exposure to the counterparty arising from the transactions subject to the master netting agreement.

(19) E* as calculated under paragraphs (1) to (17) shall, for the purposes of Articles 41 to 94, be taken as the exposure value of the exposure to the counterparty arising from the transactions subject to the master netting agreement.

Article 124

(1) The simple method for using collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) shall be available only where risk-weighted exposure amounts are calculated under the standardized approach for credit risk. A bank shall not employ both the simple method and the comprehensive method for using collateral (or the object of a pledged right or an assigned receivable).

(2) Under this method, the recognized collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) shall be assigned a value equal to its market value as determined in accordance with Article 109(1).

(3) The risk weight that would be assigned under the standardized approach for credit risk if the lender had a direct exposure to the collateral instrument shall be assigned to those portions of claims collateralized by the market value of the recognized collateral (or the object of a pledged right or an assigned receivable) under Article 100(2). The risk weight of the collateralized portion shall be a minimum of 20 % except as specified in paragraphs (4) to (6). The remainder of the exposure shall receive the risk weight that would be assigned to an unsecured exposure to the counterparty under the standardized approach for credit risk.

(4) In the case of the pledge of a property right in a security or the lending or borrowing of a security, a risk weight of 0% shall be assigned to the collateralized portion of the exposure (the collateral or the objects pledged or receivables assigned) arising from transactions which fulfil the requirements set out in paragraphs (35) and (36). If the counterparty to the transaction is not a core market participant, a risk weight of 10% shall be assigned.

(5) To the extent of the protection given by collateral (or the object of a pledged right or an assigned receivable) under Article 100(2), a risk weight of 0% shall be assigned to the exposure values determined under Articles 10 to 15 for the derivative instruments listed in Article 16 and subject to daily marking-to-market, collateralized by cash or cash-assimilated instruments where there is no currency mismatch. A risk weight of 10% shall be assigned to the extent of the protection given by collateral (or the object of a pledged right or an assigned receivable) under Article 100(2), a risk weight of 0% shall be assigned to the exposure values of such transactions collateralized by debt securities issued by central governments or central banks which are assigned a 0% risk weight under the standardized approach for credit risk. For the purposes of this paragraph, debt securities issued by central governments or central banks shall include:
(a) debt securities issued by local authorities or other regional governments exposures to which are treated as exposures to the central government in whose jurisdiction they are established under the standardized approach for credit risk;
(b) debt securities issued by multilateral development banks to which a 0% risk weight is assigned under the standardized approach for credit risk;
(c) debt securities issued by international organizations which are assigned a 0% risk weight under the standardized approach for credit risk.

(6) A risk weight of 0% shall be assigned where the exposure and the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) are denominated in the same currency, and the funded credit protection is in the form of:
a) cash on deposit or a cash assimilated instrument; or
b) debt securities issued by central governments or central banks in accordance with paragraph (5) which attract a risk weight of 0% under the standardized approach for credit risk, and its market value has been discounted by 20%.

(7) In valuing collateral (or the object of a pledged right or an assigned receivable) under Article 100(2), for the purposes of the comprehensive method for the use thereof, volatility adjustments shall be applied to the market value of the credit protection, as set out in paragraphs (11) to (35) in order to take account of price volatility.

(8) Subject to the treatment for currency mismatches in the case of over-the-counter derivatives transactions set out in paragraph (9), where the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) is denominated in a currency that differs from that in which the underlying exposure is denominated, an adjustment reflecting currency volatility shall be added to the volatility adjustment appropriate to the credit protection as set out in paragraphs (11) to (35).

(9) In the case of over-the-counter transactions covered by contractual netting agreements meeting the conditions set out in Articles 10 to 15, a volatility adjustment reflecting currency volatility shall be applied when there is a mismatch between, on the one hand, the currency of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) and, on the other hand, the settlement currency. Even in the case where multiple currencies are involved in the transactions covered by the netting agreement, only a single volatility adjustment shall be applied.

(10) Where the volatility-adjusted value of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) is to be taken into account, it shall be calculated as follows in the case of all transactions except those transactions subject to a master netting agreement to which the provisions set out in paragraphs (1) to (19) are applied:
CVA = C x (1-HC-HFX).
The volatility-adjusted value of the exposure to be taken into account is calculated as follows:

EVA = E x (1+HE),), and, in the case of over-the-counter derivative transactions, EVA = E.
The fully adjusted value of the exposure, taking into account both volatility and the risk-mitigating effects of the collateral (or the object of a pledged right or an assigned receivable) shall be calculated as follows:
E* = max {0, [EVA - CVAM]}
where:
E is the exposure value as would be determined under the standardized approach for credit risk or the internal ratings based approach if the exposure was not protected by collateral (or the object of a pledged right or an assigned receivable) under Article 100(2). For this purpose, for banks calculating risk-weighted exposure amounts under the standardized approach for credit risk, the exposure value of off-balance sheet items listed in Article 17 shall be 100% of its value rather than the percentages indicated in Articles 31(3) of the Banking Act, and for banks calculating risk-weighted exposure amounts under the internal ratings based approach, the exposure value of the items listed in Article 53(9) to (11) shall be calculated using a conversion factor of 100% rather than the conversion factors or percentages indicated in those paragraphs.
EVA is the volatility-adjusted exposure amount.
CVA is the volatility-adjusted value of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2).
CVAM is CVA further adjusted for any maturity mismatch in accordance with the provisions of Articles 130 to 134.
HE is the volatility adjustment appropriate to the exposure (E), as calculated under paragraphs (11) to (35).
HC is the volatility adjustment appropriate to the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2), as calculated under paragraphs (11) to (35).
HFX is the volatility adjustment appropriate to currency mismatch, as calculated under paragraphs (11) to (35).
E* is the fully adjusted exposure value taking into account volatility and the risk-mitigating effects of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2).

(11) Volatility adjustments may be calculated in two ways:
a) in accordance with paragraphs (13) to (18); or
b) on the basis of own estimates under paragraphs (19) to (33).

(12) A bank's decision to calculate volatility adjustments in accordance with paragraphs (13) to (18) or on the basis of owns estimates under (19) to (33) may be made independently of whether it calculates risk-weighted exposure amounts under the standardized approach for credit risk or the internal ratings based approach. If the bank chooses the calculation method under paragraphs (19) to (33), it shall apply it to the full range of instrument types, excluding immaterial portfolios where it may use the procedure under paragraphs (13) to (18). Where the collateral (or the object of a pledged right or an assigned receivable) consists of a number of items, the volatility adjustment shall be:

$$H = \sum_i a_i H_i$$

where a_i is the proportion of an item to the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) as a whole, and H_i is the volatility adjustment applicable to that item.

(13) The volatility adjustments to be applied under the volatility adjustments approach set out in this Decree (assuming daily revaluation) shall be those set out in Tables 18 to 21.

Table 18

Credit quality step with which the credit assessment of the debt security is associated	Residual maturity	Volatility adjustments for debt securities issued by entities described in Article 100(2)(b)			Volatility adjustments for debt securities issued by entities described in Article 100(2)(c) and (d)		
		20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation (%)
1	≤ 1 year	0.707	0.5	0.354	1.414	1	0.707
	>1 ≤ 5 years	2.828	2	1.414	5.657	4	2.828
	> 5 years	5.657	4	2.828	11.314	8	5.657
2-3	≤ 1 year	1.414	1	0.707	2.828	2	1.414
	>1 ≤ 5 years	4.243	3	2.121	8.485	6	4.243
	> 5 years	8.485	6	4.243	16.971	12	8.485
4	≤ 1 year	21.213	15	10.607	-	-	-
	>1 ≤ 5 years	21.213	15	10.607	-	-	-
	> 5 years	21.213	15	10.607	-	-	-

Table 19

Credit quality step with which the credit assessment of a short term debt security is associated	Volatility adjustments for debt securities issued by entities described in Article 100(2)(b) with short-term credit assessments			Volatility adjustments for debt securities issued by entities described in Article 100(2)(c) and (d) with short-term credit assessments		
	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
1	0.707	0.5	0.354	1.414	1	0.707
2-3	1.414	1	0.707	2.828	2	1.414

Table 20

Other collateral or exposure types			
	20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
Main Index Equities, Main Index Convertible Bonds	21.213	15	10.607
Other Equities or Convertible Bonds listed on a recognized exchange	35.355	25	17.678
Cash	0	0	0
Gold	21.213	15	10.607

Table 21

Volatility adjustment for currency mismatch		
20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
11.314	8	5.657

(14) For secured lending transactions the liquidation period shall be 20 business days. For repurchase transactions (except insofar as such transactions involve the transfer of commodities or

rights relating to title to commodities) and securities lending or borrowing transactions, the liquidation period shall be 5 business days. For other capital market-driven transactions, the liquidation period shall be 10 business days.

(15) In Tables 18 to 21 and in paragraphs 16 to 18, the credit quality step with which a credit assessment of the debt security is associated is the credit quality step with which the credit assessment is determined by the National Bank of Slovakia to be associated under the provisions on the standardized approach for credit risk. For the purpose of this paragraph, Article 100(5) also applies.

(16) For non-eligible securities or for commodities lent or sold under repurchase transactions or securities or commodities lending or borrowing transactions, the volatility adjustment is the same as for non-main index equities listed on a recognized exchange.

(17) For eligible units in collective investment undertakings the volatility adjustment is the weighted average volatility adjustments that would apply, having regard to the liquidation period of the transaction as specified in paragraph (14), to the assets in which the fund has invested. If the assets in which the fund has invested are not known to the bank, the volatility adjustment is the highest volatility adjustment that would apply to any of the assets in which the fund has the right to invest.

(18) For unrated debt securities issued by institutions and satisfying the eligibility criteria in Article 100(1), the volatility adjustments shall be the same as for securities issued by institutions or corporates with an external credit assessment associated with credit quality steps 2 or 3.

(19) The requirements set out in paragraphs (24) to (33) for the use of own volatility estimates to calculate the volatility adjustments shall be applied to collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) and exposures.

(20) When debt securities have a credit assessment from an eligible credit rating agency equivalent to investment grade or better, a volatility estimate for each category of security may be calculated.

(21) In determining relevant categories, a bank shall take into account the type of issuer of the security the external credit assessment of the securities, their residual maturity, and their modified duration. Volatility estimates must be representative of the securities included in the category by the bank.

(22) For debt securities having a credit assessment from an eligible credit rating agency equivalent to below investment grade, and for other eligible funded credit protection, the volatility adjustments must be calculated for each individual item.

(23) A bank which makes volatility adjustments using the own estimates in accordance with this paragraph, paragraphs (19) to (22) and paragraphs (24) to (33), shall estimate the volatility of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2), or the volatility of a foreign exchange mismatch, without taking into account any correlations between the unsecured exposure, the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2), or the exchange rates.

(24) In calculating the volatility adjustments, a 99th percentile one-tailed confidence interval shall be used.

(25) The liquidation period shall be 20 business days for secured lending transactions; 5 business days for repurchase transactions, except insofar as such transactions involve the transfer of commodities or rights relating to title to commodities and securities lending or borrowing transactions, and 10 business days for other capital market-driven transactions.

(26) A bank may use volatility adjustment numbers calculated according to shorter or longer liquidation periods as set out in paragraph (25), and in that case shall use the following formula:

$$H_M = H_N \sqrt{T_M / T_N}$$

where:

TM is the relevant liquidation period for which HM is to be calculated;
TN is the liquidation period under paragraph (25);
HM is the volatility adjustment under TM;
HN is the volatility adjustment under TN.

(27) A bank shall take into account the illiquidity of lower-quality assets. The liquidation period shall be adjusted upwards in cases where there is doubt concerning the liquidity of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2). The bank shall also identify where historical data may understate potential volatility. Such cases shall be dealt with by means of a stress scenario.

(28) The historical observation period for calculating volatility adjustments shall be at least one year. For a bank that uses a weighting scheme or other methods for the historical observation period, the effective observation period shall be at least one year (that is, the weighted average time lag of the individual observations shall not be less than six months).

(29) A bank shall update its data sets at least once every three months and shall also reassess them whenever market prices are subject to material changes. Volatility adjustments shall be computed at least every three months.

(30) The volatility estimates shall be used in the day-to-day risk management process of the bank including in relation to its internal exposure limits.

(31) If the liquidation period used by the bank in its day-to-day risk management process is longer than that set out in this Chapter for the type of transaction in question, the volatility adjustments shall be scaled up in accordance with the formula set out in paragraph (26).

(32) A bank shall have established procedures for monitoring and ensuring compliance with a documented set of policies and controls for the operation of its system for the estimation of volatility adjustments and for the integration of such estimations into its risk management process.

(33) An independent review of the bank's system for the estimation of volatility adjustments shall be carried out regularly in the bank's own internal auditing process. A review of the overall system for the estimation of volatility adjustments and for integration of those adjustments into the bank's risk management process shall take place at least once a year and shall specifically address, at a minimum:
a) the integration of estimated volatility adjustments into daily risk management;
b) the validation of any significant change in the process for the estimation of volatility adjustments;

c) the verification of the consistency, timeliness and reliability of data sources used to run the system for the estimation of volatility adjustments, including the independence of such data sources; and
d) the accuracy and appropriateness of the volatility assumptions.

(34) The volatility adjustments set out in paragraphs (13) to (18) are the volatility adjustments to be applied where there is daily revaluation. Where a bank uses its own estimates of the volatility adjustments in accordance with paragraphs (19) to (33), these shall be calculated in the first instance on the basis of daily revaluation. If the frequency of revaluation is less than daily, larger volatility adjustments shall be applied. These shall be calculated using the following formula:

$$H = H_M \sqrt{\frac{N_R + (T_M - 1)}{T_M}}$$

where:

H is the volatility adjustment to be applied;
HM is the volatility adjustment where there is daily revaluation;
NR is the actual number of business days between revaluations;
TM is the liquidation period for the type of transaction in question.

(35) In relation to repurchase transactions and securities lending or borrowing transactions, where a bank proceeds in accordance with paragraphs (13) to (18) or on the basis of own estimates under paragraphs (19) to (33) and where the conditions set out in subparagraphs (a) to (h) are satisfied, a bank may, instead of applying the volatility adjustments calculated under paragraphs (11) to (34), apply a 0% volatility adjustment. This option is not available where the internal models approach set out in Article 123(8) to (17) is used:
a) Both the exposure and the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) are cash or debt securities issued by central governments or central banks within the meaning of Article 100(2)(b) and eligible for a 0% risk weight under the standardized approach for credit risk;
b) Both the exposure and the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) are denominated in the same currency;
c) Either the maturity of the transaction is no more than one day or both the exposure and the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) are subject to daily marking-to-market or daily remargining;
d) It is considered that the time between the last marking-to-market before a failure to remargin by the counterparty and the realization of the collateral (or the object of a pledged right or an assigned receivable) under Article 100(2) shall be no more than four business days;
e) The transaction is settled across a settlement system proven for that type of transaction;
f) The documentation covering the agreement is standard market documentation for repurchase transactions or securities lending or borrowing transactions in the securities concerned;
g) The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver margin or otherwise defaults, then the transaction is immediately terminable, and
h) 'Core market participants' include the following entities:

1. the entities mentioned in Article 100(2)(b) exposures to which are assigned a 0% risk weight under the provisions on the standardized approach for credit risk;
2. institutions;
3. other financial institutions (including insurance companies) exposures to which are assigned a 20% risk weight under the provisions on the standardized approach for credit risk or which, in the case of banks calculating risk-weighted exposure amounts and expected loss amounts under the internal ratings based approach, do not have a credit assessment by an

eligible credit rating agency are internally rated as having a PD equivalent to that associated with the credit assessments of credit rating agencies determined by the National Bank of Slovakia to be associated with credit quality step 2, or above, under the rules for the risk-weighting of exposures to corporates under the standardized approach for credit risk;
4. regulated collective investment undertakings that are subject to capital or leverage requirements;
5. regulated pension funds; and
6. recognized clearing organizations.

(36) E* as calculated under paragraph (10) shall be taken as the exposure value for the purposes of the standardized approach for credit risk. In the case of off-balance sheet items listed in Article 17, E* shall be taken as the value at which the percentages indicated in Article 31(3) of the Banking Act shall be applied to arrive at the exposure value.

(37) The effective LGD (LGD*) calculated as set out in this paragraph shall be taken as the LGD for the purposes of Articles 41 to 94.
LGD* = LGD x (E*/E)
where:
LGD is the LGD that would apply to the exposure under the provisions on the internal ratings based approach if the exposure were not protected by a lien or by the pledge of a right or assignment of a receivable;
E is the exposure value as described under paragraph (10).
E* is as calculated under paragraph (33).

Article 125

(1) Residential real estate shall be valued by an independent valuer.

(2) The value of the collateral (or the object of a pledged right) under Article 100(11) shall be reduced to reflect the results of the regular monitoring required under Article 110 and to take account of the any prior claims on the collateral (or the object of a pledged right).

(3) The value of receivables shall be the amount receivable.

(4) Property shall be valued at the amount for which the property would exchange on the date of valuation between a buyer and a seller in an arm's-length transaction.

(5) The effective LGD (LGD*) calculated as set out in paragraphs (6) to (9) shall be taken as the LGD for the purposes of Article 41 to 94.

(6) Where the ratio of the value of the collateral (or the object of a pledged right or an assigned receivable) to the exposure value – the ratio of C to E – is below a threshold level of C* (the required minimum collateralization level for the exposure) as laid down in Table 22, LGD* shall be the LGD laid down in Articles 41 to 94 for uncollateralized exposures to the counterparty.

(7) Where the ratio of the value of the collateral (or the object of a pledged right or an assigned receivable) to the exposure value exceeds a second, higher threshold level of C** (i.e. the required level of collateralization to receive full LGD recognition) as laid down in Table 22, LGD* shall be that prescribed in Table 22.

(8) Where the required level of collateralization C** is not achieved in respect of the exposure as a whole, the exposure shall be considered to be two exposures: that part in respect of

which the required level of protection by collateral (or the object of a pledged right or an assigned receivable) C** is achieved and the remainder.

(9) Table 22 sets out the applicable LGD* and required collateralization levels for the secured parts of exposures.

Table 22

Minimum LGD for secured parts of exposures	LGD* for senior claims or contingent claims	LGD* for subordinated claims or contingent claims	Required minimum collateralization level (C*)	Required minimum collateralization level (funded credit protection) of the exposure (C**)
Receivables	35 %	65 %	0 %	125 %
Residential real estate/commercial real estate	35 %	65 %	30 %	140 %
Other collateral	40 %	70 %	30 %	140 %

Article 126

(1) Where risk-weighted exposure amounts and expected loss amounts are calculated under the internal ratings based approach, and an exposure is collateralized by different types of collateral (or objects pledged or assigned) under Article 100, the effective LGD (LGD*), to be taken as the LGD for the purposes of Articles 41 to 94, shall be calculated in accordance with paragraphs (2) and (3).

(2) The bank shall be required to divide the volatility-adjusted value of the exposure (i.e. the value after the application of the volatility adjustment as set out in Article 124(10) into parts each covered by only one type of collateral (or the object of a pledged right or an assigned receivable). That is, the exposure must be divided into the part covered under Article 100(2) and (6), the portion covered by receivables, the portion covered by commercial real estate, and the part which is unsecured under this Decree.

(3) LGD* for each part of exposure shall be calculated separately in accordance with the relevant provisions of this Chapter.

Article 127

(1) Where the conditions set out in Article 114(1) are satisfied, a credit protection falling within the terms of Article 101(1) shall be treated as a guarantee by third party to perform towards the bank in the event of its borrower's default.

(2) Where the conditions set out in Article 114(2) are satisfied, credit protection falling within the terms of Article 101(b) shall be treated as a commitment by the insurance undertaking obliged under the respective insurance policy to perfrom to the bank in the event of its borrower's default. The value of the credit protection recognised shall be the surrender value agreed in the life insurance policy.

(3) Instruments eligible under Article 101(3) shall be treated as a guarantee by the issuing institution to fulfil towards the bank in the event of its borrower's default.

(4) The recognised value of the credit protection under paragraph 3 shall be determined as follows:

a) where the instrument will be repurchased at its face value, the value of the protection shall be that amount;
b) where the instrument will be repurchased at market price, the value of the protection shall be the value of the instrument valued in the same way as the debt securities specified in Article 100(5).

Article 128

(1) The value of unfunded credit protection (G) shall be the amount that the protection provider has undertaken to pay in the event of the default of the respective undertaking by the borrower or on the occurrence of another specified credit event. In the case of credit derivatives which do not include as a credit event restructuring of the underlying obligation and where at the same time the amount that the protection provider has undertaken to pay
a) is not higher than the exposure value, the value of the credit protection calculated under the first sentence shall be reduced by 40%; or
b) is higher than the exposure, the value of the credit protection shall not be higher than 60% of the exposure value.

(2) Where unfunded credit protection is denominated in a currency different from that in which the exposure is denominated (i.e. a currency mismatch) the value of the credit protection shall be reduced by the application of the volatility adjustment Hfx as follows:
$G^* = G \times (1-Hfx)$
where:
G is the nominal amount of the credit protection;
G^* is G adjusted for any foreign exchange risk; and
Hfx is the volatility adjustment for any currency mismatch between the credit protection and the underlying obligation; where there is no currency mismatch $G^* = G$.

(3) The volatility adjustments for any currency mismatch shall be calculated according to Article 124(13) to (18) or based on the own estimates approach as set out in Article 124(19) to (33), and this in the scope under Article 124(12).

Article 129

(1) Where the bank transfers a part of the risk of a claim in one or more tranches, the value of the risk-weighted exposures shall be calculated according to the provisions on securitisation under this Decree. The threshold below which no payment shall be made in the event of a loss shall be considered to be equivalent to the extent of the lowest tranche.

(2) For the purposes of the standardised approach for credit risk, g shall be the risk weight to be assigned to an exposure which is fully protected by unfunded protection (GA),
where:
g is the risk weight of exposures to the protection provider as specified in the standardised approach for credit risk; and
GA is the value of G^* as calculated under Article 128(2) further adjusted for any maturity mismatch as laid down in Articles 130 to 134.

(3) Where the protected amount is less than the exposure value and the protected and unprotected parts are of equal seniority - i.e. the bank and the protection provider share losses on a pro rata basis – proportional regulatory capital relief shall be afforded. For the purposes of the standardised approach for credit risk, the risk-weighted exposure amount shall be calculated in accordance with the following formula:
$(E-GA) \times r + GA \times g$

where:
E is the exposure value;
GA is the value of G* as calculated under Article 128(2) further adjusted for any maturity mismatch as laid down in Articles 130 to 134;
r is the risk weight of exposures to the obligor, as applicable for the standardised approach for credit risk; and
g is the risk weight of exposures to the protection provider under the standardised approach for credit risk.

(4) A bank may proceed under Article 18(4) and (5) in the case of exposures or parts of exposures guaranteed by the central government or central bank, where the third-party has undertaken to fulfil to the bank in the event of its borrower's default, on behalf of the borrower, and where the exposure is funded in the same currency.

(5) For the covered portion of the exposure, the probability of default may for the purposes of Articles 49 to 52 be the probability of default of the protection provider, or a probability of default between that of the borrower and that of the guarantor if a full substitution is deemed not to be warranted. In the case of subordinated exposures and unsubordinated unfunded protection, the loss given default to be applied for the purposes of Articles 49 to 52 may be that associated with senior unfunded protection.

(6) For any uncovered portion of the exposure the probability of default shall be that of the borrower and the loss given default shall be that of the underlying exposure.

(7) GA is the value of G* as calculated under Article 128(2) further adjusted for any maturity mismatch as laid down in Articles 130 to 134.

Article 130

(1) For the purposes of calculating risk-weighted exposure amounts, a maturity mismatch occurs when the residual maturity of the credit protection is less than that of the protected exposure. Protection of less than three months residual maturity, the maturity of which is less than the maturity of the underlying exposure, shall not be recognised.

(2) Where there is a maturity mismatch the credit protection shall not be recognised where:
a) the original maturity of the protection is less than one year; or
b) the exposure is a short-term exposure subject to a one-day floor rather than a one-year floor in respect of the maturity value (M) under Article 50(7).

Article 131

(1) Subject to a maximum of five years, the effective maturity of the underlying exposure shall be the longest possible remaining time before the obligor is scheduled to fulfil its obligations. Subject to paragraph 2, the maturity of the credit protection shall be the time to the earliest date at which the protection may terminate or be terminated.

(2) Where there is an option to terminate the protection which is at the discretion of the protection seller, the maturity of the protection shall taken to be the time to the earlier date at which that option may be exercised. Where there is an option to terminate the protection which is at the discretion of the protection beneficiary and the terms of the arrangement contain a positive incentive for the protection beneficiary to call the transaction before the contractual maturity, the

maturity of the protection shall be taken to be the time to the earlier date at which that option may be exercised.

