

Pursuant to Article 44 paragraph 1 point 3 of the Central Bank of Montenegro Law (OGM 40/10, 46/10) and in conjunction with Article 59 paragraph 7, Article 60 paragraph 1, Article 63 paragraph 1, Articles 65 and 69 paragraph 2 of the Banking Law (OGM 17/08, 44/10), the Council of the Central Bank of Montenegro, at its meeting held on 12 July 2011, passed the following

## CAPITAL ADEQUACY DECISION

### I. GENERAL PROVISIONS

#### Subject Matter of the Decision

##### Article 1

This Decision shall regulate:

- 1) elements and manner of calculation of bank's own funds,
- 2) methodologies for the calculation of capital requirements for credit risk, settlement/delivery risk and counterparty credit risk, market risks and operational risk;
- 3) manner of calculating bank solvency ratio.

#### Definitions

##### Article 2

Certain definitions and terms used in this Decision shall have the following meaning:

- 1) **"credit institution"** is a legal person whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account;
- 2) **"financial institution"** is a legal person other than a credit institution, the principal activity of which is to acquire holdings or to carry on one or more of the activities listed in Article 6 paragraph 2 of the Banking Law (OGM 17/08, 44/10);
- 3) **"External Credit Assessment Institution"** (hereinafter: ECAI) is a legal person that makes assessments of creditworthiness and publishes credit ratings of other entities;
- 4) **"Export Credit Agency"** (hereinafter: ECA) is a legal person which supports local entities in their exports activities;
- 5) **"debt securities"** are securities entitling their holders to the payment of nominal value or nominal value including interest, as well as other rights;
- 6) **"equity securities"** are securities issued as a share of capital of a joint-stock company;
- 7) **"convertible securities"** are securities entitling their holders to exchange those securities for other securities;

- 8) **“trading book”** includes positions in business books of a bank concerning financial instruments and commodities held either for trading intent or for hedging other elements of trading book and which are either free of any restrictive covenants on their tradability or able to be hedged;
- 9) **“banking book”** relates to all asset and off-balance sheet items of a bank not identified as trading book items”;
- 10) **“positions held for trading”** are short-term financial instruments or commodities held in trading book with the intention of generating income in short period from current or expected difference between their purchase and selling prices, or from other differences in prices or interest rates;
- 11) **“financial instrument”** is any legal business representing the source of increase in financial assets of one entity and an increase in financial liabilities or capital instruments of another entity;
- 12) **“financial assets”** are any assets being money, right to receive money or other financial assets; or contractual right to exchange financial asset at potentially favourable conditions or acquire some capital instrument;
- 13) **“financial liabilities”** are the obligations to pay money or some other financial assets, or to exchange financial liabilities at potentially unfavourable conditions;
- 14) **“hybrid instrument”** is a financial instrument having characteristics of capital and debt”
- 15) **“financial derivatives”** are derivative securities (futures, forwards, options, swaps, warrants) and their value is derived from the some basic (underlying) instrument;
- 16) **“underlying instrument”** is security or other instrument to which a financial derivative contract relates;
- 17) **“futures”** are standardized term contracts obliging a buyer to receive, and a seller to deliver certain assets at the previously agreed price and date.
- 18) **“forwards”** are non-standardized term contracts obliging a buyer to receive, and a seller to deliver certain assets at the previously agreed price and date;
- 19) **“options”** are agreements entitling their legitimate holder to buy or sell contracted assets subject to previously agreed conditions at a specified date or within a specified time period;
- 20) **“call option”** is an agreement giving a buyer (call option holder) a right, but not the obligation, to buy certain assets at the previously determined fixed price or a price which can be obtained by using mutually agreed formula, at a specific date or within a specific time period;
- 21) **“put option”** is an agreement giving a buyer (put option holder) the right, but not the obligation, to sell certain assets at the previously determined fixed price or a price which can be obtained by using mutually agreed formula, at a specific date or within a specific time period;
- 22) **“over-the-counter derivative instruments”** (hereinafter: OTC) are financial derivatives not traded on an organized market (stock exchange);
- 23) **“warrant”** is a security giving its holder the right to buy a certain property at the previously agreed price within a certain timeframe before the maturity date, or at the maturity date of the warrant which settlement is performed in money or underlying property;
- 24) **“hedging position”** refers to a position in bank business books which materially significantly or completely compensates for the position risk subject to hedging”

**25) “repurchase (repo) agreement and reverse repurchase agreement”** are agreements on sale and repurchase of securities, whereby for the bank:

- “repurchase agreement” is an agreement based on which a bank sells securities subject to a commitment to repurchase the same or identical securities at a predetermined price and on future date which has been specified or will be specified by the bank;
- “reverse repurchase agreement” is an agreement based on which a bank buys securities subject to a commitment to sell the same or identical securities at a predetermined price and on future date which has been specified or will be specified by the transferor.

The following criteria must be met for repurchase and/or reverse repurchase agreements:

- bank and /or counterparty shall transfer ownership rights of securities subject to these agreements;
- a bank may transfer or pledge securities subject to these agreements only to one counterparty;

**26) “securities or commodities lending agreement”** and **“securities or commodities borrowing agreement”** means any agreement in which a bank or its counterparty transfers securities or commodities against appropriate collateral subject to a commitment that the borrower will return equivalent securities or commodities at some future date or when requested to do so by the transferor whereby the transaction is securities or commodities lending for the party transferring the securities or commodities, and is securities or commodities borrowing for the party to which they are transferred;

**27) “delta coefficient”** means the expected change in an option price arising from change in the price of the underlying instrument;

**28) “gamma coefficient”** means a relative change in delta ratio arising from a small change in the price of the underlying instrument;

**29) “vega coefficient”** is a change in the option price arising from a small change in volatility of the underlying instrument;

**30) “volatility”** is a measure of unpredictable change of a certain financial instrument in a certain time period and it shows the size of change in its price in that period, which is generally calculated as a standard deviation in price change of financial instrument over a certain time period;

**31) “long settlement transaction”** means a transactions where a counterparty undertakes to deliver a security or a foreign currency amount against cash or other financial instruments, or vice versa, at a settlement or delivery date that is contractually specified as the shorter of the period longer than the time period which represents the market standard for that specific transaction or five working days after the date of negotiated transaction;

**32) “margin lending transactions”** mean transactions where a bank grants a loan for purchase, sale, keeping, covering financing costs in borrowing or trading with securities, while such transactions do not include other types of loans secured by collateral in the form of securities;

**33) “covered bonds”** mean bonds whose issuance is regulated by a special law of the country where the issuer has its registered office and that meet the following criteria:

- for the purpose of protecting property rights, the issuer of covered bonds may only be a bank subject to supervision by a competent authority of EU Member State or other state with an equivalent supervisory regime;
- the funds obtained from the sale of covered bonds must be placed in assets providing sufficient coverage for obligations arising from covered bonds until their maturity; and
- covered bonds must be collateralised and, in the event of bankruptcy or winding-up of the issuer, allow preferential treatment to the holder of covered bonds giving him priority in terms of principal and interest payments.