(3) Where a credit derivative may terminate or be terminated in the period during which the protection provider may fulfil its obligation without defaulting on the protection agreement, the maturity of the protection shall be reduced by this period.

Article 132

The financial collateral simple method means that where there is a mismatch between the maturity of the exposure and the maturity of the protection, the collateral or object of the securing transfer or assignment under Article 100(2) and (6) shall not be recognised.

Article 133

The financial collateral comprehensive method means that the maturity of the credit protection and that of the exposure must be reflected in the adjusted value of the collateral or object of the securing transfer or assignment under Article 100(2) and (6) according to the following formula:
CVAM = CVA x (t-t*)/(T-t*)
where:
CVA is the value of the collateral or object of the securing transfer or assignment under Article 100(2) and (6) adjusted for volatility under Article 124(10) or the amount of the exposure, whichever is the lowest;
t is the number of years remaining to the maturity date of the credit protection calculated in accordance with Article 131, or the value of T, whichever is the lower;
T is the number of years remaining to the maturity date of the exposure calculated in accordance with Article 131, or 5 years, whichever is the lower; and
t* is 0.25.
CVAM shall be taken as CVA further adjusted for maturity mismatch of the exposure with the period for which the protection was agreed and concurrently included in the formula for the calculation of the fully adjusted value of the exposure (E*) set out in Article 124(10).

Article 134

In the case of transactions subject to unfunded credit protection the maturity of the credit protection and that of the exposure must be reflected in the adjusted value of the credit protection according to the following formula:
GA = G* x (t-t*)/(T-t*)
where:
G* is the amount of the protection adjusted for any currency mismatch;
GA is G* adjusted for any maturity mismatch of the exposure and credit protection;
t is the number of years remaining to the maturity date of the credit protection calculated in accordance with Article 131, or the value of T, whichever is the lower;
T is the number of years remaining to the maturity date of the exposure calculated in accordance with Article 131, whichever is the lower; and
t* is 0.25.
GA is then taken as the value of the protection for the purposes of Articles 128 and 129.

Article 135

(1) In the case where a bank calculating risk-weighted exposure amount using the standardised approach for a credit risk has more than one form of credit risk mitigation covering the

same exposure, and where these forms are relevant under this Decree, the respective exposure shall be subdivided into parts according to the type of protection to which the respective part relates, the risk-weighted exposure amount shall be calculated separately for each portion in accordance with the provisions on the standardised approach for credit risk.

(2) When the credit protection provided by a single protection provider has differing maturities, a similar approach to that described in paragraph 1 shall be applied.

Article 136

Where a bank obtains credit protection for a specified portfolio of claims, where the first default among the claims from this portfolio constitutes the credit event, the bank may modify, in accordance with this Decree, the calculation of the risk-weighted exposure amount and, as relevant, the expected loss amount of the exposure which would, in the absence of the credit protection, produce the lowest risk-weighted exposure under the provisions on the standardised approach for credit risk or the internal ratings based approach. This procedure, however, is possible only if the exposure value is less than or equal to the value of the credit protection.

Article 137

Protection for a credit derivative in which the credit event is defined as the nth default in a certain tranche in a certain portfolio of claims shall be recognised as relevant for capital requirement purposes only if, too, the exposures in the tranche subordinate to that decisive for determining the credit event are secured in a relevant manner, or if default has already occurred on claims included in this tranche. In such cases the procedure shall be mutatis mutandis in accordance with Article 136.

Particulars of the prior approval application for using own volatility estimates

Article 138

The application for prior approval by the National Bank of Slovakia for using own estimates under Article 124(19) to (33) concerning the calculation of volatility adjustments for collateral or an object of the securing a transfer of a right or assignment of a claim and the particulars of the application shall be governed mutatis mutandis by the provisions concerning an application for prior consent by the National Bank of Slovakia for the use of internal models for calculating market risk under Articles 184 to 191.

CHAPTER FIVE

SECURITISATION

Calculation of risk-weighted exposures for securitisation positions

Article 139

For the purposes of this Decree
a) traditional securitisation means a securitisation involving the transfer of an originator’s exposure into a special purpose entity, achieved through the assignment or transfer of rights corresponding to

the securitised exposures or through an agreement on co-participation in the risk; the securities issued do not represent payment obligations for the originator bank;
b) synthetic securitisation means a securitisation where the tranching of exposures is achieved by the use of unfunded credit protection and where the pool of exposures is not removed from the balance sheet of the originator bank;
c) securitisation position means an exposure ensuing from securitisation;
d) an originator means an entity which

1) itself or through related entities is directly or indirectly involved in the original agreement which created the obligations or potential obligations of the debtor or potential debtor giving rise to the exposure being securitised;

2) purchases a third party's exposures onto its balance sheet and then securitises them;

e) a sponsor means a bank or securities dealer other than the originator bank or originator securities dealer that establishes and manages an asset-backed commercial paper programme or other securitisation scheme that purchases exposures from third party entities;
f) credit enhancements means funds that based on an agreement serve to increase the real value of a position in securitisation;
g) securitisation special purpose entity means a trustee or corporation trust other than a bank and other than a securities dealer organised for carrying on securitisation, the activities of which are limited to those necessary for achieving that objective, the structure of which is intended to isolate the obligations of the special purpose entity from those of the originator bank, and where the entitled holders of interests in this special purpose entity have the right to pledge or exchange those interests without restriction;
h) excess spread means finance charge collections and other fee income received in respect of the securitised exposures net of costs and expenses;
i) clean-up call option means a contractual option for the originator to repurchase or extinguish the securitisation positions before all of the underlying exposures have been repaid, when the amount of the outstanding exposures falls below a specified level;
j) liquidity facility means the securitisation position arising from a contractual agreement to provide funding to ensure timeliness of cash flows to investors;
k) K_{IRB} means 8% of the risk-weighted exposure amounts that would be calculated under the internal ratings based approach in respect of the securitised exposures, had they not been securitised, plus the amount of the expected losses associated with those exposures calculated under those provisions;
l) ratings based method means the method of calculating risk-weighted exposure amounts for securitisation positions in accordance with Article 146;
m) supervisory formula method means under this Decree the method of calculating risk-weighted exposure amounts for securitisation positions in accordance with Article 147;
n) unrated position means a securitisation position which does not have an eligible credit assessment by a recognised rating agency as defined in the respective provisions of the Act on Banks for securitisation positions;
o) rated position means a securitisation position which has an eligible credit assessment by a recognised rating agency as defined in the respective provisions of the Act on Banks for securitisation positions;
p) asset-backed commercial paper programme means a programme of securitisations the securities issued by which predominantly take the form of commercial paper with an original maturity of one year or less;
r) early amortisation provisions means a contractual provision which in the event of defined circumstances requires amortisation of the investor's position ahead of the original maturity of the issued securities;
s) general market disruption means the situation where more than one special purpose entity across different transactions are unable to roll over maturing commercial paper and that inability is not the

result of an impairment of the special-purpose entity's credit quality or of the credit quality of the securitised exposures;
t) tranche seniority or juniority means the degree of participation in the coverage of credit risk, where holders of positions in senior tranches receive priority in satisfaction from revenues, a bankrupt estate or liquidation balance ahead of subordinate tranche holders.

Article 140

(1) Where a bank uses the standardised approach for a credit risk for the calculation of risk-weighted exposure amounts for the exposure class to which the securitised exposures would be assigned under the respective provision of the Act on Banks, it shall calculate the risk-weighted exposure amount for a securitised position in accordance with Articles 141 to 144. In all other cases it shall calculate the risk-weighted exposure amount in accordance with Articles 141, 142 and 145 to 150.

(2) Where there is an exposure to different tranches in a securitisation, the exposure to each tranche shall be considered a separate securitisation position. The providers of credit protection to securitisation positions shall be considered to hold positions in the securitisation. Securitisation positions shall include exposures to securitisation arising from interest rate or currency derivative contracts.

(3) Subject to paragraph 4;
a) where a bank calculates risk-weighted exposure amounts under Articles 143 and 144, the exposure value of an on-balance-sheet securitisation position shall be its balance-sheet value;
b) where a bank calculates risk-weighted exposure amounts under Articles 145 to 150, the exposure value of an on-balance-sheet securitisation position shall be measured gross of value adjustments; and
c) the exposure value of an off-balance-sheet securitisation position shall be its nominal value multiplied by a conversion figure as prescribed in this Chapter. This conversion figure shall be 100%, unless specified otherwise in this Decree.

(4) The exposure value of a securitisation position arising from derivative instruments listed in Article 16 shall be determined in accordance with Article 15.

(5) Where a securitisation position is subject to funded or unfunded credit protection, the exposure value of that position may be modified in accordance with the provisions on credit risk mitigation.

(6) Where a bank has two or more overlapping positions in a securitisation it will be required to the extent that they overlap to include in its calculation of risk-weighted exposure amounts only the position or part of a position producing the higher risk-weighted exposure amounts. For the purpose of this paragraph "overlapping" means that the positions represent exposure to the same risk such that to the extent of the overlap there is a single exposure.

(7) Subject to paragraph 8 a bank may determine the exposure amount of an unrated liquidity facility by applying to the nominal value of a liquidity facility
a) with an original maturity of up to one year a conversion figure of 20%;
b) with an original maturity longer than one year a conversion figure of 50%;
c) that may be drawn only in the event of a general market disruption a conversion figure of 0%;
d) which is unconditionally cancellable a conversion figure of 0%, provided that repayment of the drawn facility is senior to other claims on the cash flows arising from the securitised exposures.

The highest of the risk weights that would be applied to a securitised exposure under the provisions on the standardised approach of credit risk shall be applied by a bank holding these exposures.

(8) Subject to paragraph 7:
a) the liquidity facility documentation shall clearly identify and limit the circumstances under which the liquidity facility may be drawn;
b) it shall not be possible for the liquidity facility to be drawn in order to cover existing losses, in particular by providing liquidity in respect of exposures in default at the time of draw or by acquiring assets at more than fair value;
c) the liquidity facility shall not be used to provide permanent or regular funding for the securitisation;
d) repayment of draws on the facility shall not be subordinated to the claims of investors other than to claims arising in respect of interest rate or currency derivative contracts, fees or other such payments, nor be subject to deferral or waiver;
e) it shall not be possible for the liquidity facility to be drawn after all applicable credit enhancements from which the liquidity facility would benefit are exhausted;
f) the liquidity facility must include a provision that results in an automatic reduction in the amount that can be drawn by the amount of exposures that are in default, where default has the meaning given to it under provisions on the internal ratings based approach, or where the pool of securitised exposures consists of rated instruments that terminate the liquidity facility if the average quality of the pool falls below investment grade.

Article 141

(1) The originator bank of a traditional securitisation may exclude securitised exposures from the calculation of risk-weighted exposure amounts and expected loss amounts if significant credit risk associated with the securitised exposures has been transferred to third parties and if
a) the securitisation documentation reflects the economic substance of the transaction;
b) the securitised exposures are put beyond the reach of the originator bank and its creditors, including in the event of bankruptcy and receivership; this shall be supported by the opinion of qualified legal counsel;
c) the securities issued do not represent payment obligations of the originator bank;
d) the transferee is a securitisation special purpose entity;
e) the originator does not maintain effective or indirect control over the transferred exposures; an originator shall be considered to have maintained effective control over the transferred exposures if it has the right to repurchase from the transferee the previously transferred exposures in order to realise their benefits or if it is obligated to reassume transferred risk; where the originator retains servicing rights or obligations in respect of the transferred exposures, this shall not of itself represent indirect control of the exposures;
f) in the case of clean-up call options:

1. the clean-up call option is exercisable at the discretion of the originator bank;
2. the clean-up call option may only be exercised when 10% or less of the original value of the exposures securitised remains unamortised;
3. the clean-up call option is not structured to avoid allocating losses to credit enhancement positions or other positions held by investors and is not otherwise structured to provide credit enhancement;

g) the securitisation documentation does not contain clauses that

1. other than in the case of early and modernisation provisions require positions in the securitisation to be improved by the originator bank by altering the underlying credit exposures or increasing the yield payable to investors in response to a deterioration in the credit quality of the securitised exposures; or

2. increase the yield payable to holders of positions in the securitisation in response to a deterioration in the quality from the aspect of the credit risk of the underlying pool of exposures.

(2) An originator bank of a synthetic securitisation may calculate risk-weighted exposure amounts, and, as relevant, expected loss amounts for the securitised exposures in accordance with paragraph 1, this paragraph and paragraphs 3 to 5, if significant credit risk has been transferred to third parties either through funded or unfunded credit protection and the transfer complies with the following conditions:
a) the securitisation documentation reflects the economic substance of the transaction;
b) the credit protection by which the credit risk is transferred complies with the eligibility and other credit risk mitigation requirements for the recognition of such credit protection; for the purposes of this paragraph, securitisation special purpose entities shall not be recognised as eligible unfunded credit protection providers;
c) the instruments used to transfer credit risk do not contain conditions that:

1. impose significant materiality thresholds below which credit protection is deemed not to be triggered if a credit event occurs;
2. allow for the termination of the protection due to deterioration of the credit quality of the underlying exposures;
3. other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator bank;
4. increase the bank's cost for the credit protection or the yield payable to holders of positions in the securitisation in response to a deterioration in the credit quality of the underlying pool;

d) an opinion has been obtained from qualified legal counsel confirming the enforceability of the credit protection in all relevant jurisdictions.

(3) Where an originator bank transfers credit risk under paragraphs 1 and 2, it shall calculate risk-weighted exposure amounts for positions it holds in a securitisation in accordance with Articles 143 to 150. Where an originator bank does not transfer a significant part of credit risk under paragraphs 1 and 2, it shall not proceed under the first sentence.

(4) An originator bank that proceeded in the calculation of risk-weighted exposure amounts under paragraphs 1 to 3 or a sponsor bank shall not provide support to a securitisation for the purpose of reducing investors' potential or actual losses beyond the framework of its contractual obligations.

(5) Where an originator bank or sponsor bank does not comply with paragraph 4, it shall maintain own funds against all securitised exposures as if they were not securitised. A bank shall disclose the fact that it has provided non-contractual support and disclose the impact on capital requirement compliance resulting from this support.

Article 142

(1) In calculating risk-weighted exposure amounts for the securitised exposures, where the conditions in paragraph 2 are met, the originator bank of a synthetic securitisation shall use the relevant calculation methodologies set out in Articles 143 to 150. A bank in proceeding under the first sentence shall take account of any maturity mismatch between the credit protection by which the tranching is achieved and the securitised exposures in the manner set out in paragraph 3. The expected loss amount of exposures for which the risk weight and expected loss amount are calculated under the internal ratings based approach shall be zero.

(2) Paragraph 1 refers to the entire pool of exposures included in the securitisation. The originator bank is required to calculate the risk-weighted exposure amounts in respect of all tranches in the securitisation in accordance with the provisions of Articles 143 to 150 subject to paragraph 3, including those relating to the recognition of credit risk mitigation. For example, where a tranches transferred by means of unfunded credit protection to a third party, the risk weight of that third party shall be applied to the tranche in the calculation of the originator bank's risk-weighted exposure amounts.

(3) An originator bank shall ignore any maturity mismatch in calculating risk-weighted exposure amounts for tranches appearing pursuant to Articles 143 to 150 with a risk weighting of 1250%. For all other tranches the maturity mismatch treatment set out in the chapter on credit risk mitigation shall be applied in accordance with the following formula:

$$RW^{*} = RW(SP) \times \frac{t - t^{*}}{T - t^{*}} + RW(Ass) \times \frac{T - t}{T - t^{*}},$$

where:
*RW** is the risk-weighted exposure amount for the purposes of calculating credit risk;
RW(Ass) is the risk-weighted exposure amount for exposures if they had not been securitised, calculated on a pro rata basis;
RW(SP) is the risk-weighted exposure amount calculated under paragraph 3 if there was no maturity mismatch;
T is the maturity of the underlying exposures expressed in years;
t is the maturity of credit protection expressed in years; and
*t** is 0.25.

(4) For the purposes of this Decree the maturity of the securitised exposures shall be taken to be the longest maturity of any of those exposures, subject to a maximum of five years. The maturity of the credit protection shall be determined in accordance with the chapter on credit risk mitigation.

Calculation of risk-weighted exposure amounts under the standardised approach for credit risk

Article 143

(1) Subject to paragraph 3, the risk-weighted exposure amount of a rated securitisation position shall be calculated by applying to the exposure value according to Tables 23 and 24 the risk weight associated with the credit quality step to which the National Bank of Slovakia has assigned the external credit assessment in accordance with the respective provisions of the Act on Banks for securitisation positions.

Table 23

Credit quality step	1	2	3	4	5 and lower
Risk weight	20 %	50 %	100 %	350 %	1250 %

Table 24

Credit quality step	1	2	3	All other ratings
Risk weight	20 %	50 %	100 %	1250 %

(2) Subject to paragraphs 4 to 9, the risk-weighted exposure amount of an unrated securitisation position shall be calculated by applying a risk weight of 1250%.

(3) An originator bank or sponsor bank may consider the maximum risk-weighted exposure amounts calculated in respect of its positions in a securitisation to be the risk-weighted exposure amounts which would be calculated for the securitised exposures had they not been securitised subject to the presumed application of a 150% risk weight to all past due items and items belonging to regulatory high risk categories amongst the securitised exposures.

(4) Provided the composition of the pool of exposures securitised is known under all circumstances, for calculating the risk-weighted exposure amount for an unrated securitisation position a bank may apply the weighted average risk weight that a bank holding the exposures would apply to the securitised exposures under the standardised approach for credit risk, multiplied by a concentration ratio. This concentration ratio is equal to the sum of the nominal amounts of all the tranches and the sum of the nominal amounts of the tranches junior to or pari passu with the tranche in which the position is held including that tranche itself. The resulting risk weight shall not be higher than 1250% or lower than any risk weight applicable to a rated more senior tranche. Where the bank is unable to determine the risk weights that would be applied to the securitised exposures under the standardised approach for credit risk, it shall apply to the unrated securitisation position a risk weight of 1250%.

(5) Subject to the availability of a more favourable treatment by virtue of the provisions concerning liquidity facilities in paragraph 7, a bank may apply to securitisation positions meeting the conditions set out in paragraph 6 a risk weight that is the greater of 100% or the highest of the risk weights that would be applied to any of the securitised exposures based on the provisions on the standardised approach for credit risk by a bank holding the exposures.

(6) For the treatment set out in paragraph 5 to be available, the securitisation position shall be

a) in a tranche which is economically in a second loss position or senior in an asset-backed commercial paper programme and the first lost tranche must provide meaningful credit enhancement to the second lost tranche;

b) of a quality the equivalent of investment grade or better; and

c) held by a bank which does not hold a position in the first lost tranche.

(7) The risk weight applied to a liquidity facility exposure under this paragraph shall be the highest risk weight that a bank holding the exposures would apply to any securitised exposure under the standardised approach for credit risk.

(8) Where a bank obtains credit protection on a securitisation position, the calculation of risk-weighted exposure amounts may be modified in accordance with credit risk mitigation methodologies.

(9) As provided in Article 6 a bank may deduct the exposure amount of a securitisation position in respect of which a 1250% risk weight is assigned from own funds as an alternative to including the position in the calculation of risk-weighted exposure amounts. For these purposes the calculation of the exposure value may reflect eligible funded credit protection in a manner consistent with paragraph 8.

(10) Where a bank makes use of the alternative indicated in paragraph 9, the amount equalling 12.5 times the amount deducted in accordance with that paragraph shall for the purposes of paragraph 3 be subtracted from the amount specified in paragraph 3 as the maximum risk-weighted exposure amount to be calculated by the respective obliged persons.

Article 144

(1) In the case of the sale of revolving exposures into a securitisation that contains an early amortisation provision, an originator bank which calculates the risk-weighted exposure amount in respect of securitisation positions in accordance with Article 143 shall calculate also the risk-weighted exposure amount under the methodology set out in paragraphs 2 to 15.

(2) The bank shall calculate a risk-weighted exposure amount in respect of the sum of the originator's interest and the investors' interest.

(3) For securitisation structures were the securitised exposures comprised revolving and non-revolving exposures, an originator bank shall apply the treatment set out in paragraphs 4 to 13 to that portion of the underlying pool containing revolving exposures.

(4) For the purposes of paragraphs 1 to 3, this paragraph and paragraphs 5 to 13, an originator's interest means the exposure value corresponding to the notional part of a pool of securitised drawn loans, which, unlike the remaining part of the securitised assets, represents cash flows generated by principal, interest collections and other associated amounts which are not available to make payments to those having securitisation positions. The originator's interest may not be subordinate to the investors' interest. The investors' interest means the exposure value of the corresponding remaining part of the securitised drawn loans.

(5) The exposure of the originator bank resulting from the originator's interest shall not be considered a securitisation position and in calculation of the exposure shall be treated as if this part of the assets had not been securitised.

(6) Originators of the following types of securitisation are exempt from the capital requirement in paragraph 1:
a) securitisations of revolving exposures whereby investors remain fully exposed to the risks of all future draws from the side of borrowers so that the risk on the underlying facilities does not return to the originator bank even after an early amortisation event has occurred; and
b) securitisations where an early amortisation clause is solely triggered on the basis of events not related to the performance of the securitised assets or the originator bank, such as material changes in tax laws.

(7) For an originator bank subject to the capital requirement in paragraph 1, the total of the risk-weighted exposure amounts in respect of its positions in the investors' interest and the risk-weighted exposure amounts calculated under paragraph 1 shall be no greater than the greater of these values:
a) the risk-weighted exposure amount calculated in respect of its positions in the investors' interest;
b) the originator's exposure amount under paragraph 5.

(8) Deduction of net gains, if any, arising from the capitalisation of future income under Article 4, shall be treated outside the maximum amount indicated in paragraph 7.

(9) The risk-weighted exposure amount to be calculated in accordance with paragraph 1 shall be determined by multiplying the amount of the investors' interest by the appropriate

conversion figure as indicated in paragraph 13 and the weighted average risk weight that would apply to the securitised exposures if the exposures had not been securitised.

(10) An early amortisation provision shall be considered to be controlled where the following conditions are met:
a) the originator bank has an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortisation;
b) throughout the duration of the transaction there is pro rata sharing between the originator's interest and the investors' interest of payments of interest and principal, expenses, losses and recoveries based on the balance of receivables outstanding at one or more reference points during each month;
c) the amortisation period is considered sufficient for 90% of the total debt (originator's and investors' interest) outstanding at the beginning of the early amortisation period and which has been repaid or recognised as in default;
d) the speed of repayment is no more rapid than would be achieved by straight-line amortisation over the period set out in subparagraph (c).

(11) In the case of securitisations subject to an early amortisation provision of retail exposures which are uncommitted and unconditionally cancellable without prior notice, where the early amortisation is triggered by the excess spread falling to a specified level, the bank shall compare the three-month average excess spread with the excess spread levels at which excess spread is required to be trapped.

(12) Where the securitisation does not require excess spread to be trapped, the trapping is deemed to be 4.5 percentage points greater than the excess spread level at which the early amortisation is triggered.

(13) The conversion figure to be applied shall be determined by the level of the actual three-month average excess spread in accordance with Table 25.

Table 25

	Securitisations subject to a controlled early amortisation provision	Securitisations subject to a non-controlled early amortisation provision
Three-month average excess spread	Conversion figure	Conversion figure
at least 133.33% of the excess spread trapping point	0 %	0 %
less than 133.33%, but not less than 100% of the excess spread trapping point	1 %	5 %
less than 100%, but not less than 75% of the excess spread trapping point	2 %	15 %
less than 75%, but not less than 50% of the excess spread trapping point	10 %	50 %
less than 50%, but not less than 25% of the excess spread trapping point	20 %	100 %
less than 25% of the excess spread trapping point	40 %	100 %
Securitisations to which paragraphs 11 and 12 do not apply and which are subject to an early amortisation provision	90%	100%

Calculation of risk-weighted exposure amounts under the internal ratings based approach

Article 145

(1) For calculating the risk-weighted exposure amount in the case of
a) a rated position or a position in respect of which the conditions set out in paragraph 2 for using an inferred rating are met, the ratings based method set out in Article 146 shall be used;
b) an unrated position the supervisory formula method set out in this Decree under Article 147 shall be used; a bank other than an originator bank or a sponsor bank may only use the supervisory formula method based on prior consent from the National Bank of Slovakia under the respective provisions of the Act on Banks for securitisation positions;
c) an originator or sponsor bank unable to calculate K_{IRB} and in the case of other banks that had not obtained prior consent from the National Bank of Slovakia to use the supervisory formula method under this Decree, a risk weight of 1250% shall be assigned to securitisation positions which are unrated and to positions in respect of which an inferred rating may not be used.

(2) An institution shall attribute to an unrated position an inferred rating equivalent to the rating of those rated positions (the "reference positions") which are the most senior positions which are in all respects subordinate to the unrated securitisation position in question where
a) the reference positions are fully subordinate to the unrated securitisation position;
b) the maturity of the reference positions is equal to or longer than that of the unrated positions in question; and
c) any inferred rating is updated on an ongoing basis to reflect any changes in the rating of the reference positions.

(3) An originator bank, a sponsor bank, or other bank which can calculate K_{IRB}, may consider the maximum risk-weighted exposure amounts calculated in respect of its positions in a securitisation to be the amounts corresponding to the capital requirement under Article 30c(2)(a) of the Act on Banks equal to the sum of 8% of the risk-weighted exposure amounts which would be produced if the securitised assets had not been securitised and were on the balance sheet of the bank plus the expected loss amounts of those exposures.

Article 146

(1) Under the ratings based method, the risk-weighted exposure amount of a rated securitisation shall be calculated by applying to the exposure value the risk weight associated with the credit quality step to which the rating was assigned by the National Bank of Slovakia in accordance with the respective provisions of the Act on Banks for securitisation positions as set out in Tables 26 and 27, multiplied by 1.06.

Table 26

Credit quality step	Risk weight		
	Effective number of securitisation exposures ≥ 6		Effective number of securitisation exposures < 6
	Positions in the most senior securitisation tranche	Other positions	
1	7 %	12 %	20 %
2	8 %	15 %	25 %
3	10 %	18 %	35 %
4	12 %	20 %	35 %
5	20 %	35 %	35 %
6	35 %	50 %	50 %
7	60 %	75 %	75 %
8	100 %	100 %	100 %
9	250 %	250 %	250 %
10	425 %	425 %	425 %
11	650 %	650 %	650 %
All other ratings	1250 %	1250 %	1250 %

Table 27

Credit quality step	Risk weight		
	Effective number of securitisation exposures ≥ 6		Effective number of securitisation exposures < 6
	Positions in the most senior securitisation tranche	Other positions	
1	7 %	12 %	20 %
2	12 %	20 %	35 %
3	60 %	75 %	75 %
All other ratings	1250 %	1250 %	1250 %

(2) When determining whether a securitisation tranche is the most senior, it is not required to take into consideration amounts due on the interest rate or currency derivative contracts, fees due, or other similar payments.

(3) A risk weight of 6% may be applied to a position in the most senior securitisation tranche and that tranche is senior in all respects to another tranche of the securitisation position which would receive a risk weight of 7% under paragraph 1, provided that:
a) this is justified on the basis of the loss absorption qualities of subordinate tranches in the securitisation; and
b) the position has an external credit assessment corresponding to the first credit quality step in Table 26 or 27 or, if it is unrated, requirements in Article 145(2) are satisfied, where reference positions are positions in the subordinate tranche which would receive a risk weight of 7% under paragraph 1.

(4) In calculating the effective number of exposures securitised, multiple exposures to one obligor shall be treated as one and the same exposure. The effective number of exposures is calculated in accordance with the following formula:

$$N = \frac{\left(\sum_i EAD_i\right)^2}{\sum_i EAD_i^2}$$

where EAD_i represents the sum of the exposure values of all exposures to the ith obligor. In the case of resecuritisation, the bank shall look at the number of securitisation exposures in the pool and not the number of underlying exposures in the original pool from which the securitisation exposures stem. If the portfolio share associated with the largest exposure, C_1, is available, the bank may compute N as $1/C_1$.

Article 147

(1) The value corresponding to the risk weight applicable to a securitisation position under the supervisory formula method set out in this Decree shall be greater than 7% or calculated in accordance with the following formula:

12.5 x (S[L+T] – S[L]) / T

where

$$S[x]=\begin{cases} x & \text{when } x \le Kirbr \\ Kirbr + K[x] - K[Kirbr] + (d \cdot Kirbr/\omega)(1 - e^{\omega(Kirbr-x)/Kirbr}) & \text{when } Kirbr < x \end{cases}$$

---

where

$h = (1 - Kirbr / ELGD)^N$

$c = Kirbr /(1 - h)$

$v = \dfrac{(ELGD - Kirbr) Kirbr + 0.25 (1 - ELGD) Kirbr}{N}$

$f = \left(\dfrac{v + Kirbr^2}{1 - h} - c^2 \right) + \dfrac{(1 - Kirbr) Kirbr - v}{(1 - h) \tau}$

$g = \dfrac{(1-c)c}{f} - 1$

$a = g \cdot c$

$b = g \cdot (1-c)$

$d = 1 - (1 - h) \cdot (1 - Beta[Kirbr; a, b])$

$K[x] = (1 - h) \cdot ((1 - Beta[x; a, b]) x + Beta[x; a+1, b] c).$

$\tau = 1000$ and

$\omega = 20$, where

Beta [x; a, b] refers to the cumulative beta distribution with parameters a and b evaluated at x;
T refers to the thickness of the tranche in which the position is held; calculated as the ratio of the nominal amount of the tranche to the sum of the exposure values of the exposures that have been securitised; for the purposes of the calculation, the exposure value of a derivative instrument listed in Article 15 shall, where the current replacement cost is not a positive value, be the potential future credit exposure calculated under Article 15;
K_{IRBR} is the ratio of K_{IRBR} to the sum of the exposure values of the exposures that have been securitised. K_{IRBR} is expressed in decimal form (e.g. K_{IRBR} equal to 15 % of the pool would be expressed as K_{IRBR} of 0.15);
L is the credit enhancement level; it is calculated as the ratio of the nominal amount of all tranches subordinate to the tranche in which the position is held to the sum of the exposure values of the exposures that have been securitised; capitalised future income shall not be included in the calculation of L; amounts due by counterparties
to derivative instruments listed in Article 15 that represent tranches more junior than the tranche in question may be measured at their current replacement cost / their notional price;
N is the effective number of exposures calculated in accordance with Article 146(4);
ELGD is the exposure-weighted average loss-given-default; it is calculated as follows:

$$ELGD = \frac{\sum_i LGD_i \cdot EAD_i}{\sum_i EAD_i}$$

where LGD_i represents the average loss-given-default associated with all exposures to the ith obligor, where the LGD is determined in accordance with the provisions on the internal ratings based approach; in the case of resecuritisation, an LGD of 100% shall be applied to the securitised positions; when default and dilution risk for purchased trade receivables are treated in an aggregate

manner within a securitisation (e.g. a single reserve or over-collateralisation is available to cover all losses), the LGD_i input to the calculation shall be constructed as a weighted average of the loss-given-default for credit risk and a 75% loss-given-default for dilution risk. The weights shall be the capital charges for credit risk and dilution risk respectively.

(2) If the exposure value of the largest securitised exposure, C_1, is no more than 3 % of the sum of the exposure values of the securitised exposures, then, for the purposes of the supervisory formula method under this Decree, the bank may set LGD= 50 % and N equal to either:

$$N = \left(C_1 C_m + \left(\frac{C_m - C_1}{m-1} \right) \max\{1 - m C_1, 0\} \right)^{-1}$$

or N=1/C1. C_m is the ratio of the sum of the exposure values of the largest “m” exposures to the sum of the exposure values of the exposures securitised . The level of “m” may be set by the bank.

Article 148

(1) Eligible funded protection is limited to that which
a) is eligible for the calculation of risk-weighted exposure amounts under the standardised approach for credit risk as laid down in the chapter on credit risk mitigation;
b) meets the minimum requirements as laid down in the chapter on credit risk mitigation.

(2) Eligible unfunded credit protection and unfunded protection providers are limited to those which
a) are eligible under the chapter on credit risk mitigation; and
b) meet the minimum requirements as laid down in the chapter on credit risk mitigation.

(3) Where risk-weighted exposure amounts for securitisation positions subject to credit risk mitigation are calculated using the ratings based method, the exposure value and the risk-weighted exposure amount of a securitisation position in respect of which credit protection has been obtained may be modified in accordance with the provisions on credit risk mitigation as they apply for the calculation of risk-weighted exposure amounts under the standardised approach for credit risk.

(4) Where risk-weighted exposure amounts for securitisation positions subject to credit risk mitigation are calculated using the supervisory formula method under this Decree and this concerns full credit protection, this amount is calculated as follows:
a) the “effective risk weight of the exposure” is calculated by dividing the risk-weighted exposure amount of the position by the exposure value of the position multiplied by 100;
b) in the case of funded credit protection, the funded protection-adjusted exposure amount of the position (E*, as laid down in the chapter on credit risk mitigation for the calculation of risk-weighted exposure amounts under the standardised approach for credit risk, taking the amount of the securitisation position to be E) shall be multiplied by the effective risk weight;
c) in the case of unfunded credit protection, G_A (the amount of the credit protection adjusted for any currency mismatch and maturity mismatch in accordance with the provisions on credit risk mitigation) and the risk weight of the protection provider shall be multiplied; adding this to the amount arrived at by multiplying the amount of the securitisation position minus G_A by the effective risk weight.

(5) Where risk-weighted exposure amounts for securitisation positions subject to credit risk mitigation are calculated using the supervisory formula method under this Decree and this concerns partial credit protection, this amount is calculated as follows:

a) if the credit risk mitigation covers the first loss or losses on a proportional basis on the securitisation position, these risk-weighted exposure amounts may be calculated in accordance with the procedure set out in paragraph 4;
b) in other cases, the bank shall treat the securitisation position as two or more positions with the uncovered portion being considered the position with the lower credit quality; for the purposes of calculating the risk-weighted exposure amount for this position, the provisions in Article 147 shall apply subject to the modifications that "T" shall be adjusted to e* in the case of funded credit protection, and to T-g in the case of unfunded credit protection, where e* denotes the ratio of E* to the total underlying amount of the underlying pool, where E* is the adjusted exposure amount of the securitisation position calculated in accordance with the provisions on credit risk mitigation as they apply for the calculation of risk-weighted exposure amounts under the standardised approach for credit risk taking the amount of the securitisation position to be E, and where g is the ratio of the nominal amount of credit protection (adjusted for any currency or maturity mismatch in accordance with the provisions on credit risk mitigation) to the sum of the exposure amounts of the securitised exposures; in the case of unfunded credit protection the risk weight of the protection provider shall be applied to that portion of the position not falling within the adjusted value of "T".

Article 149

(1) In addition to the risk-weighted exposure amounts calculated in respect of its securitisation positions, an originator bank shall be required in the case of selling revolving exposures into a securitisation containing an early amortisation provision to calculate the risk-weighted exposure amount according to the methodology set out in Article 144, where paragraphs 2 and 3 shall be used instead of paragraphs 4 and 5 of Article 144.

(2) For the purposes of this paragraph "originator's interest" shall be the sum of:
a) the exposure value of that notional part of a pool of securitised drawn loans, which, unlike the remaining part of the securitised assets, represents cash flows generated by principal, interest collections and other associated amounts which are not available to make payments to those having securitisation positions; plus
b) the exposure value of that part of the pool of undrawn amounts of the credit lines, the drawn amounts of which are the subject of securitisation, where the proportion of the volume of the drawn and undrawn loans is equal to the proportion of the exposure value described in subparagraph a) to the exposure value resulting from the pool of securitised drawn loans.

(3) The originator's interest may not be subordinate to the investors' interest. The investors' interest means the sum of the exposure value of drawn loans not falling within subparagraph a) plus the exposure value of undrawn amounts of credit lines, the drawn amounts of which have been securitised and do not fall within subparagraph b).

(4) An originator's exposure from the notional part of securitised drawn loans under paragraph 2(a) shall not be treated as a securitisation position and in calculating the exposure shall be treated as if the respective part of the assets had not been securitised. The originator bank shall be considered to be a holder of a pro rata exposure to the undrawn amounts of the credit lines, the drawn amounts of which have been securitised, in an amount equal to that described in paragraph 2(b).

Article 150

(1) The risk-weighted exposure amount of a securitisation position to which a 1250% risk weight is assigned may be reduced by 12.5 times the amount of any value adjustments made by the bank in respect of the securitised exposures.

(2) The risk-weighted exposure amount of a securitisation position may be reduced by 12.5 times the amount of any value adjustments made by the bank in respect of the position.

(3) As an alternative to including a securitisation position in respect of which a 1250% risk weight applies in the calculation of risk-weighted exposure amounts, the bank may deduct its exposure amount from own funds in accordance with Article 6.

(4) For the purposes of paragraph 3:
a) the exposure value of the position may be derived from the risk-weighted exposure amounts taking into account any reductions made in accordance with paragraphs 1 and 2;
b) the calculation of the exposure value may reflect eligible funded protection in a manner consistent with the methodology given in Article 148; and
c) where the supervisory formula method under this Decree is used to calculate risk-weighted exposure amounts and $L \leq K_{IRBR}$ and $[L+T] > K_{IRBR}$, the position may be treated as two positions with L equal to K_{IRBR} for the more senior of the positions.

(5) Where a bank makes use of the alternative indicated in paragraph 3, 12.5 times the amount deducted in accordance with that paragraph shall, for the purposes of Article 145(3), be subtracted from the amount specified in that paragraph as the maximum risk-weighted exposure amount to be calculated by the respective obligatory entities.

PART FOUR
CAPITAL REQUIREMENTS FOR COVERING TRADING BOOK POSITION RISKS, FOREIGN EXCHANGE RISK AND COMMODITIES RISK

CHAPTER 1
TRADING BOOK

Article 151

(1) The trading book shall be a separate register under Article 39(1) to (6) of the Act on Banks, booking the positions listed in paragraphs 2 to 4 and Article 171(2) so that it is possible to identify:
a) positions in financial instruments and commodities held for trading on own account;
b) positions in financial instruments or commodities held in order to hedge other instruments on the own account with financial instruments or commodities in the trading book;
c) positions in the financial instruments or commodities arising from the provision of investment services for a client;
d) positions in the financial instruments and commodities resulting from market making; and
e) positions resulting from internal hedges.

(2) Records in the trading book shall be arranged according to the material aspect of the position from transactions in:
a) debt instruments;
b) capital instruments;
c) foreign currencies and gold;
d) commodity instruments.

(3) For the purposes of calculating capital requirements from trading book positions:
a) a long position in a financial instrument or commodity booked in the trading book means the number of units of a financial instrument or commodity in respect of which the bank is in the

position of creditor or owner multiplied by the unit price of this financial instrument or commodity determined for its valuation under Article 154;
b) a short position in a financial instrument of commodity booked in the trading book means the number of units of a financial instrument or commodity in respect of which the bank is in the position of debtor multiplied by the unit price of this financial instrument or commodity determined for its valuation under Article 154.

(4) Positions under paragraph 3 means:
a) interest-rate positions, where this concerns positions in a debt security;
b) interest-rate positions other than those under subparagraph a), where a change in market interest rates brings about a direct change in its real value;
c) capital positions, where this concerns positions in a capital security.

(5) Trading book positions shall be booked in particular separately without their mutual netting.

(6) A record in a trading book shall contain:
a) name of the counterparty;
b) date of concluding the transaction;
c) settlement date of the transaction;
d) maturity date of the financial instrument;
e) information on the interest rates used and agreed;
f) information on the foreign currency exchange rates used and agreed;
g) information on the type of position in accordance with paragraphs 1, 3 and 4 and Article 171(2);
h) information on the type of transaction in accordance with paragraph 2;
i) information on the amount of the financial instrument or commodity and their unit prices;
j) information on the current value of the position;
k) information on the type of price used for revaluing the position under Article 154;
l) position revaluation date.

(7) A record in the trading book may in addition to the information listed in paragraph 6 contain other information according to the type of transaction, in particular on positions in underlying instruments of the respective derivatives. In the case of using market prices, the record in the trading book may contain also information on the source of the market price used.

(8) A bank shall have in connection to its risk management system a clearly defined strategy and procedures for determining the positions or summaries of positions to include in the trading book for the purposes of calculating capital requirements in accordance with the provisions laid down in Article 39(1) to (6) of the Act on Banks. Compliance with this strategy and these procedures shall be fully documented and subject to regular internal audit.

(9) A bank shall have a strategy and procedures for overall management of the trading book. A strategy and procedure mean in particular:
a) the activities the bank considers to be trading and as constituting part of the trading book for capital requirement purposes;
b) the extent to which a position can be marked-to-market daily by reference to a market, with a statement of information on its liquidity, whether it is sufficiently active and whether it is a two-way market;
c) for positions that are marked-to-model, the extent to which the bank can

1. identify all material risks of the position;
2. hedge all material risks of the position with instruments for which an active, liquid two-way market exists; and

3. derive reliable estimates for the key assumptions and parameters used in the model;
d) determining the extent to which procedures for external validation are in accordance with the bank's validation procedures;
e) the extent to which legal restrictions or other operational requirements could impede the bank's ability to close or hedge positions in the short-term;
f) the extent to which the bank can, and is required to, actively risk manage the position within its trading operation;
g) the extent to which the institution may transfer risk between the banking and trading book and the criteria for such a transfer.

(10) Where a bank has positions booked in its trading book representing items reducing its own funds under first and second point of Article 6(1)(a) and (b), for the purposes of calculating capital requirements these items may be treated as equity or debt instruments, as appropriate to their nature, if the bank is an active market-maker in these items.

(11) A bank may for the purposes of calculating capital adequacy requirements book in the trading book positions resulting from repo trades or reverse repo trades which are booked in the banking book, provided that
a) these repo trades or reverse repo trades meet the requirements set out in Article 39(2) of the Act on Banks and in Article 153;
b) the securities or cash representing these positions meet the requirements in order that they could otherwise be registered in the trading book or these positions are registered in the trading book; and
c) all positions meeting the requirements under subparagraphs a) and b) become booked in the trading book.

(12) Notwithstanding the provisions of paragraph 10, all repo trades or reverse repo trades booked in the banking book shall be subject to a banking book credit risk capital charge.

(13) For the purposes of this Decree, “repo trade” and “reverse repo trade” mean a contract
a) on the purchase of a security under a special act[1]) with an agreed obligation of the seller to repurchase securities at a price specified in advance on a day specified in advance or at the request of the contracting party; for the seller this constitutes a repo trade and for the buyer a reverse repo trade;
b) on credit under a special act[2]) with hedging by a transfer of securities under a special act[3]); the acceptance of a loan with hedging by a transfer of securities constitutes a repo trade, the provision of a loan with hedging by a transfer of securities constitutes a reverse repo trade.

Article 152

(1) Capital requirements for positions booked in a bank's trading book shall be calculated as the sum of individual requirements for the risks from positions booked in the trading book listed in paragraph 2.

(2) Risks from trading book positions for the purposes of this Decree shall consist of:
a) settlement risk;
b) counterparty risk;
c) debt instrument risk;
d) capital instrument risk;
e) large exposure risk in the trading book.

[1] Article 30 of Act No. 566/2001 Coll.
[2] For example, Articles 497 to 507 of the Commercial Code.
[3] Article 53 of Act No. 566/2001 Coll.

(3) As an alternative to the procedure under Articles 156 to 170, capital requirements for covering risk from trading book positions may be calculated by the procedure under Articles 9 to 150, by including trading book positions into the calculation of credit risk, as if they were asset items and off-balance-sheet items booked in the banking book, provided that
a) business booked in the trading book does not exceed and has not exceeded during the preceding 20 business days 5% of the bank's total business, and concurrently the sum of all values of long and short positions booked in the trading book is not and has not been during the preceding 20 business days more than 15 000 000 euro; and
b) business booked in the trading book does not exceed and has never exceeded 6% of the bank's total business, and concurrently the sum of all values of long and short positions booked in the trading book is not and has never been more than 20 000 00 euro.

(4) What part of the total bank's business under paragraph 3(a) and (b) is to be formed by trading-book business, shall be determined by the proportion of the sum of long trading-book positions valued in accordance with Article 39(1) to (6) of the Act on Banks to the sum of long trading-book positions valued in accordance with Article 39(1) to (6) of the Act on Banks, of individual banking book asset items in accounting values and of off-balance-sheet items of the banking book that are claims and future claims in accounting values.

Article 153

Positions or sets of positions in the trading book held by a bank with trading intent shall comply with the following requirements:
a) for each position or sets of positions there must be defined a trading strategy, approved by the bank's senior management, which shall include the expected holding horizon of each position or set of positions;
b) for each position or sets of positions there must be defined a procedure under which individual positions or sets of positions are to be managed; the procedure for managing positions or sets of positions shall include the following conditions:

1. positions are entered into primarily by means of the bank's trading desk;
2. limits are set for positions or sets of positions, into which the bank enters while trading;
3. maximum and possibly minimum position values are set up to which a dealers may enter into and manage positions autonomously of other dealers, departments of the bank, senior management, control bodies or other persons, according to the adopted trading strategy;
4. the bank's senior management is regularly informed of current values of positions by means of reports as an integral part of the risk management system;
5. monitoring of position values includes the verification of financial instrument and commodity prices on the respective financial and commodity markets, determining whether it is possible to place the financial instrument or commodity on the market or whether it is possible to hedge the risk or part of the risk from them, determining the quality and availability of market data for the purposes of valuing positions and verifying levels of market turnover and values of financial instruments and commodities traded on these markets;

c) for each position or set of positions there must be clearly defined a procedure for monitoring the value of a position against the bank's trading strategy, including monitoring of turnover in the trading book and values of positions intended for sale booked in the trading book.

Article 154

(1) Evaluation and control systems and procedures, as set up and maintained by the bank, for ensuring reliable and prudent valuation of positions or estimates of position values shall include at least:

a) procedures for valuing positions; this includes clearly defined responsibilities in all fields of activity involved in the process of valuing positions, sources of market data and the manner of verifying their appropriateness, the frequency of independent valuation of positions, timing of closing prices, procedures for adjusting valuations, and procedures in performing regular monthly and ad hoc verifications of the manner of valuing positions; and
b) provision for ensuring the independence of the department responsible for performing position valuations from other departments in respect of the acquisition of data and for the purposes of drawing up and delivering reports on position valuations; independence in reporting on position valuations shall be ensured up to the level of a member of the bank's board of directors.

(2) Marking to market means the at least daily valuation of positions on the basis of available close-out prices sourced from independent data sources, such as prices on an organised market, current prices from a software system providing information on prices on organised markets or price quotes from several independent reputable providers of investment services.

(3) When marking to market, the price used of the bid and offer prices shall be that which for the bank would mean the highest loss or lowest profit, unless the bank is a significant market maker for the type of financial instrument or commodity in question and can close its position in this financial instrument or commodity at mid-market price. Where the bank is a significant market maker in the type of financial instrument or commodity in question, in marking to market it shall use the mid-market price for the financial instrument or commodity in question.

(4) Where marking to market under paragraph 3 is not possible, the bank shall mark to model its positions or sets of positions before calculating the respective capital requirement for covering risks from positions booked in the trading book. Marking to model means any valuation by a qualified estimate corresponding to an objective assessment on the basis of mathematical and/or statistical methodologies with the use of market inputs.

(5) The following requirements must be complied with when marking to model:
a) the bank's senior management shall be aware of the items of the trading book which are subject to mark to model and shall be aware of the importance attached to the uncertainty this valuation creates in reporting risk;
b) market inputs shall be sourced, where possible, in line with market prices, and the appropriateness of the market inputs of a particular position and the parameters of the model shall be assessed on a frequent basis;
c) where available, valuation methodologies which are accepted market practice for particular financial instruments or commodities shall be used;
d) where the model is developed by the bank itself, it shall be based on appropriate assumptions, which have been assessed and verified by suitably qualified parties that did not participate in its development; the model should be developed or proved independently of the front office and tested independently, including a verification and confirmation of the correctness of mathematical assumptions of the model and the software system used for valuation;
e) there shall be formal change control procedures in place and a secure copy of the model shall be held, and regularly used to check valuations;
f) the person responsible for risk management shall be aware of the weaknesses of the models used and know how to best reflect them in evaluation outputs; and
g) the model shall be subject to periodic review to determine the accuracy of its performance, i.e. assessing the continued appropriateness of assumptions, analysis of profit and loss versus risk factors, comparison of actual close-out values to model outputs.

(6) Independent and regular verifications shall be performed at the bank of the accuracy of marking to market positions and marking to model positions from the aspect of the accuracy and

independence of the position values determined and, in the case of using marking to model, also from the aspect of the accuracy and independence of input data for this model. If, for the purposes of valuing a position, the market prices or mark-to-model estimates are identified by dealers, verification of the accuracy of the position valuation shall be performed by a department independent from the dealing room, at least monthly or depending on the nature (risk) of the trading activity, more frequently. Where sources of market data or input data for marking to model are not sufficiently objective, the bank may for the purposes of valuing a position use other prudent measures than marking to model, in particular valuation adjustment or creation of provisions.

(7) A bank shall have a system established and maintained for calculating valuation adjustments or creating special reserves which take account of close-out costs, operational risks connected with a transaction, early termination, investing and funding costs, future administrative costs and model risk.