Covered bonds must be included in the list of covered bonds, which includes the list of authorised issuers and types of collateral;

- 34) **“credit risk mitigation”** means a technique used by a bank to reduce the credit risk associated with an exposure or exposures which bank continues to hold;
- 35) **“underlying exposure”** is the on-balance or off balance sheet item secured by the credit protection by credit protection beneficiary;
- 36) **“secured lending transaction”** means any transaction giving rise to an exposure secured by collateral which does not include a provision conferring upon the bank the right to receive margin frequently from the debtor, pledgor or other collateral provider;
- 37) **“capital market-driven transaction”** means any transaction giving rise to an exposure secured by collateral which includes a provision conferring upon the bank the right to receive margin frequently from the debtor, pledgor or other collateral provider;
- 38) **“master netting agreement”** means an agreement providing for the netting of claims based on individual legal transactions (hereinafter: transactions) and, in the case of termination of agreements, the settlement of amounts related to all transactions. Master netting agreements provide for the netting of gains and losses on transactions closed out under a master agreement. Such agreements lay down the terms and conditions of netting where the parties trade in different products regulated by individual agreements. A master netting agreement provides for the overall relationship of the parties in case of trading in different products by giving the non-defaulting party the right to terminate and close-out all transactions under the agreement upon the event of default on any of the transactions;
- 39) **“minimum lease payments”** are the payments over the lease term that the lessee is or can be required to make;
- 40) **“credit derivative”** means a financial derivative which transfers credit risk from one to another counterparty. Credit derivative contract obliges credit protection provider to pay out to the protection buyer upon occurrence of a credit event the amount equal to the following:
- the decline in the value of the reference obligation with respect to the initial value;
  - the entire notional value of the reference obligation in exchange for physical delivery of the reference obligation or another equivalent financial instrument specified in the contract; and
  - a specified fixed amount;

- 41) **“reference obligation”** means an obligation under a credit derivative used for the purposes of determining cash settlement value or deliverable obligation;
- 42) **“credit event”** means contractual event or circumstances giving rise the bank to use credit protection instruments;
- 43) **“credit default swap”** (hereinafter: CDS) means a type of credit derivative under which credit protection provider undertakes to compensate the credit protection buyer in the event of the default or on the occurrence of other specified credit events for which the credit protection buyer pays the protection seller a periodic premium.
- 44) **“total return swap”** (hereinafter: TRS) means a type of credit derivative under which the credit protection buyer transfers all cash flows on the reference asset to the credit protection provider for which the credit protection provider pays a premium in the form of a reference interest rate (most frequently LIBOR) increased by a certain spread, where:
- the value of the reference asset upon maturity of a TRS exceeds its value at the time of the conclusion of the TRS, the credit protection buyer pays the difference in the value of the reference asset to the protection provider,
  - where the value of the reference asset is less than its value at the time of the conclusion of the TRS, the protection provider pays the difference in the value of the reference asset to the protection buyer,
  - in the event of the default or on the occurrence of other specified credit events, the contract is terminated and the loss is borne by the protection provider;
- 45) **“credit linked notes”** (hereinafter: CLN) means a derivative financial instrument with an embedded credit default swap allowing credit protection buyer to transfer the risk associated with the asset on which the CLN is based to credit protection seller.
- 46) **“cash assimilated instrument”** means a certificate of deposit or other similar instrument issued by the debtor’s bank;
- 47) **“securitisation”** means a transaction or a scheme, where the credit risk associated with an exposure or pool of exposures is tranching, having the following characteristics:
- Payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; and
  - The subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme;
- 48) **“traditional securitisation”** means securitisation involving the economic transfer of the exposures being securitised to a securitisation special purpose entity which issues securities. This shall be accomplished by the transfer of ownership of the securitised exposures from the originator or through sub-participation. The securities issued do not represent payment obligations of the originator bank;
- 49) **“synthetic securitisation”** means a securitisation where the tranching is achieved by the use of credit derivatives or guarantees, and the pool of exposures is not removed from the balance sheet of the originator;
- 50) **“originator”** means either of the following:
- an entity which, either itself or through related entities, directly or indirectly, was 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; or
- an entity which purchases a third party's exposures onto its balance sheet and then securitises them;
- 51) **“bank sponsor”** means a bank other than an originator bank that establishes and manages an asset-backed commercial paper programme or other securitisation scheme that purchases exposures from third party entities;
- 52) **“securitisation position”** means an exposure to securitisation scheme, including exposure based on interest rate or foreign exchange rate of a derivative;
- 53) **“senior securitisation position”** means a position which has priority in the order of payment among all other securitisation positions;
- 54) **“junior securitisation position”** means a securitisation position which is junior to another securitisation position in the order of payment;
- 55) **“tranche”** means a contractually established segment of the credit risk associated with an exposure or number of exposures, where a position in the segment entails a risk of credit loss greater than or less than a position of the same amount in each other such segment, without taking account of credit protection provided by third parties directly to the holders of positions in the segment or in other segments;
- 56) **“unrated position”** means a securitisation position which does not have an eligible credit assessment by an eligible ECAI;
- 57) **“rated position”** means a securitisation position which has an eligible credit assessment by an eligible ECAI;
- 58) **“asset-backed commercial paper (ABCP) programme”** means a programme of securitisation where the securities issued predominantly take the form of commercial paper with an original maturity of one year or less;
- 59) **“excess spread”** means finance charge collections and other fee income received in respect of the securitised exposures net of costs and expenses;
- 60) **“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 outstanding exposures falls below a specified level;
- 61) **“liquidity facility”** means the securitisation position arising from a contractual agreement to provide funding to ensure timeliness of cash flows to investors;
- 62) **“credit enhancement”** means a contractual arrangement whereby the credit quality of a position in a securitisation is improved in relation to what it would have been if the enhancement had not been provided, including the enhancement provided by more junior tranches in the securitisation and other types of credit protection;
- 63) **“securitisation special purpose entity (hereinafter: SSPE)”** means a corporation trust or other entity, other than a credit institution, organised for carrying on a securitisation or securitisations,
- the activities of which are limited to those appropriate to accomplishing that objective,
  - the structure of which is intended to isolate the obligations of the SSPE from those of the originator bank,
  - holders of the beneficial interests in which have the right to pledge or exchange those interests without restriction;

- 64) **“regulated market”** means a multilateral system operated and/or managed by a market operator who combines or facilitates the demand for, and supply of, financial instruments by third parties in a manner that leads to contracts on the financial instruments traded by its rules;
- 65) **“general market disruption”** means a situation where more than one SPE across different transactions are unable to roll over maturing commercial paper and that inability is not the result of an impairment of the SPE’s credit quality or of the credit quality of the securitised exposure
- 66) **“settlement/delivery risk”** means the probability of occurrence of negative effects on the financial result and capital of a bank based on unsettled transactions or due failure of a counterparty to meet free delivery transaction on settlement/delivery date;
- 67) **“unsettled transaction”** means transactions settled through a delivery versus payment (DvP) system, which provides for simultaneous exchange of receivables among counterparties in a transaction. If such a transaction is not settled by the contractual settlement date, the bank is exposed to the risk of loss on the difference between the contractual value of the transaction and the current market value of the transaction which may arise upon its maturity;
- 68) **“free delivery”** means a transaction under which a counterparty executes payment/delivery before the other counterparty has executed its contractual obligation. If such transaction is not settled by the contractual settlement date, the credit institution is exposed to the risk of loss on the full amount of payment/delivery;
- 69) **“counterparty credit risk”** means risk from failing to meet counterparty obligation in a transaction before final settlement of transaction cash flows;
- 70) **“central counterparty”** means an entity that legally interposes itself between counterparties to contracts traded within one or more financial markets, becoming the buyer to every seller and the seller to every buyer, provided that the central counterparty’s counterparty credit risk exposures with all participants in its arrangements are fully collateralised on a daily basis;
- 71) **“netting set”** means a group of transactions with a single counterparty that are subject to a legally enforceable bilateral netting arrangement and for which netting is recognized under this Decision. Each transaction that is not subject to a legally enforceable bilateral netting arrangement should be interpreted as its own netting set;
- 72) **“risk position”** means a risk number that is assigned to a transaction under standardised approach for capital requirement for counterparty credit risk;
- 73) **“hedging set”** means a group of risk positions from the transactions within a single netting set for which only their net balance is relevant for determining the exposure value under Standardised approach;
- 74) **“cross-product netting”** means the inclusion of transactions of different product categories within the same netting set;
- 75) **“current market value”** means the net market value of the portfolio of transactions within the netting set with the counterparty, with both positive and negative market values being used in computing the current market value;
- 76) **“stock financing”** means positions where physical stock has been sold forward and the cost of funding has been locked in until the date of the forward sale;

**77) "clearing member"** means a member of the exchange or the clearing house which has a direct contractual relationship with the central counterparty (market guarantor);

## **II OWN FUNDS OF A BANK**

### **Elements of own funds**

#### **Article 3**

Elements of own funds of a bank are the following:

- 1) core elements of own funds under Article 4 paragraph 2 hereof, included in the calculation of a core capital of a bank;
- 2) supplementary elements of own funds under Article 5 paragraph 2 hereof, included in the calculation of supplementary capital.

### **Core capital**

#### **Article 4**

Bank's core capital shall be a sum of the core elements of own funds referred to in paragraph 2 of this Article, reduced by a sum of deductible items under paragraph 4 of this Article.

Core elements of own funds shall be the following:

- 1) paid-in share capital at nominal value, excluding cumulative preferential shares;
- 2) collected issue premiums, excluding issue premiums based on cumulative preferential shares;
- 3) reserves established against post-tax income (legal, statutory, and other reserves);
- 4) undistributed prior years profit which shareholders' assembly decided to include in core capital deducted by corresponding income tax and other foreseeable expenses;
- 5) current year income if the following conditions have been met:
  - shareholders' assembly or board of directors with the authorisation of the shareholders' assembly decided to allocate current year income, in the accomplished or lower amount, to provisions, as an increase in share capital, for covering prior years losses and/or to undistributed profit, expressed in percentages;
  - Income has been deducted by corresponding income tax and other foreseeable expenses;
  - income has been reviewed by external auditor,
  - bank has been approved by the Central Bank to include income into core capital of the bank;

Where a bank is originator in a securitisation, the amount of current year income shall be reduced by the net profit, which arises from the capitalisation of future income from securitised assets providing credit enhancement to a securitized positions.

Deductible items in the calculation of core capital shall be as follows:

- 1) prior years` losses,
- 2) current year loss,
- 3) intangible assets such as goodwill, licenses, patents, trademarks and concessions,
- 4) nominal amount of acquired own shares, excluding cumulative preferential shares;
- 5) unrealised loss on fair value adjustment of financial assets available for sale;
- 6) undercalculated loan loss provisions disclosed at the examination;
- 7) excess of limit in investing in real estates and fixed assets specified under special regulation of the Central Bank.

## **Supplementary capital**

### **Article 5**

Bank supplementary capital shall be a sum of supplementary elements of own funds set out in paragraph 2 of this Article deducted by a sum of deductible items under paragraph 3 of this Article.

Supplementary elements of own funds to be included in the supplementary capital of a bank shall be the following:

- 1) nominal value of paid-in cumulative preferential shares;
- 2) paid issue premiums based on cumulative preferential shares;
- 3) general reserves up to 1.25% of total risk weighted assets at a maximum;
- 4) subordinated debt meeting the requirements set out under Article 6 hereof;
- 5) hybrid instruments meeting the requirements under Article 7 hereof.
- 6) revaluation reserves for real estate property owned by a bank.

Deductible items in the calculation of supplementary capital shall be the following:

- 1) acquired own cumulative preferential shares;
- 2) receivables and contingent liabilities secured by hybrid instruments or subordinated debt up to the amount these instruments have been included in supplementary capital.

## **Subordinated debt**

### **Article 6**

Subordinated debt may be included in the calculation of supplementary capital if:

- 1) debt has been paid in full;
- 2) debt has been unsecured, i.e. bank does not guarantee any payment arising from this instrument by its own guarantee, mortgage or in any other way;
- 3) in case of bank bankruptcy and/or liquidation, the debt is subordinated to other liabilities and shall be paid after liabilities to other creditors have been paid in full;
- 4) debt may be used only for the payment of creditors` claims during bank bankruptcy or liquidation;

- 5) payment to creditors or buyout by bank itself before the maturity date may only be performed
  - in case of converting subordinated debt into shares, excluding cumulative preferential shares;
  - in other cases with the Central Bank's approval, if the debt repayment does not deteriorate capital adequacy indicators;
- 6) the debt maturity date has been agreed in advance and is longer than five years following the payment date;
- 7) a written agreement on subordinated debt has been concluded, which incorporates, in addition to requirements set out under points 2 – 6 of this Article, a note stating that the subordinated debt may not be considered a deposit.

If the repayment of the subordinated debt has been agreed in instalments, this debt can be treated as element of supplementary capital, only if the first instalment matures in period longer than five years.

In the calculation of supplementary capital, a bank shall gradually reduce the total amount of subordinated debt by 20% at the beginning of each of the remaining five years preceding the agreed debt repayment date.

## **Hybrid instruments**

### **Article 7**

Hybrid instruments may be included in the calculation of supplementary capital if:

- 1) instrument has been issued by a bank for the purpose of its inclusion in supplementary capital calculation;
- 2) the underlying obligation has been paid in full;
- 3) instrument has been unsecured, i.e. bank does not guarantee any payment arising from this instrument by its own guarantee, mortgage or in any other way;
- 4) instrument is completely, unconditionally and irrevocably available for covering losses;
- 5) in case of bank bankruptcy and/or liquidation, the debt is subordinated to other claims and shall be paid after debts to other creditors have been paid in full;
- 6) debt maturity date has been agreed and is longer than five years following the payment date;
- 7) payment to creditors or repurchase by the bank itself before the maturity date shall not be possible, except in case of converting this debt instrument into shares, excluding cumulative preferential shares;
- 8) if the level of own funds falls below the legally prescribed level, a bank may not pay any interest, fees or other yield arising from this instrument until the prescribed level of own funds and/or solvency ratio has been re-established;
- 9) if a bank does not increase its own funds up to the prescribed level within 90 days following the day when the lacking amount of own funds representing 75% of the prescribed level has been determined, the bank shall convert this instrument into shares to be included in the bank core capital.

If the payment of bank's obligation for hybrid instrument has been agreed in instalments, this instrument can be treated as element of supplementary capital, only if the first instalment matures in period longer than five years.

Hybrid instrument shall not be calculated in supplementary capital in the year preceding the effective maturity.

### **Ratios for calculating own funds**

#### **Article 8**

When calculating own funds, bank shall adhere to the following ratios:

- 1) the total amount of supplementary capital may not exceed the amount of bank core capital;
- 2) the total sum of subordinated debt and cumulative preferential shares may not exceed 50% of core capital.

### **Deductions from own funds**

#### **Article 9**

Items deductible from own funds shall be:

- 1) direct or indirect holdings in other bank or credit or financial institutions, which exceed 10% of their capital;
- 2) investments in subordinated debt and hybrid instruments of other banks or other credit or financial institutions in which the bank has direct or indirect holdings exceeding 10% of their capital,
- 3) total amount of direct or indirect holdings in other banks or other credit or financial institutions up to 10% of their capital and investments in subordinated debt and hybrid instruments not covered under point 2) of this paragraph, if these holdings exceed 10% of the bank's own funds prior to deductions performed under this Article;
- 4) direct or indirect holdings in insurance companies, reinsurance companies or insurance holding companies exceeding 10% of their capital;
- 5) direct or indirect holdings in non-financial legal person exceeding 10% of own funds of a bank, prior to deductions performed under this Article;
- 6) direct and indirect holdings in non-financial legal person, exceeding 30% of bank's own funds, prior to deductions performed under this Article;
- 7) claims on and contingent liabilities to legal persons connected with a bank provided that those claims or contingent liabilities have been established under more favourable terms than those usually offered to other persons that are not connected with the bank;
- 8) claims and contingent liabilities secured by shares of other banks or other credit or financial institutions not quoted on the officially recognized stock exchanges;
- 9) the exposure amount of securitisation positions, determined as deductible item of own funds as set out in the part of the Decision regulating securitization;

Deductible items under paragraph 1 of this Article shall be deducted from core and supplementary capital where 50% of total amount of deductible items are deducted from core capital and 50% from supplementary capital of the bank.

By way of exception from paragraph 2 of this Article, if 50% of total amount of deductible items exceeds supplementary capital, the difference above the amount of supplementary capital shall be deducted from core capital.

Investments of a bank referred to in paragraph 1 points 1)-3) above shall not be treated by a bank as deductible item when calculating supplementary capital if those investments are of temporary character and if bank still holds them to provide financial assistance for reorganisation or improvement of financial situation of an entity of the investments concerned.

In case of treatment of bank's investments under paragraph 4 above, bank shall without delay inform the Central Bank about it and submit documentation evidencing fulfilment of conditions for the exclusion of such investment from the calculation of supplementary capital.

Bank shall not include in its own funds:

- 1) gain or loss on liabilities valued at fair value due to changes in the bank's credit quality rating;
- 2) reserves from cash flow hedges of positions previously measured at amortised cost and cash flow hedges related to unplanned transactions;
- 3) unrealised gain from investment property and from financial instruments available for sale

### **Requirements for including subordinated debt and hybrid instrument into capital**

#### **Article 10**

Bank may include subordinated debt and hybrid instrument in supplementary capital only if it delivers to the Central Bank the evidence that requirements for the inclusion of subordinated debt and/or hybrid instruments set out under Articles 6 or 7 hereof have been met.