(8) A bank shall constantly monitor the liquidity of its positions, identify less liquid positions and determine factors causing the reduced liquidity. Factors causing reduced liquidity in positions may include the time period necessary for hedging or closing out a position or risks connected with a position, price volatility on the market, volatility of the bid/offer price spreads, the availability of market prices and quotes provided by market-makers, the number and size of market-makers, volatility of market trading volumes in the financial instruments and commodities subject to valuation. In the case that market prices are unavailable for less liquid positions, for the purpose of valuing these positions, a method of price adjustments or special reserves creation may be used as an alternative to marking-to-model or to valuation by a price provided by a third party.

Article 155

(1) An internal hedge is a position that materially or completely offsets the component risk of a position or set of positions booked in the banking book. Positions arising from internal hedges are eligible for trading book capital treatment, provided that they are held with trading intent and that they fulfil the requirements under Articles 153 and 154, at minimum:
a) internal hedges shall not be primarily intended to reduce or avoid capital requirements;
b) internal hedges shall be carefully booked and subject to internal approval and internal audit;
c) internal hedges shall be effected at market conditions,
d) a substantial part of market risk arising from the internal hedge shall be dynamically managed within authorised limits; and
e) internal agreements shall be carefully monitored on the basis of procedures laid down in internal regulations.

(2) Paragraph 1 shall not apply to the calculation of capital requirements for covering risks from positions or sets of banking-book positions which are the subject of an agreement on an internal hedge.

(3) Notwithstanding paragraphs 1 and 2, where an institution hedges a banking book credit risk exposure using a credit derivative booked in its trading book by an agreement on an internal hedge, the banking book exposure shall not be deemed to be hedged for the purposes of calculating capital requirements until the bank purchases from a counterparty buying risk a credit derivative meeting the conditions set out in Part Three, the chapter on credit risk mitigation concerning the banking book exposure. Where such a hedge is purchased or recognised as a hedge of a banking book exposure for the purposes of calculating capital requirements, neither the internal or external credit derivative hedge shall be included in the trading book for the purposes of calculating capital requirements.

CHAPTER 2

CALCULATION OF CAPITAL REQUIREMENTS FOR TRADING BOOK RISK UNDER THE SIMPLIFIED APPROACH

Settlement risk

Article 156

(1) Where transactions in financial instruments or commodities, with the exception of repo trades and reverse repo trades, securities or commodities lending and securities or commodities borrowing are not settled within four working days following delivery of the financial instruments or commodities, the capital requirement for settlement risk shall be calculated.

(2) The capital requirement for settlement risk shall be calculated as the sum of the price differences of unsettled transactions multiplied by the conversion figures in paragraph 3, provided these differences would mean a loss for the bank. Price differences shall be determined as the difference between the agreed settlement price and the price of the financial instruments or commodities identified for the evaluation under Article 154 and valid for the reporting date.

(3) The conversion figure for calculating the capital requirement for settlement risk shall be
a) 0.08 where 5 to 15 working days have elapsed since the settlement date;
b) 0.50 where 16 to 30 working days have elapsed since the settlement date;
c) 0.75 where 31 to 45 working days have elapsed since the settlement date;
d) 1.00 where more than 45 working days have elapsed since the settlement date.

(4) In the case of the delivery of financial instruments or commodities in advance, the bank shall calculate capital requirements as set out in paragraph 5, if:
a) it has paid for the financial instruments or commodities before receiving them or it has already delivered the financial instruments or commodities before receiving payment for them; and
b) in the case of cross-border transactions, one day or more has elapsed since it made that payment or delivery.

5) From the moment of the transfer of the first contractual payment or delivery leg up to four working days after the second contractual payment or delivery leg, the claim shall be treated as an exposure in the banking book. From five working days after the second contractual payment or delivery leg until the extinction of the transaction, the claim shall be deducted from own funds.

6) In applying a risk weight to claims treated as exposures in the banking book, a bank using the internal ratings based approach may assign PDs (probability of default) to counterparties towards which it has no other banking book exposure, on the basis of the counterparty's external credit assessment. A bank using own estimates of loss given defaults ("LGDs") may apply the LGD set out in paragraph 50(2) to claims treated as exposures in the banking book provided that they apply them to all such exposures. Alternatively, a bank using the internal ratings based approach may apply the risk weights under the provisions on the standardised approach of credit risk provided that they apply them to all such exposures, or the bank may apply a 100% risk weight to all such exposures. If the amount of a positive exposure resulting from transactions under this paragraph is not material, the bank may apply a risk weight of 100% to these exposures.

(7) In the case of a system wide failure of a settlement or clearing system the requirements under paragraphs 1 to 6 shall not be calculated until the situation is rectified. In this case the non-

settlement of a transaction by a counterparty shall not be deemed default for the purposes of credit risk.

Counterparty credit risk

Article 157

(1) A bank shall calculate capital requirements for covering counterparty credit risk arising from exposures due to the following:
a) OTC derivative instruments and credit derivatives;
b) repo trades and securities or commodities lending or borrowing transactions based on securities or commodities included in the trading book;
c) margin lending transactions based on securities or commodities; and
d) long settlement transactions.

(2) Subject to paragraphs 3 to 6, exposure values and risk-weighted exposure amounts for such exposures shall be calculated in accordance with the provisions of Part Three.

(3) For the purposes of paragraph 2 the list of derivatives under Article 16 shall be amended to include credit derivatives, and the calculation by marking to market under Article 11 for credit derivatives shall be amended to include these rules:
a) to obtain a figure for potential future credit exposure in the case of total return swap credit derivatives and credit default swap credit derivatives, the nominal amount of the instrument shall be multiplied by the following percentages:
1. 5%, where the reference obligation is one that if it gave rise to a direct exposure of the bank it would be a qualifying item for the purposes of Article 2 of the Act on Banks;
2. 10%, where the reference obligation is one that if it gave rise to a direct exposure of the bank it would not be a qualifying item for the purposes of Article 2 of the Act on Banks;
b) however, in the case of a credit default swap, a bank the exposure of which arising from the swap represents a long position in the underlying instrument, shall be permitted to use a figure of 0% for the potential future credit exposure, unless the credit default swap is subject to closeout upon the insolvency of the entity the exposure of which arising from the swap represents a short position in the underlying instrument, even though the underlying instrument has not defaulted;
c) where the credit derivative provides protection in relation to the "n^{th} to default" amongst a number of underlying obligations which of the percentage figures prescribed above is to be applied is determined by the obligation with the lowest credit quality determined by whether it is one that if incurred by the bank would be a qualifying item for the purposes of Article 2 of the Act on Banks.

(4) For the purposes of paragraph 2, in calculating risk-weighted exposure amounts a bank shall not use the financial collateral simple method set out in Article 124(1) to (6) for recognition of the effects of financial collateral.

5) For the purposes of paragraph 2, in the case of repo trades or securities or commodities lending or borrowing contracts booked in the trading book, all financial instruments and commodities that are eligible to be included in the trading book shall be recognised as eligible collateral. For exposures due to OTC derivative instruments booked in the trading book, commodities that are eligible to be included in the trading book may also be recognised as eligible collateral. For the purposes of calculating volatility adjustments where such financial instruments or commodities which are not eligible under the credit risk mitigation methods are lent, sold or provided, or borrowed, purchased or received by way of collateral or otherwise in such a transaction, and the institution is using the supervisory volatility adjustments approach under this Decree, such instruments and commodities shall be treated in the same way as non-main index

equities listed on a recognised exchange. Where the bank is using the own estimates of volatility adjustments approach by credit risk mitigation methods in respect of financial instruments or commodities which are not eligible under these methods, volatility adjustments must be calculated individually for each item. Where a bank is using the internal models approach defined in the chapter on credit risk mitigation, it may also apply this approach in the trading book.

(6) For the purposes of paragraph 2, in relation to the recognition of master netting agreements covering repo trades and/or contracts on securities or commodities lending or other capital market transactions under Article 97(1)(b), netting of positions in the trading book and banking book shall be recognised only when the netted transactions fulfil the following conditions:
a) all transactions are marked to market daily; and
b) any items borrowed, purchased or received under the transactions may be recognised as eligible financial collateral under Part Three without the application of paragraph 5.

(7) Where a credit derivative included in the trading book forms part of an internal hedge and the credit protection is recognised under Part Three, there shall be deemed not to be counterparty risk arising from the position in the credit derivative.

(8) The capital requirement for covering counterparty risk shall be 8% of the total risk-weighted exposure amounts under paragraphs 1 to 7.

Debt instrument risk

Article 158

(1) The capital requirement to offset debt instrument risk shall be the sum of the capital requirements for covering the following:
a) specific debt instrument risk for all currencies;
b) general debt instrument risk for all currencies;
c) debt instrument risk connected with interest-rate futures and interest-rate options traded on regulated markets (“exchange-traded interest-rate derivatives”);
d) debt instrument risk connected with credit derivatives.

(2) Debt instruments mean
a) debt securities;
b) interest-rate derivatives under article 16 (1);
c) underlying interest-rate derivative instruments under Article 16;
d) other interest-rate positions under Article 151(4)(b).

(3) Debt instruments which are forwards shall represent at least one interest-rate position of the underlying instruments of such transactions.

(4) Debt instruments which are options or warrants shall represent at least one interest-rate position of the underlying instruments of these options or warrants, multiplied by the respective delta coefficient.

(5) Net interest-rate positions in the debt securities, or interest-rate futures, interest-rate options and warrants shall be calculated as the excess of long interest-rate positions over short interest-rate positions where the debt instruments are identical; or the excess of short interest-rate positions over long interest-rate positions where these debt instruments are identical. In calculating the net interest-rate position in the long financial instruments under paragraph 2(d) the procedure for calculating the net interest-rate position in long securities shall apply mutatis mutandis.

(6) Identical debt securities means debt securities of the same type, issued by the same issuer, denominated in the same currency and having the same coupon rate or yield otherwise defined, the same residual maturity and the same timetable for paying out yields. Identical interest-rate futures, interest-rate options or warrants means interest-rate futures, interest-rate options or warrants concluded towards a single counterparty and for which the conditions under paragraph 7 apply.

(7) Net interest-rate positions from derivatives other than those in the case of which the bank has decided to proceed under paragraph 5, shall be calculated as the excess of long interest-rate positions over short interest-rate positions; or the excess of short interest-rate positions over long interest-rate positions under paragraph 2(c), provided this concerns:
a) the same type of derivative;
b) the same type of underlying instrument denominated in the same currency;
c) the same issuer in the case of an underlying instrument which is a debt security;
d) a reference interest-rate with a mutual deviation not greater than 15 basis points (bp) where the underlying instrument is a floating-rated debt instrument for which the time spread between fixing the floating interest-rate for debt instruments included in a long position and for debt instruments included in a short position may not be greater than:

1. zero days in the case of a residual maturity of less than one month hence;
2. seven days in the case of a residual maturity from one month to one year hence;
3. 30 days in the case of a residual maturity of one year hence;

e) a reference interest-rate with a mutual deviation not greater than 15 basis points (bp) where the underlying instrument is a fixed-rate debt instrument for which the time spread between the maturity of debt instruments included in the long position and of debt instruments included in the short position may not be greater than:

1. zero days in the case of a residual maturity of less than one month hence;
2. seven days in the case of a residual maturity from one month to one year hence;
3. 30 days in the case of a residual maturity of one year hence.

(8) For the purposes of calculating capital requirements, a net interest-rate position from derivatives shall be assigned the reference interest rate of the original position that forms the excess of the respective net interest-rate position.

(9) Net interest-rate positions shall be grouped by individual currency and the value of the debt instrument risk shall be calculated for each currency individually. Before their grouping, all net interest-rate positions shall be converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination.

(10) For the purpose of calculating specific debt instrument risk, holdings of own debt instruments shall be disregarded in determining the net interest-rate position.

Article 159

(1) For the purposes of calculating capital requirements for specific debt instrument risk net interest-rate positions shall be assigned to categories on the basis of their issuer/obligor, external or internal credit assessment and residual maturity, and then multiplied by the coefficients shown in Table 28.

(2) The capital requirement for specific debt instrument risk shall be the sum of values calculated under paragraph 1 for each currency.

Table 28

Categories	Specific risk capital charge
Debt securities issued or guaranteed by central governments, issued by central banks, international organisations, multilateral development banks or local or regional authorities which would be assigned to the first credit quality step or which would receive a 0% risk weighting under the rules for risk weighting of exposures under the standardised approach for credit risk.	0%
Debt securities issued or guaranteed by central governments, issued by central banks, international organisations, multilateral development banks or local or regional authorities which would be assigned to the second or third credit quality step under the rules for the risk weighting of exposures under the standardised approach for credit risk, debt securities issued or guaranteed by institutions which would be assigned to the first or second credit quality step under rules for the risk weighting of exposures under the standardised approach for credit risk, and debt securities issued or guaranteed by corporates which would qualify for the first or second credit quality step under rules for the risk weighting of exposures under the standardised approach for credit risk. Other qualified items set out in paragraph (5).	0.25% (residual term to final maturity of six months or less) 1.00% (residual term to final maturity of greater than six months and up to and including 24 months) 1.60% (residual term to final maturity exceeding 24 months)
Debt securities issued or guaranteed by central governments, issued by central banks, international organisations multilateral development banks or local authorities or local governments which would be assigned to the fourth or fifth the credit quality step under rules for the risk weighting of exposures under the standardised approach for credit risk, debt securities issued or guaranteed by institutions which would be assigned to the third credit quality step under rules for the risk weighting of exposures, and debt securities issued or guaranteed by corporates which would be assigned to the third or fourth credit quality step under rules for the risk weighting of exposures under the standardised approach for credit risk. Exposures for which a credit assessment by a nominated rating agency is not available.	8.00%
Debt securities issued or guaranteed by a central governments, central banks, international organisations, multilateral development banks or local authorities or local governments or institutions which would be assigned to the sixth credit quality step under rules for the risk weighting of exposures under the standardised approach for credit risk, debt securities issued or guaranteed by corporates which would be assigned to the fifth or sixth credit quality step under rules for the risk weighting of exposures under the standardised approach for credit risk.	12.00%

(3) For banks which apply the rules for the risk weighting of exposures under the internal ratings based approach to qualify for a credit quality step the obligor shall have an internal weighting with a probability of default equal to or lower than that associated with the appropriate credit quality step under the rules for the risk weighting of exposures to corporates under the standardised approach for credit risk.

(4) Instruments issued by a non-qualifying issuer shall receive a specific risk capital charge of 8% or 12% according to Table 28. Securitisation positions that would be subject to a deduction under the treatment laid down in Article 6 or risk weight at 1250% as set out in Articles 140, 143 to 150, shall be subject to a capital charge that is no less than that set under this treatment. Unrated liquidity facilities shall receive a capital charge that is no less than that set out in Articles 140, 143 to 150.

(5) For the purposes of paragraphs 2 to 4 qualifying items shall include:
a) long and short positions in assets qualifying for a credit quality step corresponding at least to investment grade in the mapping process under the standardised approach for credit risk;
b) long and short positions in assets which, because of the solvency of the issuer, do not have a probability of default higher than the probability of default of the assets referred to under subparagraph a) under the internal ratings based approach;
c) long and short positions in assets not having a credit assessment by a nominated rating agency and which meet the following conditions:
1. the bank considers them to be sufficiently liquid;
2. according to the bank's own discretion their investment quality is at least equal to investment grade of the assets referred to under subparagraph a); and
3. they are listed on at least one regulated market in a Member State or on a stock exchange in a third country, provided that this exchange is recognised by the competent authorities of the relevant Member State;
d) long and short positions in assets issued by institutions subject to the capital adequacy requirements under the Act on Banks, which the relevant institutions consider to be sufficiently liquid and whose investment quality is, according to the bank's own discretion, at least equivalent to the investment quality of the assets referred to under subparagraph a); and
e) securities issued by institutions whose credit quality is equivalent or higher than those associated with the second credit quality step under the rules for risk weighting of exposures towards institutions under the standardised approach for credit risk and that are subject to the supervisory and legal regulations comparable to those laid down in the Act on Banks.

Article 160

(1) The capital requirement against general debt instrument risk shall be calculated using the
a) maturity-based method;
b) duration method.

(2) The method chosen under paragraph 1 shall be used throughout the period set in internal bank regulations, at least though for the period of one calendar quarter. This requirement shall not apply to the calculation of general debt instrument risk values associated with exchange-traded interest-rate derivatives calculated using the margin method under Article 163

Article 161

(1) Under the maturity-based method the capital requirement against general debt instrument risk shall be calculated for each currency as follows:
a) net interest-rate positions shall be assigned to a maturities schedule for the relevant currency, which shall contain 13 maturity bands for financial instruments with a reference interest rate equal to or higher than 0.03 and 15 maturity bands for financial instruments with a reference interest rate of up to 0.03 in three maturity zones according to Table 29;
b) each net long or short interest-rate position shall be multiplied by the coefficient under subparagraph a); the weighted net long or weighted net short interest-rate position of each maturity

band shall equal the sum of the products of the net long or net short interest-rate positions and the respective coefficient under subparagraph a) for the respective maturity band;
c) the long and short weighted net interest-rate positions of the individual maturity bands shall then be matched; the result shall be one matched and one unmatched short or long interest-rate position for each maturity band;
d) the totals of all long and the totals of all short matched interest-rate positions of the individual maturity bands shall be computed in each maturity zone individually; the totals obtained shall be matched for the individual maturity zones and the result shall be one matched interest-rate position and one unmatched long or short interest-rate position for each maturity zone;
e) the unmatched interest-rate positions of maturity zones 1 and 2 shall be matched if one of these positions is long and the other is short; the result shall be a matched interest-rate position for the maturity zones 1 and 2 and an unmatched long or short interest-rate position of maturity zone 1 and 2; where an unmatched interest-rate position of maturity zone 1 and 2 has been created by zone 2, this position shall then be matched with the unmatched interest-rate position of maturity zone 3 if one of them is long and the other short; the result shall be a short interest-rate position of the maturity zones 1, 2 and 3 and an unmatched long or short interest-rate position of the maturity zone 1, 2 and 3;
f) the procedure under subparagraph e) may be performed the first for maturity zones 2 and 3, and if an unmatched long or short interest-rate position of maturity zone 2 and 3 created by zone 2 thereby arises, this position may be matched with the unmatched interest-rate position of maturity zone 1, provided one of them is long and the other short;
g) unmatched interest-rate positions from the pair of maturity zones 1 and 2 created by zone 1 and from zone 3, or from the pair of zones 2 and 3 created by zone 3 and from zone 1 that have not yet been matched shall be matched if one of these positions is short and the other is long; the result shall be the residual matched interest-rate position and unmatched long or short interest-rate position;
h) the residual unmatched interest-rate position shall be found by summing all unmatched positions from all maturity zones that have not yet been matched under the procedure set out in subparagraphs a) to g);
i) the general interest-rate risk shall be calculated as the sum of the following components:

1. 10% of the sum of the matched interest-rate positions for each maturity band as determined under the procedure set out in subparagraphs a) to c);
2. 30% of the sum of the matched interest-rate positions for maturity zones 2 and 3 as determined under the procedure set out in subparagraphs a) to d);
3. 40% of the sum of:
3a. the matched interest-rate position for maturity zone 1 as determined under the procedure set out in subparagraphs a) to d);
3b. the matched interest-rate position for the pair of maturity zones 1 and 2 or 2 and 3 as determined under the procedure set out in subparagraphs a) to d) and e) or f);
3c. the matched interest-rate position of the trio of maturity zones 1, 2 and 3 as determined under the procedure set out in subparagraphs a) to d) and e) or f);
4. 150% of the residual matched interest-rate position as determined under the procedure set out in subparagraphs a) to g);
5. 100% of the residual unmatched interest-rate position as determined under the procedure set out in subparagraphs a) to h).

(2) A matched interest-rate position means the lower of the values of the long interest-rate position and the short interest-rate position that are mutually matched.

(3) An unmatched interest-rate position means:
a) an excess of a long interest-rate position over a short interest-rate position that are mutually matched; this unmatched interest-rate position is an unmatched long interest-rate position;

b) an excess of a short interest-rate position over a long interest-rate position that are mutually matched; this unmatched interest-rate position is an unmatched short interest-rate position.

(4) Where a debt instrument does not contain a reference interest rate, this position shall be assigned to a band with a reference interest-rate of up to 0.03%.

(5) In the case of fixed-rate debt instruments, net interest-rate positions shall be assigned to maturity bands according to their residual maturities. In the case of floating-rate debt instruments, they shall be assigned according to the time remaining to the next interest-rate fixing.

Table 29

Zone	Maturity band (x)				Coefficient	Assumed interest rate change
	reference interest rate $\geq 0{,}03$		reference interest rate $< 0{,}03$			
1	2	3	4	5	6	7
1	1	$x \leq 1$ month	1	$x \leq 1$ month	0.0000	-
	2	$1 < x \leq 3$ months	2	$1 < x \leq 3$ months	0.0020	0.01
	3	$3 < x \leq 6$ months	3	$3 < x \leq 6$ months	0.0040	0.01
	4	$6 < x \leq 12$ months	4	$6 < x \leq 12$ months	0.0070	0.01
2	5	$1 < x \leq 2$ years	5	$1 < x \leq 1{,}9$ years	0.0125	0.009
	6	$2 < x \leq 3$ years	6	$1{,}9 < x \leq 2{,}8$ years	0.0175	0.008
	7	$3 < x \leq 4$ years	7	$2{,}8 < x \leq 3{,}6$ years	0.0225	0.0075
3	8	$4 < x \leq 5$ years	8	$3{,}6 < x \leq 4{,}3$ years	0.0275	0.0075
	9	$5 < x \leq 7$ years	9	$4{,}3 < x \leq 5{,}7$ years	0.0325	0.007
	10	$7 < x \leq 10$ years	10	$5{,}7 < x \leq 7{,}3$ years	0.0375	0.0065
	11	$10 < x \leq 15$ years	11	$7{,}3 < x \leq 9{,}3$ years	0.0450	0.006
	12	$15 < x \leq 20$ years	12	$9{,}3 < x \leq 10{,}6$ years	0.0525	0.006
	13	$20 < x$ years	13	$10{,}6 < x \leq 12$ years	0.0600	0.006
			14	$12 < x \leq 20$ years	0.0800	0.006
			15	$20 < x$ years	0.1250	0.006

Article 162

(1) The capital charge for general debt instrument risk may be calculated using the duration-based method for each currency individually as follows:
a) the modified duration for each net interest-rate position shall be calculated on the basis of the following formula:

$$MD = \frac{D}{(1+r)}, \text{ where } D = \frac{\sum_{t=1}^{T} \frac{t \cdot C_t}{(1+r)^t}}{\sum_{t=1}^{T} \frac{C_t}{(1+r)^t}}, \text{ where}$$

MD – modified duration,

r – yield to maturity,
C_t – cash payment in time t,
T – residual maturity,

and the modified durations shall be assigned to a durations schedule for the respective currency, which shall contain 15 duration bands in three duration zones, in accordance with Table 30;
b) each net long or net short interest-rate position shall then be multiplied by the assumed interest-rate change and by the modified duration under subparagraph a); the weighted net long or net short interest-rate position for each duration band shall equal the sum of the products of the net long or net short interest-rate positions and the respective assumed interest-rate changes and modified durations under subparagraph a) for the respective duration band;
c) the general interest-rate risk values shall then be calculated mutatis mutandis according to the procedure laid down in Article 161(1)(c) to (i); for this purpose a maturity band shall be changed for a duration band and the maturity zone shall be changed for a duration zone.

(2) In the case of fixed-rate debt instruments, modified durations shall be calculated on the basis of residual maturities. In the case of floating-rate debt instruments, modified durations shall be calculated on the basis of the time remaining to the next interest-rate fixing.

Table 30

Duration band		**Assumed interest-rate change**	**Duration band**		**Assumed interest-rate change**
1	2	3	1	2	3
Duration zone 1			**Duration zone 3**		
1	$x \leq 1$ month	0.01	8	$3,6 < x \leq 4,3$ years	0.0075
2	$1 < x \leq 3$ months	0.01	9	$4,3 < x \leq 5,7$ years	0.007
3	$3 < x \leq 6$ months	0.01	10	$5,7 < x \leq 7,3$ years	0.0065
4	$6 < x \leq 12$ months	0.01	11	$7,3 < x \leq 9,3$ years	0.006
Duration zone 2			**12**	$9,3 < x \leq 10,6$ years	0.006
5	$1 < x \leq 1,9$ years	0.009	13	$10,6 < x \leq 12$ years	0.006
6	$1,9 < x \leq 2,8$ years	0.008	14	$12 < x \leq 20$ years	0.006
7	$2,8 < x \leq 3,6$ years	0.0075	15	$20 < x$ years	0.006

Article 163

(1) For the calculation of capital charges for debt instrument risk connected with exchange-traded interest-rate derivatives, the margin method may be used provided the capital charges for debt instrument risk obtained thereby are at least equal to the capital charges for the instrument risk connected with these futures and options as would be obtained using the methods under Articles 159 to 162, or as would be obtained using an internal model for calculating the bank's market risk under Articles 184 to 191.

(2) Capital charges for debt instrument risk connected with exchange-traded interest-rate derivatives shall be the sum of the exchange-traded margins corresponding to these futures and options.

(3) Where the margin method is used for calculating capital charges for debt instrument risk connected with exchange-traded interest-rate derivatives, the interest-rate positions of these futures

or options shall not be included in the calculation of debt instrument risk by the methods under Articles 159 to 162.

Article 164

(1) The capital charge for debt instrument risk connected with the credit derivatives shall be the sum of:
a) specific debt instrument risk connected with credit derivatives for all currencies; and
b) general debt instrument risk connected with credit derivatives for all currencies.

(2) The capital charge for specific debt instrument risk connected with credit derivatives shall be the sum of the values calculated by multiplying the coefficients given in Table 28 with the interest-rate position values from credit derivatives allocated to the appropriate categories on the basis of the issuer and the residual maturity of the respective reference asset or government bond.

(3) The general risk connected with credit derivatives shall be calculated from the interest-rate positions from credit derivatives and using the procedure under Article 160.

(4) The interest-rate position values from credit derivatives shall feature in the calculation of the capital charge for debt instrument risk in the scope set out in paragraphs 5 to 12 according to the nature of the reference assets and government bonds and without their mutual matching or matching with interest-rate positions generated by other financial or commodity instruments booked in the trading book, unless stated otherwise in Article 165.

(5) Where a bank is in the position of a risk buyer, a total return swap shall represent a long position in the reference asset and a short position in a government bond with a zero risk weighting. The long position shall enter into the calculation of the general risk and specific risk according to the issuer of the respective reference asset. The short position shall enter into the calculation of general risk.

(6) Where a bank is in the position of a risk seller, a total return swap shall represent a short position in the reference asset and a long position in a government bond with a zero risk weighting. The short position shall enter into the calculation of the general risk and specific risk according to the issuer of the respective reference asset. The long position shall enter into the calculation of general risk.

(7) Where a bank is in the position of a risk buyer, a credit default swap shall represent a long position in the reference asset. This position shall enter into the calculation of the specific risk according to the issuer of the respective reference asset.

(8) Where a bank is in the position of a risk seller, a credit default swap shall represent a short position in the reference asset. This position shall enter into the calculation of the specific risk according to the issuer of the respective reference asset.

(9) Where a bank is in the position of a risk buyer, a credit linked note shall create a long interest-rate position in a debt security and a long position in the reference asset. The long interest-rate position in the debt security shall enter into the calculation of general risk and specific risk according to the issuer of the respective debt security. The long position in the reference asset shall enter into the calculation of the specific risk according to the issuer of the respective reference asset.

(10) Where a bank is in the position of a risk seller, a credit linked note shall represent a short position in the reference asset, which shall feature in the calculation of the specific risk according to the issuer of the respective reference asset.

(11) Where a bank is in the position of a risk buyer, a first-asset-to-default basket credit derivative shall represent a long position to each reference asset. These positions shall enter into the calculation of the specific risk according to the issuer of the reference assets, where, however, it shall be at most the maximum payment amount in the case of a credit event.

(12) Where a bank is in the position of a risk seller, a first-asset-to-default basket credit derivative shall represent a short position or reference asset which on the respective reference assets generates the highest credit charge for specific risk. This position shall enter into the calculation of the specific risk according to the issuer of this reference asset.

(13) A reference asset means a loan or debt security from which a credit derivative is derived.

(14) A credit event means a happening that causes the realisation of a credit derivative, in particular the obligor's default.

(15) Credit derivatives means:
a) total return swaps;
b) credit default swaps;
c) credit linked notes;
d) first-asset-to-default basket credit derivative;
e) second-asset-to-default basket credit derivative;
f) other derivatives with underlying credit instruments.

Article 165

(1) For the purposes of calculating capital charges for risk from trading book positions the specific risk value for debt instruments may be reduced by hedging of trading book positions by credit derivatives, subject to compliance with the conditions set out in paragraphs 2 to 4.

(2) The specific risk capital charge of debt instruments for two opposite interest-rate positions in an equal amount and with the same maturity shall be zero, unless:
a) they represent the same instrument, or
b) a long cash position is fully hedged by the value of the short position of the reference asset from a total return swap (or vice versa); the maturity of the swap itself may be different from that of the hedged cash position.

(3) The specific risk capital charge of debt instruments for two opposite interest-rate positions having the same maturity shall be 20% of the specific risk of the debt instruments for that interest-rate position of them which would otherwise represent the higher capital charge for this risk, provided:
a) the reference asset and respective credit derivative have the same maturity;
b) the currency in which both interest-rate positions are denominated, one of which is the reference asset and the other cash claim or cash obligation, is the same; and
c) the change in the value of the cash claim or cash obligation does not materially influence the real value of the credit derivative.

(4) The specific risk capital charge of debt instruments for two opposite interest-rate positions shall be greater than 20% of the specific risk value of debt instruments for that interest-rate position of them which would otherwise represent the higher capital charge for this risk, provided:
a) a long cash position is fully hedged by the value of the short position of the reference asset from a total return swap (or vice versa); the maturity of the swap itself may be different from that of the hedged cash position, and the long position and short position represent instruments different from one another; and
1. the reference asset ranks pari passu or junior to the hedged cash position in the case of bankruptcy or liquidation;
2. both positions share the same obligor and there is a cross-default clause between them; or
b) they represent the same instrument, or, as relevant, the rules under paragraph 3(a) to (c) apply to them, but a maturity mismatch or currency mismatch between them may occur; or
c) the rules under paragraph 3(a) to (c) apply to them, but the long position and short position represent instruments different from one another.

Capital instrument risk

Article 166

(1) The capital charge for capital instruments shall be the sum of the capital charge for
a) specific capital instrument risk;
b) general capital instrument risk;
c) capital instrument risk connected with equity options and equity futures traded on regulated markets ("exchange-traded equity derivatives"), calculated using the margin method;
d) capital instrument risk connected with credit derivatives;
e) equity risk connected with shares in collective investment undertakings.

(2) Capital instruments means:
a) equity securities, in particular equity shares, temporary certificates and mutual fund certificates;
b) equity derivatives under Article 16 (3);
c) underlying capital instruments of derivatives under Article 16.

(3) Capital instruments which are
a) forwards shall represent at least one equity position of the underlying instruments of such transactions;
b) options or warrants shall represent at least one equity position of the underlying instruments of these options or warrants, multiplied by the respective delta coefficient.

(4) A long position or short position
a) from futures on an equities index shall be treated as a long or short equities position from a notional individual equity with a market price equal to the market value of the equity index which is the underlying instrument of the respective future;
b) from an option for futures on an equities index shall be treated as a long or short equities position from a future on the equity index which is the underlying instrument of the respective option multiplied by the respective delta coefficient.

(5) Net equity positions in equity securities, or equity futures, equity options and warrants shall be calculated as the excess of long equity positions over short equity positions, provided these capital instruments are the same, or as the excess of short equity positions over long equity positions, provided these capital instruments are the same. Same equity securities means equity securities issued by the same issuer and denominated in the same currency. Same equity futures,

equity options or warrants means equity futures, equity options or warrants concluded towards a single counterparty and to which the conditions under paragraph 6 apply.

(6) Net equity positions from derivatives, other than those derivatives in the case of which the bank has decided to proceed under paragraph 5 shall be calculated as the excess of long equity positions over short equity positions, or as the excess of short equity positions over long equity positions under paragraph 2(c), provided the following conditions are satisfied:
a) they concern the same type of derivative with the same residual maturity;
b) they concern the same time of the underlying instrument issued by the same issuer and denominated in the same currency.

(7) The total gross equity position means the total of the sum of all net long equity positions and of the sum of all net short equity positions as converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination.

(8) The total net equity position means the difference of the sum of all net long equity positions and of the sum of all net short equity positions as converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination.

(9) Positions in underlying interest-rate instruments of equity derivatives under Article 16(3) shall be included in the calculation of general debt instrument risk.

(10) Positions in underlying instruments of equity derivatives under Article 16(3) which are foreign currency assets or foreign currency liabilities shall be included in the calculation of exchange rate risk.

Article 167

(1) The specific risk capital charge for capital instruments shall be calculated as the product of the coefficient 0.04 and the value of the total gross equity position.

(2) The general risk capital charge for capital instruments shall be calculated as the product of the coefficient 0.08 and the absolute value of the total net equity position.

(3) The capital charge for capital instrument risk connected with shares in collective investment undertakings may be calculated as the product of the coefficient 0.08 and the value of risk-weighted exposures determined under this Decree; otherwise the procedure under Article 168 shall be followed.

(4) For calculating the capital charge for capital instrument risk connected with exchange-traded equity derivatives the margin method under paragraph 5 may be used, provided the capital charge for capital instrument risk calculated using this method is at least equal to the value of the capital charge for capital instrument risk connected with these futures and options which would be arrived at under paragraphs 1 and 2 or which would be arrived at using an internal market risk model as set out in Articles 184 to 191.

(5) The capital charge for capital instrument risk connected with exchange-traded equity derivatives determined by the margin method shall be the sum of exchange-traded margins corresponding to these options or futures.

(6) Where the margin method under paragraph 5 is used for calculation of the capital charge for capital instrument risk connected with exchange-traded equity derivatives, the equity positions

from these options and futures shall not be included in the calculation of capital instrument risk under paragraphs 1 and 2, and the interest-rate positions from these options and futures shall not be included in the calculation of debt instrument risk.

(7) For calculating the capital charge for capital instrument risk connected with credit derivatives the methods under Article 164 shall be used mutatis mutandis.

(8) For the purpose of reducing the specific risk capital charge for capital instruments by hedging trading book positions with credit derivatives, the methods under Article 165 shall be used mutatis mutandis.

Article 168

(1) Capital charges for positions in collective investment undertakings booked in the trading book shall be calculated in accordance with the methods set out in paragraphs 2 to 9.

(2) Positions in collective investment undertakings shall be subject to specific and general risk capital charges for capital instruments at the level of 32%. Where the modified treatments of gold as laid down in this paragraph is used, positions in collective investment undertakings shall be subject to specific and general risk capital charges for capital instruments and exchange rate risk at a level of at maximum 40%.

(3) A bank may determine the capital charge for positions in collective investment undertakings which meet the criteria set out in paragraph 5 by the methods set out in paragraphs 7 to 10.

(4) Unless stated otherwise, no netting shall be permitted between the underlying investments of collective investment undertakings and other positions held by a bank.

(5) The general eligibility criteria for using the methods in paragraphs 7 to 10 for collective investment undertakings which are supervised or established in Member States shall be as follows:
a) the prospectus or equivalent document of a collective investment undertaking shall include the following:
1. the categories of assets in which the collective investment undertaking is authorised to invest;
2. if investment limits apply, the respective limits and their calculation methodology;
3. if leverage is permitted, a maximum level of leverage; and
4. if investments in derivatives concluded on a regulated market or repo trades are permitted, the policy for limiting counterparty risk arising from these transactions;
b) the business of a collective investment undertaking shall be reported in half-yearly and annual reports to enable an assessment to be made of the assets and liabilities, income and operations over the reported period;
c) units/shares in a collective investment undertaking shall be redeemable in cash out of the undertaking's assets on a daily basis at the request of the unit holder;
d) investments in a collective investment undertaking shall be segregated from the assets of the manager of the collective investment undertaking; and
e) the investing bank shall provide for adequate risk assessment of the collective investment undertaking.

(6) Units/shares in a collective investment undertaking in a third country shall be recognised providing the requirements set out in paragraph 5(a) to (e) are met.

(7) Where a bank is notified on a daily basis of the underlying investments of a collective investment undertaking, these underlying investments may be regarded individually in the calculation of general and specific risk capital charges for capital instrument risk for these positions in accordance with the methods under Articles 158 to 170, or if the National Bank of Slovakia has granted permission, in accordance with the methods under Articles 184 to 191. On the basis of this approach positions in a collective investment undertaking shall be treated as positions in the underlying investments of the collective investment undertaking. Netting between positions in underlying investments of a collective investment undertaking and other positions held by the bank may be performed only where the bank holds a sufficient quantity of units in the collective investment undertaking to allow for redemption or creation in exchange for the underlying investments of the collective investment undertaking.

(8) A bank may calculate general and specific risk capital charges for positions in a collective investment undertaking in accordance with the methods set out in Articles 158 to 170 or, if the National Bank of Slovakia has granted permission, in accordance with methods set out in Articles 184 to 191 for the assumed positions representing those necessary to replicate the composition and yield of an externally generated index or a fixed basket of equities or debt securities referred to in subparagraph (a), subject to the following conditions:
a) the purpose of a collective investment undertaking's mandate is to replicate the composition and yield of an externally generated index or fixed basket of equities or debt securities; and
b) a correlation of at minimum 0.9 between the daily movements of prices of shares in the collective investment undertaking and the index or basket of equities or debt securities it tracks can be clearly identified for a period of at least six months; "correlation" in this context means the correlation coefficient between daily returns on units in the collective investment undertaking and the index or basket of equities or securities it tracks.

(9) Where a bank is not notified on a daily basis of the underlying investments of a collective investment undertaking, the bank may calculate general and specific capital charges for capital instrument risk in accordance with the methods set out in Articles 158 to 170 subject to these conditions:
a) it is assumed that the collective investment undertaking first invests to the maximum extent allowed under its mandate in the asset classes having the highest general and specific risk capital charge for capital instruments and then continues in investing in descending order until it reaches the maximum total investment limit; the position in a collective investment undertaking shall be treated as a direct holding in the assumed position;
b) a bank shall take account of the maximum indirect exposure that it could achieve by taking leveraged positions through a collective investment undertaking in calculating its general and specific risk capital charge for capital instruments, by proportionally increasing the position in the collective investment undertaking up to the maximum exposure to the underlying investment items resulting from the mandate; and
c) where the general and specific risk capital charge for capital instruments under this paragraph would exceed that prescribed in paragraph 2, the general and specific risk capital charge for capital instruments shall be set at this level.

Trading book asset exposure risk

Article 169

(1) For the purposes of calculating the additional capital charge for the asset exposure risk the bank shall calculate its asset exposure from financial instruments or commodities in the trading book towards one obligor as the sum of:

a) the excesses of long positions in debt instruments over short positions in debt securities calculated in accordance with first point of Article 220(i);
b) the excesses of long positions in capital instruments over short positions in capital securities calculated in accordance with first point of Article 220(i);
c) the positive price differences under Article 156 between the price of financial instruments or commodities determined in accordance with Article 154 and their agreed settlement price in the case of transactions not settled within a certain term, provided the bank is in the position of the buyer of these financial instruments or commodities;
d) the positive price differences under Article 156 between the agreed settlement price of financial instruments or commodities and the price determined in accordance with Article 154 in the case of transactions not settled within a certain term, where the bank is in the position of the seller of these financial instruments or commodities.

(2) A bank shall calculate the exposures from financial instruments and commodities booked in the trading book towards a group of closely connected entities which are obligors ("group of obligors") by summing the asset exposures towards individual obligors in this group of obligors as calculated in paragraph 1.

(3) Items reducing the registered capital of the bank and items reducing the sum of the bank's registered capital and additional capital shall not be included in the asset exposure from operations booked in the trading book towards an obligor or group of obligors.

Article 170

(1) A bank shall calculate for each obligor or group of obligors the difference between the asset exposure corresponding to the percentage ratios under Article 33e(1)(a) of the Act on Banks and the asset exposure from operations not booked in the trading book, as calculated under Article 33e(1)(b) of the Act on Banks. This difference shall be the residual asset exposure towards an obligor or group of obligors.

(2) A bank shall sum the trading book positions towards an obligor or group of obligors in accordance with Article 169. If this sum is less than the residual asset maturity towards an obligor or group of obligors, no capital charge shall be required for the asset exposure from the trading book. If this sum is greater than the residual asset exposure towards an obligor or group of obligors, the bank shall determine the additional capital requirement for the asset exposure towards the obligor or group of obligors in accordance with the procedure set out in paragraphs 3 to 5.

(3) A bank shall assign the following coefficients to positions under Article 169(1):
a) to positions under Article 169(1)(a) the percentages under Table 28 (Article 159(1));
b) to positions under Article 169(1)(b) the coefficients under Article 167(1),
c) to positions under subparagraph c) and d) the conversion figures under Article 156(3);
d) to positions under Article 169(1)(e) coefficients equal to the product of the 0.08 and the respective risk weighting that would be determined under the standardised approach for credit risk.

(4) The bank shall progressively offset positions under Article 169(1) with the residual asset exposure towards an obligor or group of obligors, whereby it shall proceed from positions with the lowest coefficient set out in paragraph 3. The result shall be a progression of position volumes exceeding the value of the residual asset exposure towards an obligor or group of obligors.

(5) The capital charge for asset exposure towards an obligor or group of obligors shall equal:

a) the product of the coefficient 2.00 and the value of positions exceeding the residual asset exposure towards an obligor or group of obligors as calculated under paragraph 4 where this exceedance lasts more than 10 days;
b) the sum of the products of position values exceeding the residual asset exposure towards an obligor or group of obligors as calculated under paragraph 4 and the coefficients assigned under Table 31 to the resultant values following the 10th day of this uninterrupted exceedance.

Table 31

Exceedance under paragraph 4 in percentages of the sum of the bank's registered capital and additional capital less respective deductible items	Coefficient
up to 40 %	2.00
from 41 % to 60 %	3.00
from 61 % to 80 %	4.00
from 81 % to 100 %	5.00
from 101 % to 250 %	6.00
above 250 %	9.00

(6) The capital charge for exposure from operations booked in the trading book shall be the sum of capital requirements for capital exposure from operations booked in the trading book towards all obligors or groups of obligors.

(7) In order to limit the occurrence of inappropriately high risks a bank shall pursue its activities with sufficient prudence so that the asset exposure from operations recorded in the trading book towards an obligor or group of obligors does not exceed on the bank's reporting day:
a) 500% of the sum of the bank's registered capital and additional capital less the respective deductible items where the uninterrupted exceedance of the respective residual asset exposure under paragraph 2 does not last more than 10 days;
b) 600% of the sum of the bank's registered capital and additional capital less the respective deductible items where the uninterrupted exceedance of the respective residual asset exposure under paragraph 2 lasts more than 10 days.

CHAPTER THREE
CALCULATION OF CAPITAL CHARGES FOR FOREIGN-EXCHANGE RISK AND COMMODITIES RISK UNDER THE SIMPLIFIED APPROACH

Article 171

(1) Capital charges for a bank's foreign-exchange risk and commodities risk shall be calculated from the values of assets and liabilities in foreign currencies, position values in gold and from position values in the commodities booked in the trading book and banking book.

(2) For the purposes of calculating a bank's capital charges for foreign-exchange risk and commodities risk:
a) a long commodity position or a long position in gold means the number of units of the commodity or number of units of weight of gold multiplied by the unit price of the respective commodity or gold determined in accordance with Article 154 in respect of which the bank is in the position of creditor or owner;
b) a short commodity position or short position in gold means the number of units of the commodity or number of units of weight of gold multiplied by the unit price of the respective commodity or gold determined in accordance with Article 154 in respect of which the bank is in the position of debtor;
c) an asset in a foreign currency means the sum of values of

1. assets in this currency, except for shares in legal entities with a decisive or substantial influence;
2. claims expressed in this currency from spot deals in this currency or spot deals in gold;
3. claims expressed in this currency from forwards in this currency or forwards in gold;
4. provided or confirmed guarantees for fulfilment of obligations for performance in this currency that are certain to be called;
5. delta equivalents of claims expressed in this currency from purchased call options to buy funds in this currency or to buy gold, or from sold put options to sell funds in this currency or to sell gold;

d) a liability in a foreign currency means the sum of the values of
1. obligations expressed in this currency;
2. obligations expressed in this currency from spot deals in this currency or in gold;
3. obligations expressed in this currency from forwards in this currency or in gold;
4. delta equivalents of obligations expressed in this currency from purchased put options to sell funds in this currency or to sell gold, or sold call options to buy funds in this currency or to buy gold.

e) a foreign exchange position in a foreign currency means the value of the difference of assets and liabilities in the same foreign currency converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable as at the date of determination, other than zero; the minuend shall be the value of the assets and the subtrahend shall be the value of the liabilities;
f) a long foreign exchange position means a positive foreign exchange position;
g) a short foreign exchange position means the absolute value of a foreign exchange position with a negative value.

Foreign-exchange risk

Article 172

(1) Assets and liabilities in a foreign currency which are booked in the banking book shall be included in the calculation of foreign-exchange risk in values booked in the trading book. Assets and liabilities in a foreign currency which are booked in the banking book shall be included in the calculation of foreign-exchange risk in accounting values.

(2) For the purposes of calculating the foreign-exchange risk value:
a) the total foreign exchange position shall be the sum of all long foreign exchange positions and the net long position in gold or the sum of all short foreign exchange positions and the net short position in gold, whichever is the greater, converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination;
b) the net position in gold shall be the excess of the long position in gold over the short position in gold or the excess of the short position in gold over the long position in gold;
c) a matched position of two foreign currencies means the lower of the values of a long foreign-exchange position in one foreign currency and a short foreign exchange position in the other foreign currency, converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination;
d) closely correlated currencies means a pair of currencies where the loss calculated on a daily basis with the conversion of position values in these currencies to Slovak koruna at the exchange rate declared by the National Bank of Slovakia, and resulting from the matching of positions in this currency pair over the following 10 consecutive working days throughout the period of three years preceding the day on which the loss is calculated does not, in at least 99% of cases, exceed 4% of the value of the respective matched position of the two foreign currencies.

(3) The loss resulting from the matching of positions in a pair of closely correlated currencies may be calculated in accordance with Article 173.

Article 173

(1) Conversion of concurrent foreign exchange positions in currencies for which mutual correlation is assumed (currencies E and F) at the exchange rate declared by the National Bank of Slovakia applicable for day D_i. Foreign exchange positions in the foreign currencies E and F shall be either opposite one another, both long, or both short.

$i = 1,2,..., m - 10$ m - number of working days in the three years preceding the reporting day.

(2) Calculation of the unmatched position in foreign currencies E and F for day D_i, as the absolute value of the difference of the foreign exchange position values in foreign currencies under paragraph 1.

X_i – the value of the unmatched position in the foreign currencies in the ith observation
$i = 1,2,..., m - 10$

(3) Determination of the matched position in the foreign currencies E and F for day D_i, as the lower of the foreign exchange position values in the foreign currencies under paragraph 1.

Y_i – value of the matched position in the foreign currencies in the ith observation
$i = 1,2,..., m – 10$

(4) Conversion of concurrent foreign exchange positions in currencies E and F at the exchange rate declared by the National Bank of Slovakia applicable for day D_{i+10}.

$i = 1,2,..., m - 10$

(5) Calculation of the unmatched position in foreign currencies E and F for day D_{i+10}, as the absolute value of the difference of the foreign exchange position values in foreign currencies under paragraph 4.

X_{i+10} – the value of the unmatched position in the foreign currencies in the $i+10^{th}$ observation
$i = 1,2,..., m - 10$

(6) Determination of the matched position in the foreign currencies E and F for day D_{i+10}, as the lower of the foreign exchange position values in the foreign currencies under paragraph 4.

Y_{i+10} – value of the matched position in the foreign currencies in the $i+10^{th}$ observation
$i = 1,2,...m – 10$

(7) Calculation of S_{i+10}: the difference of the values of unmatched position values in the foreign currencies E and F for day D_i and D_{i+10}, which is the “loss rate from position matching in foreign currencies E and F”:

$$S_{i+10} = \left| X_{i+10} - X_i \right|, \qquad i = 1,2,..., m - 10$$

(8) Calculation of the relative loss RS_{i+10} from position matching in foreign currencies E and F for day D_{i+10}:

$$RS_{i+10} = \frac{S_{i+10}}{Y_{i+10}}, \qquad i = 1,2,..., m - 10$$

(9) The set I is the set of all observations. If in the ith observation $RS_{i+10} \leq 0{,}04$, then there exists the set of observations J, for which it is true that:

$$J = \left\{ j: RS_j \le 0{,}04 \right\},\ J \subset I .$$

Then the expression $A_j = 1,\ \forall j \in J$ corresponds to the jth observation.