## **III CALCULATION OF CAPITAL REQUIREMENT FOR CREDIT RISK**

### **3. 1. Methodology for calculating capital requirement - Standardised Approach**

#### **Capital requirement**

#### **Article 11**

Bank shall calculate capital requirement for credit risk in accordance with the standardised approach prescribed by this Decision.

Capital requirement for credit risk represents a result obtained from total risk weighted assets divided by 10.

### 3.2 Calculation of risk weighted exposures

#### 3.2.1 Exposure amount

##### On-balance sheet exposure

###### Article 12

Exposure amount of an on-balance sheet item shall represent book value of that item minus loan loss provisions for that asset item.

##### Off-balance sheet exposure

###### Article 13

Exposure amount of an off-balance sheet item representing off-balance sheet obligation of a bank (credit equivalent to off-balance sheet exposure) shall be calculated in the manner that book value of that item reduced by loan loss provisions shall be classified under appropriate risk category and multiplied by the appropriate conversion factor as set out in the table below:

<b>Risk Category</b>	<b>Off-Balance Sheet Item</b>	<b>Conversion Factor</b>
<b>Low risk</b>	1) undrawn credit facilities (loan agreements, purchase securities, issue guarantees or acceptance facilities) that are unconditionally cancellable at any time without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness; 2) unconditionally cancellable retail credit lines (credit cards, overdrafts) for which terms permit a bank to cancel them to the full extent (unconditionally cancellable credit lines);	<b>0%</b>
<b>Medium to low risk</b>	1) documentary letters of credit in which delivery acts as collateral and other self-liquidating instruments; 2) undrawn credit facilities with the original maturity up to one year which cannot be unconditionally cancelled at any time before prior notice, and undrawn credit facilities that cannot be automatically cancelled due to deterioration in a borrower's creditworthiness;	<b>20%</b>
<b>Medium risk</b>	1) issued and confirmed documentary letters of credit (which do not represent a medium to low risk item); 2) warranties and indemnities (including tender, performance, customs and tax bonds) and guarantees not having the character of credit substitutes; 3) irrevocable stand-by letters of credit not having the character of credit substitutes;	<b>50%</b>

	<ul style="list-style-type: none"> <li>4) undrawn credit facilities (purchase of securities, issuing guarantees or acceptance facilities) with the original maturity of more than one year;</li> <li>5) note issuance facilities (NIFs) and revolving underwriting facilities (RUFs);</li> </ul>	
<b>High risk</b>	<ul style="list-style-type: none"> <li>1) guarantees having the character of credit substitutes;</li> <li>2) acceptances;</li> <li>3) endorsements not bearing the name of another bank;</li> <li>4) transactions with recourse;</li> <li>5) irrevocable stand-by letters of credit having the character of credit substitutes;</li> <li>6) assets purchased under outright forward purchase agreements;</li> <li>7) forward deposits contracts;</li> <li>8) unpaid portion of partly paid shares and securities;</li> <li>9) asset sale and repurchase agreements;</li> <li>10) other off balance sheet commitments also carrying risk.</li> </ul>	<b>100%</b>

### **Risk-weighted exposure amount**

#### **Article 14**

Risk-weighted exposure amount for individual on-balance sheet asset item shall represent a result of the amount of that exposure multiplied by the allocated risk weight for that exposure determined in accordance with the provisions of the Decision hereof.

Risk-weighted exposure amount for individual off-balance sheet item shall represent a result of the credit equivalent of off-balance sheet exposure multiplied by the allocated risk weight for that exposure determined in accordance with the provision of the Decision.

### **Calculation of exposure amounts in special cases**

#### **Article 15**

If the exposure is subject to funded or unfunded credit protection, the amount of such exposure shall be determined in accordance with the provisions of this Decision prescribing the credit risk mitigation techniques.

If the exposure is in the form of financial derivatives set out in Annex 1 printed with this Decision thus being its integral part, the exposure amount shall be calculated in accordance with the provisions of this Decision prescribing the calculation of required capital for market risks.

The exposure amounts for repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions shall be calculated in accordance with the provisions of this Decision prescribing the calculation of capital requirement for settlement/delivery risk and

counterparty credit risk or the provisions of this Decision prescribing the credit risk mitigation techniques.

Other off-balance sheet exposures to counterparty risk which are subjects of protection on daily basis shall be calculated in accordance with the provisions of this Decision prescribing the calculation of capital requirement for settlement/delivery risk and counterparty credit risk.

### **3.2.2 Assigning risk weights by exposure classes**

#### **3.2.2.1. Exposure classes**

##### **Exposure classification**

###### **Article 16**

A bank is obliged to classify each on-balance and off-balance sheet item, except exposures representing deductible items from own funds and exposures for which capital requirements are calculated by applying the methodology for the calculation of required capital for market risks, in one of the following exposure classes:

- 1) exposures to central governments and central banks;
- 2) exposures to regional governments or local authorities;
- 3) exposures to administrative bodies and non-commercial undertakings
- 4) exposures to multilateral development banks;
- 5) exposures to international organisations;
- 6) exposures to institutions;
- 7) exposures to legal persons;
- 8) exposures to natural persons and small and medium enterprises;
- 9) exposures secured by real estate property;
- 10) exposures to defaulted borrowers;
- 11) exposures falling under high risk category;
- 12) exposure in the form of covered bonds;
- 13) securitisation exposures;
- 14) short-term exposures to institutions and corporates
- 15) exposures arising from holdings in open investment funds;
- 16) other exposures.

##### **Classification of exposures by quality step**

###### **Article 17**

The assignment of risk weights to individual exposures, for which capital requirement for credit risk is determined on the basis of a borrower's rating, shall depend on the exposure class under Article 16 of this Decision and the underlying credit quality step of that exposure.

Credit quality step for individual exposures shall be determined on the basis of:

- 1) borrower's credit rating assigned by a recognized external rating agency for credit risk assessment, which use was approved by the Central Bank in the

- 2) credit assessments by an Export Credit Agency meeting the conditions laid down in paragraph 3 of this Article.

Bank may use credit assessment of an Export Credit Agency provided that either of the following two criteria has been met:

- 1) the Export Credit Agency participates in the OECD Arrangement on Guidelines for Officially Supported Export Credits; or
- 2) the Export Credit Agency publishes its credit assessments and applies the OECD agreed methodology, and credit assessments are classified under one of the eight risk categories, depending on the minimum insurance premiums for export business.

To all remaining exposures, for which this chapter does not specify a different treatment, 100% risk weight shall apply.

### **Exposure rating scale**

#### **Article 18**

Credit rating assignments of recognized external institutions shall be classified under appropriate credit quality steps as presented in the following credit quality assessment scale:

<b>Credit quality step</b>	1	2	3	4	5	6
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The classification of borrowers` ratings with appropriate credit quality steps assigned by recognized external institutions referred to in paragraph 1 of this Article shall be performed by the Central Bank in accordance with Article 133 of the Decision.

Credit quality assessments of borrowers by Export Credit Agencies shall be classified under appropriate credit quality steps as presented in the following assessment scale:

<b>Credit quality step</b>	0	1	2	3	4	5	6	7
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### **3.2.2.2. Weighting of exposures to central governments and central banks**

#### **Definition**

#### **Article 19**

For the purpose of this Decision, central governments shall be considered government units financed from the state budget, these being the following:

- 1) in Montenegro: the Montenegrin Parliament, the Government, the President of Montenegro, ministries, the Constitutional Court, basic courts, superior courts, the Supreme Court, commercial courts, the Court of Appeals, State Prosecutor, Administration for the Prevention of Money Laundering, government funds and other government units financed from the state budget;
- 2) in other countries: government units financed from the budget and treated as central governments under the regulations of those countries governing banks' operations.

### **Risk weight assignment**

#### **Article 20**

Assignment of weight to exposures to central governments and central banks shall be performed in the following manner:

- 1) exposures to the European Central Bank shall be assigned a 0% risk weight;
- 2) exposures to central governments and central banks for which a bank uses credit ratings assigned by a recognized external institution shall be assigned risk weights in accordance with credit quality step laid down in the following rating scale:

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

- 3) exposures to central governments and central banks for which a bank uses credit assessments of a recognized Export Credit Agency shall be assigned risk weights in accordance with credit quality steps presented in the following scale:

<b>Credit quality step</b>	0	1	2	3	4	5	6	7
<b>Risk weight</b>	0%	0%	20%	50%	100 %	100%	100%	150%

- 4) exposures to central governments and central banks for which a bank does not use credit rating assigned by a recognized external institution or an Export Credit Agency shall be assigned a 100% risk weight.
- 5) exposures to Montenegro's Central Government and the Central Bank of Montenegro shall be assigned a 0% risk weight.

### **3.2.2.3. Exposures to regional governments or local authorities**

#### **Definition**

#### **Article 21**

For the purpose of this Decision, regional governments and local authorities shall be considered the following:

- 1) in Montenegro: local municipalities, municipal assemblies, their executive bodies and funds established and financed at local levels;
- 2) in other countries: units of regional governments and local authorities treated as regional government or local authority units under the regulations of those countries governing banks' operations.

## **Weighting of exposures**

### **Article 22**

Exposures to regional government and local authority units shall be weighted in accordance with Article 29 hereof prescribing the manner for risk weighting exposure to these institutions, except that preferential risk weights under Article 51 hereof shall not be applied to short-term exposures to regional governments and local authorities.

Notwithstanding paragraph 1 above, exposures to regional governments and local authority units may be treated as exposures to central governments, with prior approval of the Central Bank, if no difference between such exposures exists, because regional government and local authority units are revenue earning units, and due to existence of special institutional provisions that reduce default risk to a minimum.

The Central Bank may prepare and publish a list of the regional governments and local authority units to be risk weighted as central governments.

### **3.2.2.4 Exposures to administrative bodies and non-profit companies**

#### **Definition**

#### **Article 23**

For the purpose of this Decision, administrative bodies and non-profit companies (hereinafter: public sector entities) shall be administrative bodies accountable to central governments, regional government or local authority units and state-owned non-profit legal persons which obligations are guaranteed by the state.

For the purpose of determining risk weights, public sector entities in Montenegro shall be classified in the following groups:

- 1) the group of public sector entities treated as central governments in risk weight allocation, including: Pension and Disability Insurance Fund, the Health Insurance Fund, and the Investment and Development Fund;
- 2) the group of other public sector entities.

## **Risk weight assignment**

### **Article 24**

Exposures to public sector entities shall be weighted as follows:

- 1) exposures to public sector entities under Article 23 paragraph 2 point 1) of this Decision shall be weighted in line with Article 20 hereof prescribing exposures to central government;
- 2) exposures to public sector entities under Article 23 paragraph 2 point 2) of this Decision shall be weighted in accordance with the Article 29 hereof prescribing weight exposure to the aforesaid institutions, except that preferential risk weights under Article 51 hereof shall not be applied to short-term exposures to public sector entities;
- 3) exposures to public sector entities of other countries shall be weighted as follows:
  - exposures to public sector entities of an EU Member States shall be assigned risk weight in accordance with regulations governing such exposures in that EU Member State;
  - exposures to public sector entities of a non-EU Member States, under supervisory and regulatory provisions at least equal to those applied in the European Union, shall be assigned risk weight in accordance with regulations governing such exposures in that non-EU Member States provided that such public sector entities may only be treated as institutions in risk weight assignment;

Exposures to public sector entities other than those under points 1 to 3 of this Article shall be assigned a 100% risk weight.

### **3.2.2.5. Exposures to multilateral development banks**

#### **Risk weights**

##### **Article 25**

Bank exposures to the following multilateral development banks shall be assigned a 0% risk weight:

- 1) International Bank for Reconstruction and Development;
- 2) International Finance Corporation;
- 3) Inter-American Development Bank;
- 4) Asian Development Bank;
- 5) African Development Bank;
- 6) Council of Europe Development Bank;
- 7) Nordic Investment Bank;
- 8) Caribbean Development Bank;
- 9) European Bank for Reconstruction and Development;
- 10) European Investment Bank;
- 11) European Investment Fund;
- 12) Multilateral Investment Guarantee Agency
- 13) Islamic Development Bank.
- 14) International Finance Facility for Immunisation

Exposures to Inter-American Investment Corporation, Black Sea Trade and Development Bank and Central American Bank for Economic Integration shall be weighted in the manner prescribed in Article 29 hereof regulating the assignment of

risk weights to institutions, except that preferential risk weights under Article 51 hereof shall not be applied to short-term exposures to the aforesaid banks.

### **3.2.2.6. Exposures to international organisations**

#### **Definition**

#### **Article 26**

For the purpose of this Decision, international organisations shall be considered the following:

- 1) European Community (EC)
- 2) International Monetary Fund (IMF), and
- 3) Bank for International Settlements (BIS)

#### **Risk weight assignment**

#### **Article 27**

Exposures to international organisations shall be assigned a 0% risk weight.

### **3.2.2.7. Exposures to institutions**

#### **Definition**

#### **Article 28**

For the purpose of this Decision, institutions shall be considered:

- 1) credit institutions, and
- 2) micro-credit financial institutions, credit-guarantee institutions and investment companies.

#### **Risk weight assignment**

#### **Article 29**

Exposures to institutions for which a bank uses ratings assigned by a recognized external institution shall be weighted as follows:

- 1) exposures with the original or residual maturity of more than three months shall be assigned risk weight in accordance with credit quality steps presented in the following rating scale:

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

- 2) exposures with the original or residual maturity of up to three months shall be assigned risk weight in accordance with the credit quality steps presented in the following rating scale:

<b>Credit quality step</b>	1	2	3	4	5	6
<b>Risk weight</b>	20%	20%	20%	50%	50%	150%

Exposures to credit institutions for which a bank does not use ratings assigned by a recognized external institution shall be weighted as follows:

- 1) exposures with the original or residual maturity of more than three months shall be assigned the higher of either a 50% risk weight or risk weight assigned to exposure to central government of the jurisdiction in which the institution is incorporated;
- 2) exposures with the original or residual maturity of up to three months shall be assigned the higher of either a 20% risk weight or risk weight assigned to exposure to central government of the jurisdiction in which the institution is incorporated;

Provisions under points 1 and 2 above shall also apply to institutions under Article 28 point 2) of this Decision provided that the following conditions have been met:

- 1) that the institution was licensed by the competent authority for licensing credit institutions in that country, or the authority which has signed cooperation agreement with the authority responsible for supervision of credit institutions;
- 2) the same regulatory requirements for credit institutions also apply to these institutions.

Exposures to an unrated institution shall not be assigned a risk weight more favourable than that applied to equivalent exposures to its central government.

No exposures with 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%.

### **Specific issue rating**

#### **Article 30**

For exposures for which there is a specific issue rating representing exposure to an institution (including short-term exposure) included in this category of exposure, bank is obliged to adhere to the provisions of this Decision regulating the manner of using borrower's rating.

### **Investments in credit institutions capital**

#### **Article 31**

Participating interests or investments in other element of own funds of other credit institutions shall be risk-weighted at 100%, unless they represent deductible item in calculation of bank's own funds.

### 3.2.2.8. Exposures to corporates (legal persons)

#### Risk weight assignment

##### Article 32

Exposures to legal persons for which a bank uses ratings assigned by a recognized external institution shall be assigned risk weight in accordance with the credit quality steps presented in the following rating scale:

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

Exposures to unrated legal persons shall be assigned the risk weight of 100% or risk weight assigned to exposures to central government of the jurisdiction in which the legal person is incorporated, if the risk weight is higher.

##### Article 33

For exposures for which there is a specific issue rating representing exposure to a legal person (including short-term exposure) included in this category of exposure, bank is obliged to adhere to the provisions of this Decision regulating the manner of using borrower's rating.

### 3.2.2.9. Exposures to natural persons, small and medium-sized enterprises

#### Risk weight

##### Article 34

Exposures to natural persons and small and medium-sized enterprises shall be assigned a 75% risk weight, if the following requirements are met:

- 1) overall gross exposure of a bank and bank related parties to a single individual or a group of related parties, including outstanding receivables and excluding exposures and contingent liabilities secured by residential property, does not exceed EUR 100,000 (retail loan);
- 2) exposure represents one of the significant number of exposures with similar characteristics, therefore the risks related with such crediting are significantly decreased;
- 3) the retail portfolio is sufficiently diversified.