(10) Calculation of the probability that A will happen, where A is the “close correlation degree of the currencies E and F”:

$$P(A) = \frac{\sum_j A_j}{m-10},\ j \in J.$$

A bank may treat the currencies E and F as closely correlated, provided that $P(A) \ge 0{,}99$. Where $P(A) < 0{,}99$, the currencies E and F may not be treated as closely correlated.

Article 174

(1) The capital charge for foreign-exchange risk shall be calculated from the values of assets and liabilities in foreign currencies and from the position in gold by means of the following methods:
a) the standard method;
b) currency correlation based method;
c) margin method for currency options traded on regulated markets (“exchange-traded currency options”).

(2) Where the margin method is used for calculating capital charges for foreign-exchange risk connected with exchange-traded currency options, assets in a foreign currency and liabilities in a foreign currency from these options shall not be included in the calculation of the capital charge for foreign-exchange risk using the methods under paragraph 1 (a) and (b) and interest-rate positions from these options shall not be included in the calculation of the capital charge for debt instrument risk.

Article 175

(1) The capital charge for foreign-exchange risk under Article 174(1)(a) shall be included in the calculation of the fulfilment of a bank’s capital charges only where the total foreign exchange position exceeds 2% of the sum of the bank’s registered capital and additional capital less the respective deductible items.

(2) The size of the capital charge for foreign-exchange risk under Article 174(1)(a) shall be calculated as the product of the coefficient 0.08 and the value of the total foreign exchange position.

Article 176

(1) For the purposes of the fulfilment of a bank’s capital charges the method under article 174(1)(b) may be used only where:
a) the existence of at least one pair of closely correlated currencies under Article 172(2)(b) is proven;
b) the capital charge for foreign-exchange risk is calculated under either
1. Article 172(2)(d) and paragraph 3; or
2. Article 172(2)(d), whereby the manner of calculating the loss from matching positions in a pair of closely correlated currencies by the bank’s own method is governed by an internal regulation of the bank.

(2) Where the currency correlation based method is used for calculating the capital charge for foreign-exchange risk, this method shall be used last at the day directly preceding the day at which it is not possible to proceed under paragraph 1.

(3) The capital charge for foreign-exchange risk under Article 174(1)(b) shall be calculated as the sum of the following:
(a) the product of the coefficient 0.04 and the sum of all matched positions of closely correlated foreign currency pairs;
(b) the product of the coefficient 0.08 and the higher of the sum of only long foreign exchange positions and the net long position in gold or the sum of only short foreign exchange positions and the net short position in gold converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination, less values of matched positions of pairs of closely correlated foreign currencies.

Article 177

(1) For calculating capital charges for foreign-exchange risk connected with exchange-traded currency options the margin method may be used, provided that the capital charge for foreign-exchange risk calculated thereby is at least equal to the capital charge for foreign-exchange risk connected with these options as would be calculated using methods under Article 174(1)(a) or (b), or as would be calculated using an internal model for calculating market risk under Articles 184 to 191.

(2) The capital charge for foreign-exchange risk connected with exchange-traded currency options shall be the sum of the exchange-traded margins corresponding to these options.

Article 178

For the purposes of calculating capital requirements under Article 175, with regard to collective investment undertakings, the actual foreign exchange positions of collective investment undertakings shall be taken into account. Where the foreign exchange positions in collective investment undertakings are not known to the bank, it shall be assumed that investments in such undertakings have been invested to the maximum extent permitted under the mandate of such undertakings in foreign exchange and, for trading book positions, banks shall take account of the maximum indirect exposure that could be reached by using leverage through collective investment undertakings in calculating their capital charge for foreign-exchange risk. This shall be achieved by proportionally increasing the position in collective investment undertakings up to the maximum exposure to the underlying investment items resulting from the investment mandate. The assumed position of collective investment undertakings in a foreign currency shall be treated as a separate currency pursuant to the treatment of investments in gold with due consideration to whether the investment orientation of collective investment undertakings is available, the respective long foreign exchange position may be added to the sum of long foreign exchange positions and the respective short foreign exchange position may be added to the sum of short foreign exchange positions. Matching between such positions prior to calculating capital charges shall not be permitted.

Commodities risk

Article 179

(1) For the purposes of calculating capital charges for commodities risk, commodity instruments means:

a) commodities;
b) commodity derivatives under Article 16(3);
c) underlying commodity derivatives under Article 16.

(2) Commodity instruments which are:
a) forwards shall represent at least one commodity position of the underlying instruments of these transactions;
b) options or warrants shall represent at least one commodity position of the underlying instruments of these options or warrants, multiplied by the respective delta coefficient.

(3) The net commodity position in a commodity shall be calculated as the excess long commodity position over the short commodity position or as the excess short commodity position over the long commodity position of commodities which:
a) are identical or fulfil all the conditions for complete substitutability;
b) fulfil the condition for their mutual price correlation at the level of at least 0.9 for the preceding period of at least one year;
c) are denominated in the same currency.

(4) The net commodity position from derivatives shall be calculated as the excess long commodity position over the short commodity position or as the excess short commodity position over the long commodity position in accordance with paragraph 1(c), provided
a) this concerns the same type of derivative with the same maturity;
b) the conditions under paragraph 3 apply for the underlying commodity instrument.

(5) The gross commodity position means the sum of the long and short position in the same commodity converted to Slovak koruna at the exchange rate declared by the National Bank of Slovakia applicable for the date of determination.

(6) The net commodity position and the gross commodity position shall be determined by individual commodity and the commodities risk shall be calculated separately for each commodity.

(7) Positions in underlying interest-rate instruments of commodity derivatives shall be included in the calculation of the general risk capital charge for debt instruments.

(8) Positions in underlying commodity derivatives which are assets in a foreign currency or liabilities in a foreign currency shall be included in the calculation of the capital charge for foreign-exchange risk.

Article 180

(1) The capital charge for commodities risk shall be calculated by means of the following methods:
a) the simplified method;
b) the maturity-based method;
c) margin method for the commodity futures and commodity options traded on regulated markets (“exchange-traded commodity derivatives”).

(2) The method selected under paragraph 1(a) or (b) shall be used for a period set by an internal bank regulation, at least though for the period of one calendar quarter. This requirement does not apply to the calculation of capital charges for commodities risk connected with exchange-traded commodity derivatives calculated under the margin method (Article 183).

(3) Where the margin method is used for calculating capital requirements for commodities risk connected with exchange-traded commodity derivatives, the commodity positions from these futures and options shall not be included in the calculation of the capital charge for commodities risk by the methods under paragraph 1(a) or (b) and interest-rate positions from these futures and options shall not be included in the calculation of the capital charge for debt instrument risk.

Article 181

(1) The capital requirement for commodities risk determined by the simplified method shall be the sum of the capital charges for the commodities risks for the individual commodities.

(2) The capital charge for commodities risk for each individual commodity shall be calculated in accordance with Article 180(1)(a) as the sum of:
a) 15% of the net commodity position; and
b) 3% of the gross commodity position.

Article 182

(1) The capital charge for commodities risk determined by the maturity-based method shall be the sum of the capital charges for the commodities risks for the individual commodities.

(2) Each net commodity position shall be assigned to a maturity band according to Table 32. The net commodity positions from commodities (Article 179 (3)) shall be assigned to the first maturity band.

Table 32

Maturity band (x)		Spread rate
1.	$0 < x \leq 1$ months	0.015
2.	$1 < x \leq 3$ months	0.015
3.	$3 < x \leq 6$ months	0.015
4.	$6 < x \leq 12$ months	0.015
5.	$1 < x \leq 2$ years	0.015
6.	$2 < x \leq 3$ years	0.015
7.	$x > 3$ years	0.015

(3) For each maturity band the net commodity positions which are long shall be summed and the net commodity positions which are short shall be summed.

(4) For each maturity band the matched and unmatched commodity positions shall be determined. A matched commodity position means the lower of the long net commodity position and short net commodity position, which are mutually netted. An unmatched commodity position means:
a) the excess long net commodity position over a short net commodity position which are mutually netted; this unmatched commodity position shall be the unmatched long commodity position;
b) the excess short net commodity position over a long net commodity position which are mutually netted; this unmatched commodity position shall be the unmatched short commodity position.

(5) The unmatched commodity position of a maturity band shall be netted with the unmatched commodity position of the maturity band directly following it, provided one of them is long and the other short, the result of which shall be a short commodity position between the maturity bands and an unmatched commodity position between maturity bands. The sum of all

unmatched commodity positions between the maturity bands shall be the residual unmatched commodity position.

(6) The capital requirement for the commodities risk for each commodity shall be calculated by the maturity-based method as the sum of the following values:
a) all unmatched commodity positions of individual maturity bands multiplied by the respective spread rate given in Table 32;
b) all matched commodity positions between bands multiplied by the carry rate coefficient 0.006;
c) the residual unmatched commodity position multiplied by the outright rate coefficient 0.15.

(7) Instead of the spread rate, carry rate and outright rate values under paragraph 6 a bank may use the figures given in Table 32a, subject to the following conditions:
a) commodity transactions form the bulk of its trading activity;
b) it has a diversified portfolio of commodity positions;
c) it cannot meet the requirements for calculating capital charges for commodities risk using an internal model for calculating market risk.

Table 32a

	precious metals (except gold)	**other metals (except gold)**	**agricultural products**	**other commodities other than gold, including energy**
Spread rate	0.01	0.012	0.015	0.015
Carry rate	0.003	0.005	0.06	0.006
Outright rate	0.08	0.1	0.12	0.15

Article 183

(1) The margin method may be used for calculating the capital charge for commodities risk connected with exchange-traded commodity derivatives provided the capital charges for commodities risk thus calculated are at least equal to the capital charges for commodities risk connected with these futures and options, as would be calculated by the methods under Article 180(1)(a) or (b), or as would be calculated using an internal model for calculating market risk under Articles 184 to 191.

(2) Capital charges for commodities risk connected with exchange-traded commodity derivatives shall be the sum of exchange-traded margins corresponding to these futures and options.

CHAPTER FOUR
INTERNAL MARKET RISK MODEL

Article 184

For the purposes of calculating the capital charge for the market risk, the qualitative requirements for using an internal market risk model determining the value-at-risk shall be deemed satisfied, provided that:
a) the internal market risk model forms an integral part of the bank's daily risk management process and the outputs from it serve for reporting the bank's positions in individual risks to senior management responsible for risk management;
b) the bank has a risk management unit that is independent from trading units and reports directly to senior management or a member of the board of directors responsible for risk management;
c) the risk management unit:

1. is responsible for designing and implementing the risk management system;
2. produces and analyses daily reports on outputs from the internal market risk model;

3. proposes appropriate measures for adjusting trading limits;

d) the board of directors and senior management responsible for risk management are actively involved in the risk control process;

e) daily reports produced by the risk management unit are reviewed by senior management or members of the board of directors having sufficient authority to achieve reductions of unmatched positions taken by individual traders, as well as reductions in the bank's overall unmatched positions in individual risks;

f) the bank has sufficient numbers of staff qualified

1. in the use of systems for the field of trading and risk control;
2. in audit and back-office areas;

g) procedures are in place for monitoring and ensuring compliance with a documented set of working procedures and control mechanisms concerning the overall operation of the risk management system;

h) the internal market risk model measures risks with appropriate accuracy;

i) strict stress testing of the internal market risk model is regularly conducted and the results of this testing are reviewed by senior management responsible for risk management and reflected in changes to working procedures and the setting of limits;

j) a component of the regular internal audit process is an independent assessment of the internal market risk model so as to include front-office operations as well as the operations of the independent risk management unit;

k) internal audit at least once a year performs an assessment of the overall risk management system which includes:

1. a review of the adequacy of documentation on the risk management system and process, of the organisation of the risk management unit and its operations;
2. the manner of integrating measured market risks into the daily risk management process and into the management information system;
3. a review of the process applied in approving position valuation models and of the revaluation system used by the front and back office staff;
4. an assessment of the scope of market risk captured by the internal market risk model and a validation of all significant changes in the risk measurement process;
5. an assessment of the accuracy and completeness of position data used in the internal market risk model, the accuracy and appropriateness of volatilities and correlations used, accuracy and sensitivity of algorithms for calculation of the risks to which the bank is exposed;
6. an assessment of the procedure for evaluating the consistency, timeliness and reliability of data sources used for the internal market risk model, including the independence of these data sources;
7. an assessment of the procedure used for evaluating backtesting of the accuracy of the internal market risk model.

Article 185

(1) The criteria for the specification of risk factors in the calculation of the capital charge for market risk using an internal market risk model shall be deemed fulfilled if this calculation is influenced by the risk factors in the scope of the bank's operations in individual markets and, according to the nature of these markets, that at minimum:

a) for interest-rate risk and debt instrument risk the risk management system:

1. takes account of the risk factors corresponding to the interest rates in each currency in which the bank has significant interest-rate positions and yield curves serving for the calculation of this risk:

1a. its construction is based on one of the generally used methods;

1b. for significant interest-rate positions in the main currencies and in significant markets, maturities are divided into a minimum of six time bands in order to capture a parallel interest-rate volatility changes;

2. takes account of the risk arising from non-parallel movements of different yield curves;

b) for foreign exchange risk the risk management system incorporates risk factors corresponding to the position in gold and individual foreign currencies in which the bank has a significant position;

c) for equity risk and capital instrument risk the risk management system incorporates risk factors corresponding at least to each equity market and market in other capital securities in which the bank has a significant position;

d) for commodities risk the risk measurement system incorporates:

1. risk factors corresponding to at least each commodities market in which the bank has a significant position;

2. the risk of less than perfectly correlated price changes in similar but not identical commodities;

3. the risk of changes in the forward prices arising from maturity mismatches of commodity instruments;

4. the characteristics of individual markets, notably delivery dates and the scope provided to traders to close out positions.

(2) For the purposes of calculating the capital charge for a market risk by an internal market risk model and for specifying risk factors under paragraph 1(b) in respect of collective investment undertakings account shall be taken of the real foreign exchange positions in collective investment undertakings in the same manner as for the purposes of calculating the capital charge or foreign exchange risk by simplified methods.

Article 186

For the purposes of calculating the capital charge for market risk, an internal market risk model determining the value-at-risk shall be deemed to fulfil quantitative requirements, provided that

a) the value-at-risk is calculated on a daily basis;

b) a one-tailed confidence interval of 99% is used for calculating the value-at-risk;

c) the minimum period for which the value-at-risk is calculated in advance (the holding period) is 10 working days, or a shorter period with correction to an equivalent 10 days;

d) the historical observation period for calculating the value-at-risk is at least one year, or a shorter historical observation period where there has been a significant upsurge in price volatility;

e) data sets are renewed at least once every three months;

f) the internal market risk model used for calculating the value-at-risk is based, for example, on a covariance-variance matrix of observations, on historical simulations or a Monte Carlo simulation;

g) the internal market risk model accurately calculates risks connected with options, financial instruments similar to options, financial instruments with embedded options and with other financial instruments having non-linear price characteristics so that:

1. it takes account of the non-linear price characteristics of positions from options and from the other stated financial instruments;

2. it assesses positions from options and from the other stated financial instruments, or assesses positions through their nature similar to positions from options and from the other stated financial instruments, such as positions held for a period of at minimum 10 working days;

3. it takes account of the set of risk factors expressing the influence of volatility in interest rates and the prices of underlying instruments of options and of the other stated financial instruments on their value, i.e. the vega, delta and gamma factors;

h) the risk value is determined daily as the higher of the value-at-risk from the preceding day or the average daily value-at-risk for the proceedings 60 working days multiplied by the multiplication factor under subparagraph i);
i) the minimum multiplication factor is 3; the value of the multiplication factor is increased by the value of the plus factor stated in Table 33, depending on the number of overshootings over the course of the last 250 working days, where an overshooting represents a one-day change in the value of a portfolio higher than the value-at-risk generated by the internal market risk model;
j) for the purposes of determining the plus factor, overshootings under subparagraph i) are assessed at least quarterly, where these overshootings are calculated with the aid of a backtesting program;
k) the accuracy and operation of the internal market risk model are monitored daily with the aid of a backtesting program; for each working day a comparison is generated using backtesting of the one-day-value-at-risk calculated by the internal market risk model with the difference of the theoretical value of the bank's portfolio for the following day and the actual value of the bank's portfolio for the respective day;
l) the backtesting program shall be improved if it is considered insufficient, or at the instigation of the National Bank of Slovakia.

Table 33

Number of overshootings	Plus factor
fewer than 5	0.00
5	0.40
6	0.50
7	0.65
8	0.75
9	0.85
10 or more	1.00

Article 187

(1) For the purposes of calculating the specific risk capital charge for debt instruments and the specific risk capital charge for capital instruments, an internal market risk model shall be deemed to fulfil sufficient quantitative requirements, provided that
a) it explains the historical price variation in the portfolio;
b) it is sensitive to changes in the structure of the bank's portfolio and determines a higher risk value for a portfolio with increased asset exposure (concentration);
c) it is robust to all adverse influences;
d) its operation is validated through backtesting aimed at assessing whether specific risks are being accurately estimated;
e) it accurately estimates for debt securities and for capital securities the size of the risk that a significant change in the real price of a financial instrument will occur in consequence of an unexpected event, and the size of the risk that the issuer will not meet its commitments.

(2) Where an internal market risk model fulfils the conditions set out in paragraph 1, the capital charge for specific risks shall be determined in accordance with the procedure in Article 186. Where an internal market risk model fulfils only the conditions stated in paragraph 1(a) to (d), the capital charge for specific risks calculated by the internal market risk model in accordance with the procedure under Article 186 shall be increased by an additional charge in the amount of:
a) that part of the overall value-at-risk of the bank's whole portfolio pertaining to specific risks; or
b) the value-at-risk of the bank's sub-portfolio containing positions in debt securities and capital securities having specific risk.

Article 188

For the purposes of calculating the capital charge for market risk, the qualitative and quantitative requirements for stress testing shall be deemed fulfilled, provided that
a) a bank using an internal market risk model for determining the capital charge for market risk uses also a comprehensive stress testing programme including stress scenarios and stress qualitative and quantitative tests;
b) stress testing is used for identifying events and influences having a significant impact on the bank and on the basis of its results it is possible to determine sufficient capital provision;
c) stress scenarios incorporate factors that can cause losses or gains for the bank, or that can hamper management of their risks;
d) stress scenarios include events with low probability of occurrence in the calculation of all types of market risk and explain the influence on the bank's position of such events having linear and non-linear price characteristics;
e) stress quantitative tests identify possible impacts on the bank caused by movements in real prices, interest rates, volatilities, correlations and other risk factors;
f) qualitative tests verify the fulfilment of the capital requirement of the bank's funding and identify possibilities for reducing risks and protecting own funds against possible losses;
g) stress tests form an integral part of the strategy of the bank's board of directors and the bank's board of directors is regularly informed of their results.

Article 189

A report on the validation of an internal market risk model under Article 33c(4) of the Act on Banks shall contain primarily a statement that
a) the construction of the internal market risk model corresponds to the bank's operations;
b) the model fulfils qualitative requirements under Article 184, quantitative requirements under Article 186, and, as relevant, additional requirements under Article 187;
c) the risk factors under Article 185 are specified and that stress testing under Article 188 can be performed;
d) the internal market risk model provides reliable information on the market risk value.

Article 190

(1) Rules for combining the calculation of individual types of market risk using an internal market risk model and a simplified approach of calculating market risk for the purposes of calculating the capital charge for market risk shall be deemed fulfilled, provided that in combining the calculation of the capital charges for individual types of market risk using the internal market risk models and methods set out in Articles 158 to 183 the calculation of capital charges for the whole market risk is complied with and provided that the conditions under paragraphs 2 and 3 are satisfied.

(2) Subject to this Decree, in the calculation of capital charges for various components of individual types of market risk a combination of the calculation of capital charges for these components by internal market risk models and methods set out in Articles 158 to 183 may not be used.

(3) A change in the methods used for calculating capital charges for individual types of market risk may be made only on the basis of prior consent.

(4) For the purposes of this Decree:
a) an individual type of market risk means interest-rate risk, debt instrument risk, equity risk, capital instrument risk, foreign exchange risk and commodities risk;

b) a component of an individual type of market risk means a separately identifiable and measurable part of the value of an individual type of market risk.

Article 191

Requirements for keeping documentation regarding an internal market risk model and regarding its use shall, for the purposes of calculating capital charges for market risk, be deemed fulfilled where the bank keeps written documentation describing all significant parts of this model and the risk measurement methodology. This documentation shall contain at minimum a description of the conceptual design of the internal market risk model and of its operating details. The written documentation shall evidence that the internal market risk model is in accordance with requirements under the Act on Banks and requirements laid down by this Decree, the content of which shall include:
a) a justification of the choice of risk measurement and risk management methodology used;
b) a detailed description of the theoretical premises for the selected internal market risk model, assumptions used and the mathematical or empirical basis for the parameters used in this model, variables and data sources used for this model;
c) a description of estimation methods used;
d) a description of the responsibilities of individual units of the bank in use of the internal market risk model in the risk measurement and risk management process;
e) a description of the process of approving the internal market risk model at the bank and the process of reassessing the internal market risk model;
f) the results of stress testing and backtesting, which shall evidence that the bank's internal market risk model reliably estimates the degree of risk;
g) a history of the main changes in the internal market risk model and a description of changes since the last assessment of the model;
h) the implementation of strict statistical procedures for reassessing the selection of explanatory variables;
i) a description of the circumstances in which the model will not work effectively.

Particulars of an application for prior consent to use an internal market risk model

Article 192

(1) The particulars of a bank's application for prior consent by the National Bank of Slovakia to use an internal market risk model shall be:
a) trade name and registered office of the applicant;
b) identification number of the applicant;
c) a list of the types of market risk whose value is determined by the internal market risk model for the purposes of determining capital charges for market risk;
d) information on the whether the internal market risk model is based on the principle of Monte Carlo simulation, historical simulation, variation-covariation method or on a different principle;
e) information on whether the internal market risk model that the bank wishes to use:
1. has been designed by the bank itself;
2. has been designed by a vendor;
3. has been designed or is used also in the calculation of capital charges by the bank's parent company, by a different bank or financial institution of or heading the consolidated unit of which the bank is a part;
4. has been designed or acquired in a manner other than those listed in points 1 to 3, with a statement of this manner;
f) the name and surname of the contact person;

g) a list of documents, indicating which documents are submitted in proof of the fulfilment of which requirements under Articles 184 to 191.

(2) A value-at-risk type mathematical or mathematical-statistical model for calculating the size of a risk, including its software realisation, the reliability and accuracy of which is validated by a backtesting program may be used as an internal market risk model.

Article 193

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating a risk management system:
a) a description of the activities and responsibilities of units, including their distribution between units, the activity of which is connected with the bank's risk management system, including its units abroad, with an overview of the structure of information flows between these units and the position of these units in the organisational arrangement according to the bank's organisational structure, together with the names and surnames of senior management or members of the statutory body responsible for the management of individual units and risks;
b) a list of employees and other persons working at the risk management unit with an overview of their level of education, professional competence and length of professional practice in the respective field, and with a summary of the distribution of activities and responsibilities of the risk management unit between individual persons;
c) a list of employees and other persons responsible for market risk management at the bank, and, as relevant, a list of employees and other persons responsible for market risk management at the parent bank, other bank or financial institution in respect of which the bank has a relationship under the third point of Article 192(1)(e), including their competences in the risk management process and relevant information flows between them;
d) a list of responsible staff and other persons working in units whose activity is connected with the use of information systems in trading, trading settlement and risk control, and a list of staff and other persons working in information technology units with an overview of their level of education, professional competence and length of professional practice in the respective field;
e) a list of staff and other persons performing the internal audit of the risk management system with an overview of their level of education, professional competence and length of professional practice in the respective field;
f) other documents at the bank's discretion describing the division of activities and responsibilities in the risk measurement and risk management process.

(2) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the qualitative requirements for using an internal market risk model:
a) a list of daily reports and other reports prepared by the risk management unit with a description of their content and with a description of the use made of outputs from the internal market risk model in the case of the compilation of such reports;
b) examples of reports under subparagraph a) giving information on the extent of the market risk to which the bank is exposed;
c) a list of employees or other persons involved in preparing reports under subparagraphs a) and b), with an overview of to whom the reports are sent and by whom they are reviewed;
d) a list of employees or other persons involved in performing stress testing and involved in preparing reports on stress testing, with an overview of to whom the reports are sent and by whom they are reviewed;
e) a crisis plan of activities connected with the overall risk management system for the case of the failure of the internal market risk model;
f) a report on the validation of the internal market risk model for satisfying the requirements under Article 189;

g) the opinion of the respective supervisory authority of the state in which the bank's parent company, other bank or financial institution in respect of which the bank has a relationship under the third point of Article 192(1)(e) is incorporated, regarding the use of the internal market risk model where the fulfilment of any requirements for using the internal market risk model cannot reliably be determined from the documents submitted by the bank;
h) other documents at the bank's discretion describing the use of the internal market risk model in the process of daily risk management.

Article 194

The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the mathematical and statistical realisation of an internal market risk model:
a) a description of the structure of the internal market risk model, including its mathematical and statistical basis with a key to mathematical symbols used;
b) a list of variables, including estimated variables, of the internal market risk model with a key to mathematical symbols used;
c) a list of estimated input parameters and other input parameters of the internal market risk model with a key to mathematical symbols used and indicating the manner and reason for their estimation;
d) a description of the procedure used for aggregating individual values-at-risk determined by the internal market risk model for individual positions;
e) a description of the advantages and disadvantages, in the bank's opinion, of the internal market risk model used;
f) a list of all internal regulations relating to the mathematical and statistical realisation of the internal market risk model, and at the request of the National Bank of Slovakia, also a copy of these regulations.

Article 195

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the criteria for the specification of risk factors:
a) a current and complete list of all instruments that the bank holds in portfolios the market risk from which is to be calculated by the internal market risk model, with a description and characteristics of the individual instruments and a statement of the relation to individual risk factors and assignment to the respective types of instrument;
b) a list of risk factors not incorporated in the internal market risk model, a list of instruments this non-incorporation concerns, together with the degree of non-incorporation and an explanation of the manner of estimating the values of the respective types of market risk, if this estimate exists;
c) a detailed description of the breakdown of instruments into positions;
d) a description of individual pricing functions, including their theoretical basis, with the assumptions for their use and a justification for their use in pricing their positions from instruments for the purposes of using the internal market risk model;
e) a description of the market yield curves used and of the methods of constructing theoretical yield curves used in pricing interest-rate instruments;
f) a theoretical justification of the choice of proxy series of risk factor values for each respective risk factor, where these are used;
g) a breakdown of at least one instrument into positions for each instrument type, with a statement of:

1. the date of adopting the stated positions and a detailed description of the instrument used, including identified risk factors, respective pricing functions, numerical sequences of identified risk factor values, and, as relevant, proxy series of risk factor values used as inputs for calculating risk using the internal market risk model;
2. calculated values-at-risk, with the date at which these calculations were made;

h) a list of all internal regulations having a relation to types of instrument and to risk factors, and, at the request of the National Bank of Slovakia, also a copy of these regulations.

(2) For the purposes of this Decree:
a) an instrument means a transaction, financial instrument or commodity instrument;
b) an instrument type means a group of instruments for the pricing of which the same or related pricing function is used; where the equality or relatedness of pricing functions cannot satisfactorily be determined, an instrument type means also such a group of instruments the real value of which changes on the basis of the influence of changes in the values of risk factors in an equal or related manner;
c) a risk factor means a variable whose value is as a rule determined on the market and a change in which influences the real value of a position or instrument;
d) a proxy series of risk factor values means the respective series of combinations of values of different risk factors that could replace values of this risk factor that are unavailable on the market.

Article 196

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the requirements for the validation of the accuracy and activity of an internal market risk model by backtesting:
a) a description of the basic procedure in calculating the change in the real value of a portfolio, including an explanation of the manner by which positions within a day are included in the trading results;
b) individual daily changes in the real value of a portfolio calculated during a period of backtesting for at minimum one year;
c) a specification of the holding period on which determination of the value-at-risk is based;
d) individual daily values-at-risk calculated during a period of backtesting for at minimum one year;
e) the criteria, qualitative factors and quantitative factors incorporated in the evaluation of the accuracy of the internal market risk model and a description of the manner of evaluating the accuracy of the internal market risk model;
f) backtesting results at lower levels of aggregation, for example relating to a part of a portfolio or to a selected group of risk factors;
g) examples of the use of backtesting of the internal market risk model;
h) a list of all internal regulations relating to backtesting of the internal market risk model and, at the request of the National Bank of Slovakia, also a copy of these regulations.

(2) For the purposes of this Decree the holding period means a prescribed number of days during which the composition of a portfolio for the purposes of calculating its value-at-risk is considered invariable.

Article 197

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the requirements for the performance of stress testing:
a) a description of the methodology and scope of quantitative stress tests and qualitative tests, and their frequency;
b) a description of the procedure by which the stress scenarios are determined;
c) a list of variables to which the size of the acceptable loss in the case of a crisis situation is compared, for example planned profit or own funds;
d) reports on the results of stress testing for the last year;
e) examples of the use of stress testing;

f) a description of the advantages and disadvantages, in the bank's opinion, of the stress testing used;
g) a list of all internal regulations relating to stress testing and, at the request of the National Bank of Slovakia, also a copy of these regulations.

(2) For the purposes of this Decree a stress scenario means a set of assumptions on the basis of which the bank identifies events that may influence its financial health.

Article 198

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the quality of submitted data and of the sources of this data in the framework of evaluating the fulfilment of qualitative and quantitative requirements for an internal market risk model:
a) sets of numerical data:
1. converted and expressed in Slovak koruna, with a statement of foreign exchange rates used, unless agreed otherwise with the National Bank of Slovakia;
2. with a set order and number of decimal places, unless agreed otherwise with the National Bank of Slovakia;
3. in a format according to the agreement with the National Bank of Slovakia;
4. with a statement of information on the data source;
b) reports on results of quality checks of input data to the internal market risk model conducted before using output data calculated by the internal market risk model, with an explanation on the manner of performing this check, with a report on the error rate of checked data arising in:
1. estimation of missing data in input time series;
2. acquisition of input time series;
3. replacement of actually non-existent input time series by proxy series of risk factor values;
c) a description of the manner in which parameters of the internal market risk model are estimated in the case of:
1. missing data in input time series and the use of proxy series of risk factor values;
2. non-comparable data in input time series, for example from the aspect of a mismatch in the frequency of observations or a currency mismatch;
3. the occurrence of observations of variables with tail values in comparison with a selected frequency distribution of variables considered;
d) information on the procedure and frequency of updating input time series and the plan for the case of failure in this updating, particularly in the case of a lack of supplementary data to input time series;
e) a list of all internal regulations relating to data and data sources, and, at the request of the National Bank of Slovakia, also a copy of these regulations.

(2) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the quality of information data processing systems in the framework of evaluating the fulfilment of qualitative and quantitative requirements for an internal market risk model:
a) a list of the main information systems used by the front-office and back-office units and the risk management unit;
b) information on the internal assessment of the advantages and disadvantages of the information system ensuring the mathematical and statistical realisation of the internal market risk model for the purposes of booking instruments and their positions, pricing positions and their aggregation, and calculating values-at-risk using the internal market risk model;
c) a diagram depicting data flows:

1. in the booking of instruments and their positions, in which the manner of their transfer and the manner of the control check at the interfaces of individual information systems is explained;
2. from sources of risk factor values, or, as relevant, values from proxy series of risk factor values used in the internal market risk model and in pricing and aggregating instruments and their positions;
3. of resultant values-at-risk calculated by the internal market risk model;
4. overall between processes stated in points 1. to 3., stating the dates of concluding individual flows, in particular for the purposes of using data for trading;

d) a list of all internal regulations relating to information data processing systems, and, at the request of the National Bank of Slovakia, also a copy of these regulations.

Article 199

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the system of limits in the framework of evaluating the fulfilment of qualitative and quantitative requirements for an internal market risk model:
a) a description of the structure and scope of use of all limits relating to market risk, including trading limits, broken down by individual risk, and by the bank's individual trading units;
b) the manner of converting value-at-risk limits to trading limits and limits of other parameters, e.g. sensitivity limits to changes in risk factor values;
c) a document proving that:
1. trading limits form an integral part of the system of market risk related limits and are a result of the risk management unit's measurement process;
2. market risk related limits are determined using value-at-risk calculation methods and are validated from the aspect of stress testing results;
3. market risk related limits are subject to a process of approval and monitoring, including approval of authorisations for their exceedance;

d) a description of the procedure in the event of unauthorised exceedances of market risk related limits;
e) a description of the structure of information flows in the process of determining, approving and monitoring market risk related limits, and of information flows in the process of approving exceedances of these limits and in the process of ascertaining the reasons for these limits being exceeded;
f) a list of all internal regulations relating to the system of limits, and, at the request of the National Bank of Slovakia, a copy of these regulations.

Article 200

(1) The following documents shall form appendices to an application under Article 192(1) for the purposes of evaluating the audit in the framework of evaluating the fulfilment of qualitative and quantitative requirements for an internal market risk model:
a) a current report of the bank's internal audit and internal control unit, on an assessment of the overall system of the bank's risk management in accordance with Article 184(k), on evaluation of the manner of the fulfilment of the requirements under Articles 184 to 191, and on an evaluation of the calculations by the internal market risk model;
b) a declaration that the results of internal audit processes connected with the use of the internal market risk model form the subject of a report for the bank's senior management and members of the bank's statutory body, and that this report is delivered regularly.

Article 201

(1) An application by a bank for consent for the bank to change its internal market risk model shall contain the following particulars:
a) the trade name and registered office of the applicant;
b) the applicant's identification number;
c) the reason for the change to the internal market risk model;
d) a list of documents, indicating which documents are submitted in proof of the fulfilment of which requirements under Articles 184 to 191.

(2) The following documents shall form appendices to an application under paragraph 1 for the purpose of evaluating the change to an internal market risk model:
a) a summary document describing:
1. changes to the mathematical and statistical realisation of the internal market risk model used and changes resulting from the introduction of a new instrument type or new instrument;
2. conclusions from the verification of the internal market risk model used, conducted by the bank's internal audit and internal control unit, and from results of stress testing and backtesting of the internal market risk model used;
b) a list of staff or other persons responsible for the change to the internal market risk model, and the name and surname of the contact person;
c) a list of instrument types added, or, as relevant, of instruments unassigned to instrument types, including a list of instrument types, or, as relevant, of instruments unassigned to instrument types, included in the internal market risk model used, with the attention on to significant differences between the existing and added instrument types and instruments;
d) a description of the effect of the change to the internal market risk model on the system of trading limits under Article 199;
e) a description of the effect of the change to the internal market risk model on the values of capital charges for market risk;
f) results of backtesting of the internal market risk model used and results of backtesting of the changed internal market risk model for a period of 60 working days, or shorter following agreement with the National Bank of Slovakia, depending on the scope of the changes to the internal market risk model;
g) results of parallel testing of the internal market risk model used and the changed internal market risk model for a period of at least 20 working days, with the exception for the case of a change to an internal market risk model based on a change in the scope of instrument types or instruments, and an explanation of the main differences resulting from this parallel testing;
h) a description of new stress scenarios or modified original stress scenarios relating to the change to the internal market risk model, with documentation of specific examples of their use;
i) a description of any change in the structure of responsibilities resulting from the change to the internal market risk model;
j) a report by the bank's internal audit and internal control unit assessing the change to the internal market risk model;
k) a report on the validation of the changed internal market risk model for the fulfilment of requirements under Article 189;
l) other documents at the bank's discretion concerning the changes to the internal market risk model;
m) a list of all internal regulations relating to the change to the internal market risk model, and, at the request of the National Bank of Slovakia, also a copy of these regulations.

(3) For the purposes of this Decree a change to an internal market risk model means a change in the use or in the definition of an internal market risk model caused by:
a) an extension to the scope of instrument types or instruments unassigned to instrument types to which is tied market risk calculated by this internal market risk model; or

b) a change to the mathematical and statistical realisation of the internal market risk model.

(4) For the purposes of this Decree parallel testing of an internal market risk model used and of the changed internal market risk model means the comparison of the results of backtesting of the internal market risk model used with the results of backtesting of the changed internal market risk model as ascertained at the same time moment and over a period of the same length.

PART FIVE
CAPITAL REQUIREMENTS FOR OPERATING RISK

CHAPTER ONE
BASIC INDICATOR APPROACH

Article 202

(1) Under the basic indicator approach, the capital requirement for operational risk shall represent 15% of the relevant indicator defined in paragraphs 2 to 5 and in Article 203.

(2) The relevant indicator shall be calculated at the bank as the average over three years of the sum of net interest income and net non-interest income.

(3) The relevant indicator shall be calculated at the bank on the basis of the last three twelve-monthly observations at the end of the financial year. Where audited figures are not available to the bank, expert business estimates, or data obtained through an appropriate combination of available audited data and expert estimates shall be used.

(4) If for any of the three twelve-monthly observations, the sum of net interest income and net non-interest income is negative or equal to zero, this figure shall not be taken into account in the calculation of the three-year average. The relevant indicator shall be calculated as the sum of positive figures divided by the number of positive figures.

(5) Based on accounting items for the profit and loss account, the relevant indicator shall be calculated at the bank as the sum of the items listed in Table 34. Each element shall be included in the sum.

Table 34

1	Interest receivable and similar income
2	Interest payable and similar charges
3	Income from shares and other variable/fixed-yield securities
4	Commissions/fees receivable
5	Commissions/fees payable
6	Net profit or net loss on financial operations
7	Other operating income

Article 203

(1) The relevant indicator under Article 202 shall be calculated before the deduction of any provisions and before any adjustment to the valuation of assets and before the level of reserves and operating expenses is taken into account. Operating expenses shall include fees for services purchased from third parties which are not a parent or subsidiary of the bank or a subsidiary of a parent which is also the parent of the bank. Expenses for services provided by third parties shall

reduce the indicator if the expenses are charged in favour of an entity subject to supervision under the Act on Banks or subject to comparable supervision in another Member State.

(2) The following items shall not be included in the calculation of the relevant indicator under Article 202:
a) realised profits and losses from the sale of non-trading book items;
b) extraordinary or irregular income;
c) income from insurance, if the provision of insurance services is not a usual component of the bank's business activities.
Revaluation booked in the profit and loss account shall be included in the calculation.

CHAPTER TWO
STANDARDISED APPROACH FOR OPERATIONAL RISK

Article 204

(1) Under the standardised approach for operational risk, the capital requirement for operational risk shall represent the average over three years of the risk-weighted relevant indicator calculated each year across the business lines referred to in Table 35. In each year a negative capital requirement in the respective business line resulting from the respective negative indicator shall be included at the bank into the whole capital requirement. Where the aggregated capital charge across all business lines in the respective year is negative, then a zero average shall be included for that year.

(2) The three-year average under paragraph 1 shall be calculated on the basis of the last three twelve-monthly observations at the end of the financial year. Where audited figures are not available to the bank, expert business estimates, or data obtained through an appropriate combination of available audited data and expert estimates shall be used.

Table 35

Business line	List of activities	Percentage risk weighting of the relevant indicator
Investment banking	Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis Services related to underwriting Investment advice Advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to the mergers and the purchase of undertakings Investment research and financial analysis and other forms of general recommendation relating to transactions in financial instruments	18 %
Financial market trading	Dealing on own account Money broking Reception and transmission of orders in relation to one or more financial instruments Execution of orders on behalf of clients Placing of financial instruments without a firm commitment basis Operation of multilateral trading facilities	18 %
Retail brokerage (Activities with individual natural persons or with small and medium sized entities meeting the	Reception and transmission of orders in relation to one or more financial instruments Execution of orders on behalf of clients Placing of financial instruments without a firm	12 %

criteria of the standardised approach for credit risk concerning the retail exposure class)	commitment basis	
Commercial banking	Acceptance of deposits and other repayable funds Lending Financial leasing Guarantees and commitments	15 %
Retail banking (Activities with individual natural persons or with small and medium sized entities meeting the criteria of the standardised approach for credit risk concerning the retail exposure class)	Acceptance of deposits and other repayable funds Lending Financial leasing Guarantees and commitments	12 %
Payment and settlement	Money transmission services Issuing and administering means of payment	18 %
Agency services	Safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management	15 %
Asset management	Portfolio management Collective investment unit management Other forms of asset management	12 %

Article 205

(1) For the purposes of calculating the capital requirement for operating risk a bank may apply an alternative standardised approach by means of alternative indicators for the business lines "retail banking" and "commercial banking".

(2) The relevant indicator shall be the normalised income indicator equal to the three-year average of the total nominal amount of loans and advances multiplied by the coefficient 0.035.

(3) For the purposes of the business lines "retail banking" and "commercial banking" loans and advances shall consist of the total drawn amounts in the corresponding credit portfolios. The business line "commercial banking" shall also include securities not held in the trading book.

Article 206

(1) Alternative indicators may be used at a bank, subject to the following conditions:
a) the bank deals primarily with activities in retail and commercial banking, which account for at least 90% of its income,
b) a significant part of the bank's retail and commercial banking activities comprise loans associated with a high probability of default.

(2) Alternative indicators may be used at a bank, subject to the following conditions:
a) the bank has a well-documented assessment and management system for operational risk with clearly defined tasks for this system, it identifies its exposures to operational risk and collects relevant data concerning this risk, including material loss data; this system is subject to regular independent review;
b) the bank has an operational risk assessment system thoroughly integrated into risk management processes; its output forms an integral part of the process of monitoring and controlling the bank's operational risk;
c) the bank has a system of reporting for management that provides operational risk reports to functions responsible for the respective activities at the bank; the bank has procedures in place for adopting appropriate measures regarding information contained in management reports.

Article 207

For the purposes of calculating the capital requirement for operational risk under the standardised approach for operational risk, specific policies of the bank and criteria for mapping the relevant indicator for current business lines and activities into the standardised framework must be drawn up and documented. The criteria must be reviewed and adjusted as appropriate in the case of new or changing business activities and risks. The principles for mapping activities to business lines shall be as follows:
a) all activities must be mapped into business lines in a mutually exclusive and exhaustive manner;
b) any activity which cannot readily be mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, shall be mapped to the business line it supports; if the ancillary activity relates to more than one business line, an objective mapping criterion must be used;
c) if an activity cannot be mapped into a particular business line, then the business line yielding the highest percentage must be used; any associated ancillary activity shall be mapped to the same business line;
d) a bank may use internal pricing methods to map the relevant indicator between individual business lines; costs generated in one business line and which concern a different business line may be remapped to the business line to which they pertain, for instance, by using a treatment based on the internal transfer of costs between the two business lines;
e) the mapping of activities and business lines for the purposes of calculating the capital requirement for operational risk must be consistent with the categories used for credit and market risks;
f) senior management reporting to the bank's governing bodies shall be responsible for the mapping policy;
g) the mapping process to business lines must be subject to independent review.

CHAPTER THREE
ADVANCED MEASUREMENT APPROACHES

Article 208

For the purposes of calculating the capital requirement for operational risk under advanced measurement approaches, the bank, in addition to general risk management standards, must satisfy the following criteria:
a) the bank's internal operational risk management system is closely integrated into its day-to-day risk management processes;
b) there is regular reporting of operational risk exposures and loss experience; the bank has procedures in place for taking appropriate corrective measures;
c) the bank's risk management system is well documented; the bank has routines in place for ensuring compliance with criteria and procedures in the case of non-compliance;
d) the operational risk management processes and measurement systems are subject to regular reviews in the framework of an internal or external audit.

Article 209

(1) For the purposes of calculating the capital requirement for operational risk using advanced measurement approaches a bank shall be deemed to fulfil the quantitative criteria, provided that the capital requirement calculated by the bank shall comprise the expected loss and unexpected loss, unless the bank can demonstrate that the expected loss is adequately captured in its internal business practices. The operational risk measurement by means of the operational risk

measurement system must capture potential severe tail events, achieving a soundness standard comparable to a 99.9% confidence interval over a one-year period.

(2) The operational risk management system of a bank must have certain key elements to meet the soundness standard set out in paragraph 1. These elements must include the use of internal data, external data, scenario analysis and factors reflecting the business environment and internal control systems as set out in paragraphs 3 to 5. A bank shall have a properly documented approach for weighting the use of these four elements in its overall operational risk measurement system.

(3) The operational risk management system shall capture the major drivers of risk affecting the shape of the tails of the probability function for loss estimates.

(4) Correlations in operational risk losses across individual operational risk estimates shall be used by the bank only if it has proven that its system for measuring correlations is generally recognised, implemented comprehensively and with integrity and takes into account the uncertainty surrounding such correlation estimates, particularly in periods of stress. The bank must validate its correlation assumptions using appropriate quantitative and qualitative procedures.

(5) The operational risk management system must be internally consistent and must avoid multiple counting of quantitative assessments or risk mitigation techniques recognised in other areas of the framework of calculating capital requirements.

Article 210

(1) Internal measurement of operational risk and of calculation of the capital charge for operational risk using an advanced measurement approach shall be based on a minimum internal historical observation period of five years. When a bank first moves to an advanced measurement approach, a three-year internal historical observation period is acceptable. For the purposes of calculating the capital charge for operational risk using an advanced measurement approach, in using internal data the bank shall proceed according to the first sentence of paragraphs 2 to 6.

(2) The bank shall map its historical internal loss data into the business lines defined in Article 204, Table 35 and into the event types defined in Table 36, and shall provide this data to the National Bank of Slovakia upon request. The mapping of losses to the specified business lines and event types shall be based on documented, objective criteria. Operational risk losses that are related to credit risk and that have historically been included in internal credit risk databases shall be recorded in operational risk databases and be separately identified. Such losses shall not be subject to the capital charge for operational risk, provided that they continue to be treated as credit risk losses for the purposes of calculating capital requirements. Operational risk losses that are related to market risk shall be subject to the capital charge for operational risk.

(3) A bank's internal loss data shall capture all material activities and exposures from all relevant sub-systems and geographic areas. All activities or exposures not included, both individually and in combination, should not have a material impact on overall risk estimates. Appropriate minimum loss thresholds for internal loss data collection must be defined.

(4) Aside from information on gross loss amounts, a bank shall collect internal information about the date of the event, any recoveries of gross loss amounts, as well as descriptive information concerning the drivers or causes of the loss.

(5) A bank shall apply specific criteria for assigning loss data arising from an event in a centralised function or an activity that spans more than one business line, as well as from related events within a certain period.

(6) At a bank there shall be documented: procedures for assessing the ongoing significance of internal historical loss data, including those situations in which a replacement on the basis of expert judgment may be used, scaling, or other adjustments and to what extent they may be used and who is authorised to make such decisions.

Article 211

The bank's operational risk management system under Article 209 shall use relevant external data, especially when there is reason to suppose that the bank is exposed to infrequent, yet potentially severe losses. A bank must have a systematic procedure for determining the situations for which external data must be used and the methodologies used to incorporate the data in its operational risk measurement system. The conditions and practices for external data use must be regularly reviewed, documented and subject to periodic independent review in the framework of the internal control system.

Article 212

For the purposes of calculating the capital requirement for operational risk using an advanced measurement approach, the bank shall use scenario analysis based on expert opinion to evaluate its exposure to high severity events. Over time, such assessments need to be validated and reassessed through comparison to actual loss experience to ensure their reasonableness.

Article 213

(1) The bank's firm-wide risk assessment methodology shall, for the purposes of using advanced measurement approach, capture key business environment and internal control factors that can change its operational risk profile.

(2) The choice of each factor under paragraph 1 needs to be justified as a meaningful driver of risk, based on experience and expert judgment of the respective business areas.

(3) The sensitivity of risk estimates to changes in the factors under paragraph 1 and the respective weighting of the various factors need to be well reasoned. In addition to capturing changes in the risk due to improvements in risk controls, the framework must also capture potential increases in the risk due to a greater complexity of activities or growth in business volume.

(4) The risk assessment methodology under paragraph 1 must be documented and subject to independent review within the bank and from the side of the National Bank of Slovakia. Over time, the process and outcomes need to be validated and reassessed through comparison to actual internal loss experience and relevant external data.

Article 214

(1) In using an advanced measurement approach a bank may recognise the impact of insurance subject to the conditions set out in paragraphs 2 to 5 and other risk transfer mechanisms where the bank can demonstrate that a noticeable risk mitigation effect is achieved.

(2) A provider of insurance or reinsurance shall be authorised to provide insurance or reinsurance where it has a minimum claims paying ability rating by a recognised rating agency, and which according to a recognised rating agency is associated with credit quality step three or above under the rules for risk weighting of exposures to credit institutions laid down for the standardised approach for credit risk.

(3) The insurance and bank's insurance framework shall meet the following conditions:
a) the insurance policy shall have an initial term of at least one year; for policies with a residual term of less than one year, appropriate haircuts shall be made reflecting the declining residual term of the policy, up to a full 100% haircut for policies with a residual term of 90 days or less;
b) the insurance policy shall have a minimum notice period for cancellation of the contract of 90 days;
c) the insurance policy has no exclusions or limitations or, in the case of the bank's failure, does not preclude the bank itself, its receiver or liquidator from recovering for damages or expenses incurred by the bank, except in respect of events occurring after the initiation of receivership or liquidation proceedings in respect of the bank, provided that the insurance policy may exclude any fine, penalty or punitive damages resulting from actions by the competent authorities;
d) the risk mitigation calculations must reflect the insurance coverage in a manner that is transparent and consistent as regards the actual likelihood and impact of loss used in the overall calculation of the capital charge for operational risk;
e) the insurance is provided by a third party; in the case of insurance through captives and affiliates, the exposure has to be laid off to an independent third party, for example through reinsurance that meets the eligibility criteria; and
f) the framework for recognising insurance is well reasoned and documented.