Exposures based on securities cannot be included in the exposures to natural persons, and small and medium-sized enterprises category.

Gross exposure, within the meaning of paragraph 1 point 1) of this Article shall represent the total amount of exposure to one party and/or a group of related parties without deductions applied in the risk mitigation techniques.

Within the meaning of paragraph 1 point 2) of this Article, retail loan portfolio is sufficiently diversified if the diversification indicator does not exceed 0.2%.

The diversification indicator of retail loans portfolio represents a percentage share of average exposure to a party and/or a group of related parties in total retail loan portfolio.

Bank can also include the present value of minimum payments based on the lease agreement in the exposure to natural persons and small and medium-sized enterprises category, provided that the conditions from paragraph 1 of this Article are met.

### **3.2.2.10. Exposures secured by property**

#### **Exposure classification**

##### **Article 35**

For the purpose of risk weight assignment, exposures secured by mortgages or fiduciary shall be classified in one of the following categories:

- 1) exposures secured by mortgage or fiduciary on residential property in Montenegro;
- 2) exposures secured by mortgage or fiduciary on commercial property in Montenegro;
- 3) other exposures secured by mortgage or fiduciary.

Under the category of exposures secured by mortgage or fiduciary on residential property shall be classified exposures secured by mortgage or fiduciary, i.e. parts of exposures that are fully secured by mortgage or fiduciary on residential property:

- 1) which is or shall be occupied by the owner of that residential property, i.e. which the natural person-owner is giving lease for residential purposes, based on the lease agreement.
- 2) owned by a corporate entity which is or shall be occupied by the owner of that corporate entity.

In the category of exposures secured by mortgage or fiduciary on commercial property in shall be classified exposures, i.e. parts of exposures that are fully secured by mortgage or fiduciary on the commercial property in Montenegro, in which the borrower performs its activity.

The category of other exposures secured by mortgage or fiduciary shall include exposures secured by mortgage or fiduciary not eligible to be classified in either of the categories under paragraph 1 points 1) and 2) of this Article.

## Requirements for weighting of exposures

### Article 36

For assigning risk weight to exposures secured by residential and commercial property, pursuant to Articles 37 - 39 hereof, conditions relate to the following have to be met:

1) legal security, namely:

- mortgages and fiduciary on property enables bank to realize rights from the agreement in the relevant legal system, with the rights in force during the signing of the mortgage or fiduciary agreements;
- meeting all legal requirements for establishing mortgage or transfer of fiduciary right on the property and adequate registering of encumbrance in land or other registry books;
- legal procedures for realization of mortgage, i.e. fiduciary enable settlements of claims arising from property within the reasonable deadline.

2) monitoring the value of property, namely:

- bank is checking the value of property, using statistical and other methods – for commercial property as a minimum once per year and for residential property as a minimum once in three years. If the market conditions are subject to more significant changes, bank is checking the value of property more frequently;
- if based on the check of property value, bank determines that significant decrease of the property value has or can happen compared to regular market price, property is revalued ;
- for individual exposure that represents 5% or more of banks own funds, or exceeds the amount of 200.000 EUR (lesser of these two values is applied), independent evaluation of property is performed as a minimum every three years;

3) banks acts, namely:

- bank has adopted and is implementing internal act that establishes type of residential and commercial property that are accepted as collateral in the process of loan approval and other exposures,
- bank has adopted and is implementing procedures that include provisions based on which it is following and establishing whether the property taken as collateral is adequately insured in case of harmful events;

4) property evaluation rules, namely:

- bank is evaluating property based on the value that is equal or lesser than the market value established by the independent evaluator. Exceptionally, in case that the regulations are establishing strict criteria for evaluation of mortgage value of property, bank is evaluation property based on the value that is equal or lesser than the mortgage value established by the independent evaluator that applied those regulations.
- bank has decreased the market, i.e. mortgage value of property by the result obtained through monitoring value of property in accordance with point 2 of this Article.

## **Weighting of exposures secured by residential property**

### **Article 37**

Exposures secured by property referred to in Article 35 paragraph 1 point 1) hereof shall be assigned a 35% risk weight, provided that the following conditions have been met besides the conditions set forth in Article 36 hereof:

- 1) market value of the property does not materially depend upon the borrower's creditworthiness, without considering macroeconomic factors that are affecting the value of property and borrower's creditworthiness;
- 2) the risk related to the borrower does not materially depend on the property, but rather on the underlying capacity of the borrower to repay the debt from other sources, i.e. capacity of the borrower to repay debt does not materially depend on the cash flows resulting from the use of property pledged as collateral;
- 3) the market value of property significantly exceeds the exposure amount, at least by 50%.

Risk weight under paragraph 1 of this Article shall also be assigned to bank exposures arising from agreements on lease of residential property provided that the following conditions have been met:

- 1) the lease agreement contains the option to acquire ownership of the residential property;
- 2) the bank exposure is fully secured by bank ownership of the residential property.

## **Weighting of exposures secured by commercial property**

### **Article 38**

Assigning risk weight to exposures classified in the category of exposures secured by property under Article 36 paragraph 1 point 2) of this Decision shall be performed in the following manner:

- 1) a part of exposure not exceeding 50% of market value of property shall be assigned a 50% risk weight;
- 2) a part of exposure exceeding the limit under point 1) of this Article shall be assigned a 100% risk weight.

Pursuant to paragraph 1 of this Article, exposures secured by commercial property can be assigned a risk weight, providing that, in addition to conditions from Article 36, the following conditions are met:

- 1) market value of the property does not materially depend upon the borrower's creditworthiness, without considering macroeconomic factors that are affecting the value of residential property and borrower's creditworthiness;
- 2) the risk related to the borrower does not materially depend on the property, but rather on the underlying capacity of the borrower to repay the debt from other sources, i.e. capacity of the borrower to repay debt does not materially depend on the cash flows resulting from the use of residential property pledged as collateral;

Risk weight under paragraph 1 of this Article shall also be assigned to bank exposures arising from agreements on lease of commercial property provided that, in addition to conditions from paragraph 2 of this Article, the following conditions have been met:

- 1) the lease agreement contains the option to acquire ownership of the commercial property;
- 2) the bank exposure is fully secured by bank ownership of the commercial property.

### **Treatment of property in the territory of other countries**

#### **Article 39**

Exposures which are fully secured by mortgage or fiduciary on commercial property in the territory of an EU member state, if the regulations of that country establishes strict criteria for evaluation of the mortgage value, bank may assign risk weight of 50% to the part of exposure that represents 50% of the market value of property or 60% of the mortgage value of property, where the lesser of these two values is applied.

### **Weighting of other exposures secured by property**

#### **Article 40**

Exposures classified in the category of exposure under Article 35 paragraph 1 point 3) hereof shall be assigned a 100% risk weight.

### **3.2.2.11. Exposures to past due receivables**

#### **Definition**

#### **Article 41**

For the purpose of this Decision, past due exposures shall be considered claims on a borrower defaulting longer than 90 days.

#### **Risk weights**

#### **Article 42**

Exposures or parts of past due exposures not secured by collateral shall be assigned the following risk weights:

- 1) a 150% risk weight if the potential loan loss provisions do not exceed 20% of unsecured part of overall exposure;
- 2) a 100% risk weight if the potential loan loss provisions exceed 20% of unsecured part of overall exposure.

The unsecured part of exposure referred to in paragraph 1 of this Article shall be considered the part not eligible to be treated as fully secured exposures as specified in the provisions hereof prescribing the techniques for credit risk mitigation.

Past due receivables secured by property from Article 35, paragraph 1 point 1) and 2) and decreased by provisions for potential loan loss, are assigned the risk weight of 100%.

Notwithstanding paragraph 3 of this Article, if the allocated potential loan loss reserves amount as a minimum 20% of exposure which includes potential loan loss reserves, such exposure decreased by the amount of provisions is assigned the risk weight 50%.

### **3.2.2.12. High risk exposures**

#### **Definition**

#### **Article 43**

For the purpose of this Decision, high-risk exposures shall be considered bank investments in:

- 1) corporates with highly profitable projects bearing high risks (venture capital firms);
- 2) capital of entities or fund bearing high risk (private equity investment).