(4) The methodology for recognising insurance shall capture the following elements through discounts or haircuts applied to the amount of insurance recognition:
a) the residual term of an insurance policy, where less than one year;
b) a policy's cancellation terms, where less than one year; and
c) the uncertainty of payment, as well as mismatches in the coverage of insurance policies.

(5) The capital alleviation arising from the recognition of insurance shall not exceed 20% of the capital requirement for operational risk before the recognition of risk mitigation techniques.

Article 215

(1) When a parent bank in the European Union and its subsidiaries, or the subsidiaries of a parent financial holding company in the European Union intend to use an advanced measurement approach, the application for prior consent by the National Bank of Slovakia under Article 33d (8) of the Act on Banks shall contain also a description of the methodology used for allocating operational risk capital between individual entities of the group.

(2) The application for prior consent by the National Bank of Slovakia under paragraph 1 shall indicate whether and how operational risk diversification effects are intended to be factored into the operational risk measurement system in the group.

CHAPTER FOUR
COMBINED USE OF DIFFERENT METHODOLOGIES

Article 216

(1) A bank may, for the purposes of calculating the capital charge for operational risk, use an advanced measurement approach in combination with either the basic indicator approach or the standardised approach for operational risk, subject to the following conditions:
a) all the bank's operational risks are captured;
b) the National Bank of Slovakia has granted it prior consent for the methodology the bank uses for various activities, geographical areas, legal structures or other relevant divisions determined on an internal basis; and
c) the qualifying criteria set out in this Decree are fulfilled for the part of activities covered by the standardised approach and advanced measurement approach respectively.

(2) For the purposes of paragraph 1 fulfilment of the following additional conditions is required:
a) at the date of adopting an advanced measurement approach, a significant part of the bank's operational risks is captured by this approach; and
b) the advanced measurement approach is progressively applied at the bank across a material part of its operations according to a time schedule agreed with the National Bank of Slovakia under Article 33d(8) of the Act on Banks.

Article 217

(1) A bank may, for the purposes of calculating the capital charge for operational risk, combine the basic indicator approach with the standardised approach for operational risk only in exceptional circumstances which may require a transitional period for a gradual changeover to the standardised approach for operational risk.

(2) The combined use of the basic indicator approach and the standardised approach for operational risk shall be conditional upon a commitment by the bank to gradually change over to the standardised approach for operational risk according to a time schedule agreed with the National Bank of Slovakia under Article 33d(8) of the Act on Banks.

Table 36

Event category	Definition of terms
Internal fraud	Losses due to acts made with the intent to defraud, misappropriate property or circumvent legal regulations and internal regulations of the bank, excluding cases of diversity/discrimination events involving at least one internal party of the bank.
External fraud	Losses due to acts by a third party made with the intent to defraud, misappropriate property or circumvent legal regulations.
Employment practices and workplace safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from a payment of personal injury claims, or from diversity/discrimination events.
Clients, products & business practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or caused by the nature or design of a product.
Damage to physical assets	Losses arising from loss or damage to physical assets due to natural disaster or other events.
Business disruption and system failures	Losses arising from disruption of business or system failures.
Execution, delivery & process management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors.

CHAPTER FIVE
PARTICULARS OF AN APPLICATION FOR PRIOR CONSENT

Article 218

(1) The particulars of a bank's application for prior consent by the National Bank of Slovakia for the bank to use its internal model for calculating operational risk by an alternative standardised approach for operational risk or to use its internal model for calculating operational risk by an advanced measurement approach or to re-use the basic indicator approach, where the consent to use its internal model for calculating operational risk by an alternative standardised approach for operational risk or its internal model for calculating operational risk by an advanced measurement approach, or to re-use the standardised approach for operational risk or the basic indicator approach has already been issued to the bank, where the consent to use its internal model for calculating operational risk by an alternative standardised approach operational risk or its internal model for calculating operational risk by an advanced measurement approach, or to use a combination of approaches to calculating operational risk has already been issued to the bank, shall be:
a) trade name and registered office of the applicant;
b) identification number of the applicant;
c) information on which of the listed options for calculating operational risk the bank is submitting the application under the Act on Banks;
d) information on whether the internal model for calculating operational risk by an alternative standardised approach operational risk or the internal model for calculating operational risk by an advanced measurement approach that the bank wishes to use
1. has been designed by the bank itself;
2. has been designed by a vendor;
3. has been designed or is used also in the calculation of capital charges by the bank's parent company, by a different bank or financial institution of or heading the consolidated unit of which the bank is a part;
4. has been designed or acquired in a manner other than those listed in points 1 to 3, with a statement of this manner;
f) the name and surname of the contact person;
g) a list of documents indicating which documents are submitted in proof of the fulfilment of which requirements under the Act on Banks and this Decree;
h) a list of other documents that the bank considers meaningful from the aspect of approval for using the internal model for calculating operational risk by an alternative standardised approach for operational risk, the internal model for calculating operational risk by an advanced measurement approach, or other selected alternatives in the calculation of operational risk.

(2) A detailed analysis of changes that have happened at the bank and which constitute the reason for submitting the application shall form an appendix to an application under paragraph 1 to re-use the basic indicator approach, provided that the consent to use its internal model for calculating operational risk by an alternative standardised approach for operational risk has already been issued to the bank. The analysis must identify those facts which objectively prevent the use of the internal model for calculating operational risk by an alternative standardised approach for operational risk, and this particularly in relation to the conditions and pre-requisites for using an internal model for calculating operational risk by an alternative standardised approach for operational risk.

(3) A detailed analysis of changes that have happened at the bank and which constitute the reason for submitting the application shall form an appendix to an application under paragraph 1 to re-use the basic indicator approach or standardised approach for operational risk, provided that the consent to use an internal model for calculating operational risk by an advanced measurement approach has already been issued to the bank. The analysis must identify those facts which objectively prevent the use of the internal model for calculating operational risk by an advanced

measurement approach, and this in particular in relation to the conditions and pre-requisites for using an internal model for calculating operational risk by an advanced measurement approach.

(4) The following documents shall form an appendix to an application under paragraph 1 for calculating operational risk by an internal model for calculating operational risk by an alternative standardised approach for operational risk:
a) a self-assessment as to whether the bank fulfils the qualifying criteria of an internal model for calculating operational risk by an alternative standardised approach for operational risk;
b) an analysis which demonstrates that retail banking activities or commercial banking activities represent at least 90% of the bank's income; a decline may be at most 10% within one year, in which case the bank in the following year shall demonstrate a return to at minimum the 90% threshold.

(5) The following documents shall form an appendix to an application under paragraph 1 for calculation of operational risk by an internal model for calculating operational risk by an advanced measurement approach:
a) the organisational structure of the bank;
b) the operational risk management strategy;
c) a diagram of information flows within the bank regarding operational risk management;
d) a description of the structure of decision-making powers on the basis of outputs from the internal model for calculating operational risk by an advanced measurement approach, including a description of decision-making powers of the bank's senior management;
e) a plan for performing control over operational risk management and the plan for using an internal model for calculating operational risk by an advanced measurement approach in the framework of the internal audit process;
f) a plan for the regular updating of the internal model for calculating operational risk by an advanced measurement approach;
g) a detailed description of all aspects of the whole internal model for calculating operational risk by an advanced measurement approach, covering the preconditions for use, manner of determining operational risk classes, acquisition and use of data for the internal model for calculating operational risk by an advanced measurement approach and the incorporation of the data into the model, including information on the recency of data and the manner of the data design, modelling faces, identification of the internal holding period and its transformation to holding periods for regulatory purposes, and other calculation aspects of the internal model for calculating operational risk by an advanced measurement approach;
h) an analysis of the advantages of using the internal model for calculating operational risk by an advanced measurement approach;
i) an analysis of the business environment and internal control from the aspect of defining business lines and analyses of risk factors;
j) a description of the methods and procedures guaranteeing the consistency and quality of inputs, the realisation of calculations and outputs of the internal model for calculating operational risk by an advanced measurement approach;
k) the methodology used for allocating capital intended for covering operational risk in the framework of the consolidated entity headed by the bank;
l) information on the impact of insurance on calculations by the internal model for calculating operational risk by an advanced measurement approach;
m) a description of the internal process of validating the accuracy and computing precision of the internal model for calculating operational risk by an advanced measurement approach, comprising in particular decision criteria, statistical tests, identification of the sufficiency of internal data;
n) the internal policy for updating the model;

o) user manuals or appropriate documents concerning the software and hardware support for operational risk management systems and for the internal model for calculating operational risk by an advanced measurement approach;
p) the plan for unforeseen events in the information technology field;
r) an internal control and internal audit unit report on the review of control checks and the review of data reconciliation on material losses from operational risk in the bank's accounting;
s) the internal policy concerning data flows and the pertaining division of responsibilities;
t) documentation concerning data collection and storage;
u) a description of the bank's database systems;
v) a document containing shortcomings in the information technology for supporting the operational risk management systems and a proposal for their rectification;
x) a description of the assessment criteria for loss data;
y) a document on the relevance, use and acquisition of internal, group and external data for the purposes of the internal model for calculating operational risk by an advanced measurement approach;
z) a scenario analysis of the expert estimate of operational risk;
za) a schedule of the qualitative data used, together with the reason for and analysis of their use;
zb) a description of data time series featuring in the internal model for calculating operational risk by an advanced measurement approach.

PART SIX
CAPITAL REQUIREMENTS FOR A CONSOLIDATED ENTITY

Article 219

(1) Risk-weighted exposures from claims booked in the banking book of a consolidated entity means the risk-weighted exposures from claims booked in the banking book of members of a consolidated entity calculated under Articles 9 to 150, depending on the use of procedures set out in Article 8.

(2) Capital requirements for trading book risks, foreign exchange risk and commodities risk of a consolidated entity means the sum of the capital requirements of members of a consolidated entity calculated under Articles 152 to 171.

(3) For the purposes of calculating:
a) the debt instrument risk of a consolidated entity, the net trading-book interest-rate positions may be offset between members of the consolidated entity;
b) the capital instrument risk of a consolidated entity, the net trading book equity position may be offset between members of the consolidated entity;
c) the commodities risk of a consolidated entity, the net commodities position may be offset between members of the consolidated entity;
d) the foreign exchange risk of a consolidated entity, the net foreign exchange position may be offset between members of the consolidated entity.

(4) The offsetting of positions provided for in paragraph 3 may be performed also for positions of a foreign member of the same consolidated entity incorporated in another Member State of the European Union or European Economic Area provided that that member of the consolidated entity is obliged to fulfil the capital requirements under applicable legal regulations in the state in which it is incorporated.

(5) The offsetting of positions provided for in paragraph 3 may be performed also for positions of a foreign member of the same consolidated entity incorporated outside a Member State of the European Union or a European Economic Area provided that
in the Act on Banks, the Act on Securities a) that member of the consolidated entity that is a foreign bank has been authorised on the basis of satisfying the conditions in at least the scope under the Act on Banks;
b) that member of the consolidated entity that is a foreign securities dealer is a recognised foreign securities dealer;
c) that member of the consolidated entity complies with capital requirements in at least the scope laid down and in this Decree.

PART SEVEN
ASSET EXPOSURE

Article 220

For the purposes of this Part
a) a claim means a right to
1. monetary settlement;
2. settlement by securities; or
3. settlement by claims to monetary settlement or settlement by securities;
b) a different property right means
1. an investment in the registered capital of a commercial company or cooperative, including an investment in the form of a security, or share in the assets of another legal entity;
2. a security other than under the first point;
c) protection of a claim means a third party's obligation to fulfil upon the creditor's demand and on behalf of the obligor, should the obligor not fulfil its obligation from a contract, security or claim by which or from the proceeds of which the claim is to be satisfied in the event of the obligor's default, provided that:
1. the protection is defined by a written contract or written declaration of the guarantor to satisfy the claim, that their content is unambiguous and that it is clear from it which claims, to what amount and under what conditions are protected;
2. the contract or declaration of the guarantor to satisfy the claim does not contain provisions allowing the option to withdraw from them;
3. satisfaction of the bank's claim is not tied to a condition the fulfilment of which does not depend exclusively on the bank;
4. the protection is provided by a person who is not a person with a special relationship to the bank, other than for a bank in a state towards which the asset exposure meets the condition under Article 221(1)(a);
5. where the protection is a lien, it is entered in the respective register as the sole lien, or if more than one lien is entered, none of them belonged to another person; where this concerns a lien to securities in material form not subject to registration, they are stored at the bank to which the protected claim belongs;
6. the protection is a deposit at a bank or foreign bank and the conditions agreed preclude its owners from requesting payment of the deposited funds prior to the expiry of the agreed period to their maturity;
7. the protection is a credit derivative within the meaning of Article 104(a) and (b);
d) the value of a claim or property right means their valuation in accounting under a special act[4)];
e) the asset exposure of a bank towards a group of connected entities means the sum of the asset exposures towards the individual members of the group;

f) a central government and central bank under Article 33e(1) of the Act on Banks mean a central government other than that within the meaning of Article 221(1)(a) and the central bank of that state;
g) a claim subject to the fulfilment of a condition means:
1. a claim which arises towards an obligor if a guarantor fulfils towards the creditor on the obligor's behalf;
2. a claim which arises towards a principal if the bank fulfils towards a beneficiary on the principal's account;
3. a receivable from option transactions;
h) a future claim means:
1. a claim to the return of provided asset values which arises when the creditor fulfils its obligation to provide these asset values temporarily to the obligor;
2. a claim from forward transactions;
3. a claim from transactions in futures;
4. a claim from swap transactions;
i) the difference between assets and liabilities included in the register under Article 39 (1) of the Act on Banks means:
1. the excess long position in a financial instrument over the short position in the financial instrument, where these financial instruments are identical; in the case of derivatives the value of the net interest-rate position from the derivatives or the net equity position from derivatives calculated through a breakdown into positions may be used;
2. in the case of unsettled transactions, the price difference between the agreed price of the settlement of the transaction in the financial instrument and the price of the financial instrument in the bank's trading book applicable for the reporting date, if this price difference represents a loss for the bank;
3. in the case of a repo trade or securities lending, the price difference between the price of the provided security and the value of the obligation or value of the protection according to the valuation in the trading book and applicable for the reporting date, if this price difference represents a loss for the bank;
4. in the case of a reverse repo trade and securities borrowing, the price difference between the value of the claim or the value of the protection and the price of the received securities according to the valuation in the trading book and applicable for the reporting date, if this price difference represents a loss for the bank;
5. other net long positions booked in the bank's trading book;
j) an identical financial instrument means:
1. a debt security which is of the same type, issued by the same issuer, denominated in the same currency and has the same coupon rate or yield otherwise determined, the same residual maturity and the same timetable for paying out yields;
2. a capital security which is issued by the same issuer and denominated in the same currency;
3. financial futures, options or warrants towards the one counterparty to whom the conditions under Article 158(7) and Article 166(6) apply.

Article 221

(1) A bank's asset exposure shall not include the following asset exposures:
a) towards a central government, central bank, international organisation or multilateral development bank which, unsecured, would be assigned a 0% risk weight under Article 32 of the Act on Banks;
b) from claims guaranteed by a central government, central bank, international organisation, multilateral development bank or public sector entity to which a 0% risk weight is assigned under Article 32 of the Act on Banks;

c) from claims secured by debt securities issued by a central government, central bank, international organisation, multilateral development bank, municipality or other regional authority, or public sector entity of a Member State where under Article 32 of the Act on Banks a 0% risk weight would be assigned to an asset exposure towards these entities;
d) from claims secured by bank deposits; this includes also cash accepted by a bank under Article 104(c), a contracting party's loans towards the bank and a contracting party's deposits at the bank which are subject to an on-balance-sheet netting agreement recognised under Article 33a of the Act on Banks;
e) representing claims and other property rights which are deducted from the bank's own funds;
f) representing claims and other property rights of the bank acquired on the basis of a prior agreement on the account of other parties;
g) which in the case of foreign exchange transactions are incurred in the ordinary course of settlement during the 48 hours following payment;
h) which in the case of the purchase or sale of securities are incurred in the ordinary course of settlement during the five working days following payment or delivery of the securities, whichever is the earlier.

(2) Where the asset exposure towards entities listed in subparagraphs a) to d) is assigned a risk weight under paragraph 5 lower than that of the asset exposure towards the obligor, then asset exposures secured by the following entities shall be included in the bank's asset exposure towards these entities:
a) a bank or a foreign bank;
b) an international development bank;
c) the European Investment Bank;
d) a regional authority entity in the Slovak Republic or a Member State.

(3) Where the securing entity under paragraph 2 is a bank incorporated in a state other than that of a central government under paragraph 1(a), this secured asset exposure shall be included in the bank's asset exposure towards this entity provided that it is expressed in the currency of that state.

(4) Where there are more than one securing entities under paragraph 2, the secured asset exposure shall be included in the bank's asset exposure firstly towards a bank or foreign bank, secondly towards an international development bank and the European Investment Bank, thirdly towards a regional authority entity; where more than one securing entities have the same order, the asset exposure shall be included in the bank's asset exposure according to choice, made upon incurring the asset exposure. The procedure shall be likewise where multiple obligors are bound jointly and severally to fulfil a claim, or where another entity without agreement with the obligor takes over by contract with the bank the obligor's debt, with the exception of a bill signed with an effect under a special act[4)] only by persons of equal order, which shall be included in the asset exposure towards the acceptant where this is a foreign bill, and towards the issuer where this is a promissory note.

(5) The following asset exposures shall be included in a bank's asset exposure:
a) towards a bank incorporated in a state under paragraph 1(a), with the exception of subordinated claims and securities representing an investment in the registered capital or a share in it, with a 20% risk weight;
b) towards a multilateral development bank or the European Investment Bank, with a 20% risk weight;

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[4] Article 47 of Act No. 191/1950 the Bills and Cheques Act.

c) towards a bank incorporated in a state other than that of a central government under paragraph 1(a) expressed in the currency of that state, with the exception of subordinated claims and securities representing an investment in the registered capital or a share in it, with a 20% risk weight;
d) towards a regional authority unit in the Slovak Republic or in a Member State, with a 50% risk weight;
e) asset exposures other than under subparagraphs a) to d), with a 100% risk weight.

(6) The asset exposure of a bank shall also include asset exposure representing claims acquired and processed on the basis of a prior agreement in a foreign currency and on its own account.

(7) Unit trust certificates or units representing asset participation in any collective investment undertakings shall be included in a bank's asset exposure towards the respective unit trust fund or foreign collective investments entity under a special regulation.

(8) A claim which is tied to a suspensive condition
a) from a bank guarantee which the bank has confirmed, shall be included in the asset exposure towards the bank or foreign bank that requested confirmation of the guarantee;
b) from a credit note which the bank has confirmed, shall be included in the asset exposure towards the bank or foreign bank that opened the credit note;
c) from a bill which the bank has accepted, shall be included in the asset exposure towards the bill's issuer;
d) from a house bill which the bank has accepted, shall be included in the asset exposure towards the remittee.

(9) Exposures arising from derivatives under Article 16 and under the method set out in Article 11 shall be included in a bank's asset exposure.

Article 222

(1) The definition of a group of connected entities under Article 33e(11) of the Act on Banks shall be based on the last financial statement, the last consolidated financial statements and, as relevant, the obligor's annual report for the past calendar year and from other documents evidencing the economic connection between these entities.

(2) A group of connected entities under the first point of Article 33e(11) of the Act on Banks and a group of connected entities under the second point of Article 33e(11) of the Act on Banks shall be treated as one group of connected entities, if it is a member of a group under the second point of Article 33e(11) of the Act on Banks which controls persons in a group under the first point of Article 33e(11) of the Act on Banks.

Article 223

(1) Asset exposure on a consolidated basis under Article 33e(7) of the Act on Banks means the asset exposures of members of a consolidated entity adjusted in the manner and by the procedure laid down in a special act[10)].

(2) Where members of a consolidated entity have net long and net short positions in each individual financial instrument, the excess of the sum of net long positions of members of the consolidated entity over the sum of their net short positions may be included in the asset exposure of the consolidated entity.

Article 224

(1) The proportion of a bank's asset exposure to the bank's own funds towards an entity with a special relationship to the bank shall constitute at most:
a) 2% in the case of a natural person;
b) 10% in the case of a legal entity other than a bank incorporated in a state of a central government under Article 221(1)(a).

(2) The proportion of a bank's asset exposure to its own funds towards all entities with a special relationship to the bank shall constitute at most 40%.

(3) A bank's asset exposure under paragraphs 1 and 2 shall not include loans provided by the bank under advantageous conditions to its employees, who are persons with a special relationship to the bank.

PART EIGHT
COMMON, TRANSITIONAL AND FINAL PROVISIONS

Article 225

(1) The provisions of Articles 2 to 8 and Articles 220 to 224 shall apply equally to a securities dealer as to a bank, unless stated otherwise. The provisions of Articles 9 to 150 and Articles 152 to 219 shall apply under Article 74(10) of the Act on Securities equally to a securities dealer as to a bank, unless stated otherwise. The provisions of Article 151 under Article 75(5) of the Act on Securities shall apply equally to a securities dealer as to a bank, unless stated otherwise.

(2) Under the provisions of this Decree concerning the banking book, a securities dealer shall proceed in relation to the non-trading book under the Act on Securities.

(3) All references to the Act on Banks in provisions of this Decree, under which a securities dealer should proceed, shall be deemed references to the corresponding provisions of the Act on Securities.

Article 226

Settlement risk, counterparty risk, debt instrument risk, capital instrument risk, specific debt instrument risk, general debt instrument risk, specific capital instrument risk, general capital instrument risk, asset exposure risk, foreign exchange risk and commodities risk under this Decree shall be deemed settlement risk, counterparty risk, debt instrument risk, capital instrument risk, specific debt instrument risk, general debt instrument risk, specific capital instrument risk, general capital instrument risk, asset exposure risk, foreign exchange risk and commodities risk under a special regulation[5]).

Article 227

(1) Reserves not listed in a special regulation[6]) and created before 1 January 2004 for covering credit risk shall be included in the calculation of a bank's additional own funds and own

[5] Article 3 of National Bank of Slovakia Decree No. 12/2004 on risks and risk management systems (Notification No. 672/2004 Coll.) as amended by National Bank of Slovakia Decree No. 15/2006 (Notification No. 682/2006 Coll.).
[6] National Bank of Slovakia Decree No. 13/2004 on the classification of assets and liabilities of banks and branches of foreign banks, on the adjustment of their pricing, on the creation and cancellation of reserves and related reports

funds on a consolidated basis in accordance with their level as determined on the basis of the provisions of a special regulation[7]). Reserves created before 1 January 2004 for covering market risks shall be included in the calculation of a bank's additional own funds and own funds on a consolidated basis in an amount progressively reduced in each directly following calendar year by at minimum 25% of their balance as at 31 December 2003, if they are stated in this amount in the accounting.

(2) The reduction of the value of reserves under paragraph 1 under way as of 1 January 2004 by virtue of the regulations to date shall continue also after this Measure enters into effect.

Article 228

This Measure transposes the legal acts of the European Communities and European Union listed in the Annex.

Article 229

The following are repealed:
1. National Bank of Slovakia Decree of 12 December 2002 No. 8/2002 on the asset exposure of banks (Notification No. 697/2002 Coll.) as amended by National Bank of Slovakia Decree of 16 January 2004 No. 2/2004 (Notification No. 34/2004 Coll.) as amended by National Bank of Slovakia Decree of 8 September 2005 No. 5/2005 (Notification No. 456/2005 Coll.),
2. National Bank of Slovakia Decree of 16 January 2004 No. 4/2004 on the capital adequacy of banks' funding (Notification No. 36/2004 Coll.) as amended by National Bank of Slovakia Decree of 26 November 2004 No. 16/2004 (Notification No. 676/2004 Coll.) as amended by National Bank of Slovakia Decree of 8 September 2005 No. 5/2005 (Notification No. 456/2005 Coll.),
3. National Bank of Slovakia Decree of 26 November 2004 No. 17/2004 laying down the particulars of an application by a bank or foreign bank for prior consent by the National Bank of Slovakia to use internal models for calculating market risk (Notification No. 677/2004 Coll.).

Article 230

This Decree shall enter into effect on 30 March 2007.

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Governor

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(Notification No. 673/2004 Coll.) as amended by National Bank of Slovakia Decree No. 7/2005 (Notification No. 594/2005 Coll.).
[7] Article 13 of National Bank of Slovakia Decree No. 13/2004 (Notification No. 673/2004 Coll.).