The bank shall specify in more detail the classification of high-risk exposures in its internal rules and procedures.

#### **Assigning risk weight**

#### **Article 44**

High risk exposures shall be assigned a 150% risk weight.

### **3.2.2.13. Exposures in the form of covered bonds**

#### **Article 45**

Exposures in the form of covered bonds with no issuer rating available which meets the collateral criteria set out in Article 46 of this Decision shall be assigned a credit risk weight on the basis of the credit risk weight assigned to the bank which issues them. The following correspondence between risk weights shall apply:

- 1) if the exposures to the institution are assigned a risk weight of 20%, the covered bond shall be assigned a risk weight of 10%;
- 2) if the exposures to the institution are assigned a risk weight of 50%, the covered bond shall be assigned a risk weight of 20%;
- 3) if the exposures to the institution are assigned a risk weight of 100%, the covered bond shall be assigned a risk weight of 50%; and

- 4) 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 46**

Covered bonds shall be collateralised by:

- 1) exposures to or guaranteed by central governments, central banks, public sector entities, and regional governments and local authorities in Montenegro or in the EU Member States;
- 2) 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, provided that they do not exceed 20% of the nominal amount of outstanding covered bonds of issuing institutions, the bank may recognise their qualification for credit quality step 2;
- 3) exposures to or guaranteed by non-EU public sector entities, non-EU regional governments and non-EU local authorities that are risk weighted as exposures to institutions or central governments according to Article 21 points 1 and 2 provided that they do not exceed 20% of the nominal amount of outstanding covered bonds of issuing institutions, the bank may recognise their qualification for credit quality step 2;
- 4) exposures to institutions that qualify for the credit quality step 1 if they do not exceed 15% of the nominal amount of outstanding covered bonds of the issuing bank. The exposures to institutions from Montenegro or EU Member States with maturity not exceeding 100 days, can be recognized for qualification for credit quality step 2. 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;
- 5) loans secured by mortgage or fiduciary on residential real estate provided that the amount of loan treated as security for issued covered bonds is considered the principal amount of the loan or the amount representing 80% of market value of property if this amount is lower than principal amount of loans;
- 6) loans secured by senior units with credit quality step issued by securitisation entities governed by the laws of an EU Member State and securitising residential real estate exposures provided that at least 90% of the assets of such entities are claims secured by residential real estate. The amount of senior unit shall not exceed 20% of nominal value of the amount of issued bonds, and the amount of senior units shall be determined as the amount lesser of the following items:
  - principal amount of the lien,
  - principal amount of the lien secured by mortgage or fiduciary (all prior liens are combined),
  - 80% of the market value of pledged properties;
- 7) loans secured by mortgage or fiduciary on commercial real estate provided that the amount of loan treated as security for issued covered bonds is considered the principal amount of the loan or the amount representing 60% of market value of property if this amount is lower than principal amount of

loans. Instead of Loan to Value ratio, the amount up to a maximum level of 70% may be recognised if:

- the value of the total assets pledged as collateral for the covered bonds exceed the nominal amount outstanding on the covered bond by at least 10%,
  - if bond holder's claim the legal certainty requirements set out in Article 48 of the Decision, and
  - if bondholders' claim must take priority over all other claims on the collateral
- 8) loans secured by senior units with credit quality step 1 issued by securitisation entities governed by the laws of an EU Member State and securitising commercial real estate exposures provided that at least 90% of the assets of such entities are claims secured by commercial real estate. The amount of senior unit shall not exceed 20% of nominal value of the amount of issued bonds, and the amount of senior units shall be determined as the amount lesser of the following items:
- principal amount of the lien,
  - principal amount of the lien secured by mortgage of fiduciary (all prior liens are combined),
  - 60% of the market value of pledged properties;
- 9) loans secured by ships where only liens or fiduciary transfer of ownership (combined with any prior liens) do not exceed 60% of the market value of the pledged ship.

#### **Article 47**

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 shall not be comprised in calculating the 90% limit referred to in Article 46 points 5 and 8.

#### **Article 48**

All the assets referred to as collateral in Article 46 of this Decision shall be exclusively dedicated in law to the protection of bond-holders against losses (they are not part of the bankruptcy or liquidation estate and may not be subject to foreclosure proceedings against the issuing bank, and are not made available to meet other liabilities of the institution).

#### **Article 49**

Bank shall, for real estate collateralising covered bonds, meet the minimum requirements and the valuation rules set out in Article 36 of the Decision.

### 3.2.2.14 Items representing securitisation positions

#### Securitisation

##### Article 50

Risk weight exposure amounts for securitisation positions shall be determined in accordance with provisions of the Decision regulating securitisation framework.

### 3.2.2.15. Short term exposures to institutions and corporates

##### Article 51

Short-term exposures to a credit institution and corporates for which a credit assessment by a nominated ECAI is available shall be assigned a risk weight depending on the credit quality step from the following rating scale:

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

### 3.2.2.16. Exposures based on investments in open investment funds

#### Risk weights

##### Article 52

Exposures to open investment funds shall be assigned the risk weights as follows:

- 1) Exposures to open investment funds for which a credit assessment by a nominated ECAI is available shall be assigned shall be assigned a risk weight depending on the credit quality step from the following rating scale:

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

- 2) exposures to open investment funds for which a credit assessment by a nominated ECAI is not available shall be assigned a 100% risk weight.

Exposures to open investment funds which are associated with high risk shall receive 150% risk weight.

##### Article 53

Bank may determine the risk weights for exposures to open investment funds under Article 54, if the following eligibility criteria are met:

- 1) open investment fund is managed by a company:
  - which is subject to supervision in Montenegro or in an EU Member State, or
  - which has registered office in the non-EU country provided that it is managed by a company which is subject to supervision that is considered

- 2) the open investment fund's investment prospectus or equivalent document includes:
  - the categories of assets in which the fund is authorised to invest;
  - investment limits and the methods for calculating investment limits in case such limits apply;
- 3) the business of the open investment fund is reported on at least an annual basis to enable an assessment to be made of the activities, assets and liabilities, income and operations over the reporting period.

#### **Article 54**

Where the bank is aware of the underlying assets in the exposures to an open investment fund, it shall calculate the average risk weight for the aggregate exposure based on risk weight for each underlying exposure referred to in Article 16 hereof.

Where the bank is not aware of the underlying assets in the exposures to an open investment fund, it shall calculate the average risk weight for the aggregate exposure based on risk weight for assumed exposures.

As for paragraph 2 above, assumed exposures shall be included in the calculation by assuming that the open investment fund first invests, to the maximum extent allowed, in the exposure classes attracting the highest capital requirement, and then continues making investments in descending order in relation with required capital cover until the maximum total investment limit is reached.

#### **Article 55**

Notwithstanding Article 54 above, bank may assign risk weight to exposures to open investment funds calculated by third party provided that the correctness of calculation could be adequately ensured by the calculation and that individual weights are assigned in accordance with Article 16 hereof.

### **3.2.2.17. Other exposures**

#### **Cash and cash equivalents**

#### **Article 56**

Cash and cash equivalents shall be assigned a 0% risk weight.

Cash items in process of collection shall be assigned a 20% risk weight.

## **Gold**

### **Article 57**

Gold bullions in own vault or on an allocated basis to the extent backed by bullion liabilities shall be assigned a 0 % risk weight.

## **Equity investments**

### **Article 58**

Equity investments and other participations, except where deducted from own funds, shall be assigned a risk weight of at least 100 %.

## **Assets sale and repurchase**

### **Article 59**

In 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.

## **Lease exposures**

### **Article 60**

Bank shall report exposure value for leases as present value of minimum lease payments.

The exposures under paragraph 1 above shall be assigned risk weight depending on the relevant exposure class.

By way of exception from paragraph 1 above, when the exposure is a residual value of leased properties, the risk weighted exposure amounts shall be calculated as follows:

**risk weighted exposure amount =  $1/t * 100 \% * \text{exposure value}$ ,**

where  $t$  is the greater of 1 and the nearest number of whole years of the lease remaining.

## **Credit protection**

### **Article 61**

Where a bank provides credit protection for a number of exposures under terms that the  $n$ -th default among the exposures shall trigger payment and that this credit event shall terminate the contract, the risk weights of the exposures shall be calculated as follows:

- 1) if the group of exposures has an external credit assessment from a recognised external institution, the risk weights to be assigned shall be subject to provisions of the decision regulating securitisation framework.
- 2) if the group of exposures is not rated by a recognised external institution, the risk weights of the exposures included in the basket will be aggregated, excluding n-1 exposures, up to a maximum of 1000% of the value of credit derivative. The sum total of the risk weights of the exposures remaining in the basket shall be multiplied by the nominal amount of the protection provided by the credit derivative. The n-1 exposures to be excluded from the aggregation shall be determined on the basis of excluding the exposures that produce lower risk weights than any of the exposures included in the aggregation.

### **Tangible assets**

#### **Article 62**

Bank's tangible assets shall include:

- 1) land and buildings,
- 2) equipment;
- 3) prepayments for tangible assets and tangible assets in course of construction

Bank's tangible assets shall be assigned a 100% risk weight.

### **Other exposures**

#### **Article 63**

Exposures other than those prescribed in this Decision shall be assigned risk weight of 100%.

### **3.3 Manner of using credit ratings**

#### **Consistency**

##### **Article 64**

Bank is obliged to use consistently the selected recognized external institution for credit risk assessment and Export Credit Agencies and their respective ratings and credit assessments for each type of exposure.

A bank opting to use credit ratings of a recognized external institution for specific market segments is obliged to consistently use the respective credit ratings for all exposures belonging to those market segments.

## **Multiple ratings**

### **Article 65**

If one borrower has been assigned two credit ratings by recognized external institutions having different credit quality step scaling, a bank is obliged to use the rating assigning a higher risk weight.

If one borrower has been assigned three or more credit ratings by recognized external institutions having different credit quality step scaling, a bank is obliged to use the higher risk weight assigned by one of the two most favourable available ratings.

## **Relation between credit ratings of issuer and specific issue**

### **Article 66**

When a specific issue representing exposure has a credit rating assigned by a recognized external institution, a bank is obliged to assign risk weight appropriate for credit rating of the relevant issue.

If the issuer has its own credit rating for the specific issue with the assigned risk weight which is more favourable than risk weight assigned to an unrated receivable, and such bank receivable is not investment in that specific issue, the bank may apply the more favourable risk weight only if that unrated receivable is of the same rank or having the priority in collection in relation to the specific rated issue.

If the conditions under paragraph 2 of this Article have not been met, the bank is obliged to apply the same risk weights to other unrated receivables from the same issuer as those assigned to unrated receivables.

## **Relation between short-term credit ratings of issuer's institution and specific issue**

### **Article 67**

By way of exception from Article 66 paragraph 2 hereof, bank shall apply provisions under paragraphs 2 and 3 of this Article to short-term exposures to institutions with residual maturity of three months or less and for which there is credit rating for the specific issue.

Short-term exposures to institutions with short-term credit ratings for the same exposures (issue rating), which risk weights are more favourable than risk weights for short-term credit ratings specified under Article 29 paragraph 1 point 2) hereof shall be assigned risk weights in line with Article 29 paragraph 1 point 2) hereof.

Short-term exposures to institutions having short-term credit ratings for same exposures (the issue rating) which risk weights are less favourable than risk weights specified under Article 29 paragraph 1 point 2) hereof shall be assigned such less

favourable risk weights. All other short-term exposures to institutions not having credit ratings (issue rating) shall also be assigned less favourable risk weights.

### **Relation between short-term and long-term credit ratings for exposures to institutions and corporates**

#### **Article 68**

By way of exception from Article 66 paragraph 2 hereof, the provisions under Articles 69 and 70 shall be applied to short term issue ratings only for short-term exposures to institutions and corporates under Article 51 hereof.

#### **Article 69**

Bank may use short-term issue ratings only for short-term exposures.

#### **Article 70**

Bank may use short-term issue rating only for the purpose of establishing risk weights for such receivable for which the underlying short-term rating relates to and must not use that rating to determine risk weight of any other receivable.

By way of exception from paragraph 1 of this Article:

- 1) if short-term exposure is assigned a 150% risk weight based on the issue rating, bank is obliged to apply the same risk weight to all unrated unsecured exposures to the same borrower (regardless of these being long-term or short-term exposures);
- 2) if short-term exposure is assigned a 50% risk weight based on the issue rating, bank is obliged to apply risk weights which must not be less than 100% to all short-term unrated exposures to the same borrower.

### **Ratings in domestic and foreign currencies**

#### **Article 71**

Bank may use credit rating relating to exposure denominated in the domestic currency of the obligor only to derive risk weight for that exposure, i.e. the same credit rating may not be used to derive risk weight for other exposures on the same obligor denominated in a foreign currency.

Notwithstanding paragraph 1 above, if bank exposure arises from its participation in a loan that has been extended by a Multilateral Development Bank which creditor status is recognised on the market, bank may use the same credit rating as that relating to exposure denominated in domestic currency of the borrower to derive risk weight for other exposures to the same borrower denominated in a foreign currency.

### **3.4. Credit Risk Mitigation**

#### **3.4.1. Types of credit protection**

##### **Types of credit protection**

###### **Article 72**

For the purpose of credit risk mitigation, bank may use the following types of credit protection:

- 1) funded credit protection, which represents the technique of credit risk mitigation, according to which the reduction in credit risk exposure of a bank arises from the right of the bank in case of non-fulfilment of obligations or emergence of other contracted credit event which refers to counterparty to:
  - convert into cash or realize a transfer, assume or retain certain property or cash amount, or
  - reduces the amount of exposure for the difference between the amount of exposure and the amount of bank's receivables arising from credit protection;
- 2) unfunded credit protection, which represents a credit risk mitigation technique, according to which the reduction in credit risk exposure arises from a third party obligation to pay a certain amount in case of non-fulfilment of borrower's obligations or in case of occurrence of another contracted credit event;
- 3) credit derivatives.

##### **Credit risk mitigation in case of more types of credit protection**

###### **Article 73**

For the purpose of mitigating credit risk arising from one exposure, bank may use more types of funded and/or unfunded credit protection prescribed by this Decision.

In case under paragraph 1 of this Article, when calculating weighted amount of exposure, bank is obliged to divide exposure to separate parts to be covered by separate types of credit protection and to calculate weighted amount of exposure for each part individually.

##### **General bank acts**

###### **Article 74**

Bank is obliged to adopt and implement acts which prescribe types and techniques of credit risk mitigation and manner and activities used for acquiring credit protection.

Credit protection prescribed by general acts of a bank must be legally applicable and feasible in all relevant legal systems in which bank operates.

Bank is obliged to set up proper risk management processes, the systems which will timely indicate risks related to used credit protection and secure applicability of credit protection.

Bank shall monitor and control, by means of appropriate written rules and procedures, the residual risk arising from lower than expected effectiveness of the credit risk mitigation techniques used.

Notwithstanding credit protection, bank should perform a detailed assessment of the credit risk related to the underlying exposures and should be capable of meeting this requirement upon the request of the Central Bank.

### **3.4.2. Funded Credit Protection**

#### **3.4.2.1. Types of funded credit protection**

##### **Types of funded credit protection**

##### **Article 75**

Funded credit protection may be of only one of the following:

- 1) financial collateral;
- 2) on-balance sheet netting;
- 3) master netting agreements, which include repurchase transactions, securities or commodities lending or borrowing transactions, and/or other capital market-driven transactions;
- 4) other funded protection in the form of:
  - cash deposited with a third party,
  - life insurance policy,
  - redeemable instruments.

For the purpose of paragraph 1 point 1) above financial collateral shall be considered cash and securities or commodities purchased, lent or received under repurchase transactions or under securities lending or borrowing transactions.

Credit linked notes issued by the bank shall be treated as cash up to the amount of cash payments received from the credit linked notes buyers.

##### **General conditions for recognising funded credit protection**

##### **Article 76**

Funded credit protection may be recognized only if the underlying asset representing the credit protection is sufficiently liquid, and the asset value is stable over time and provides for appropriate security with regard to the level of attained credit protection.

A bank shall be entitled to immediately cash or retain asset representing funded credit protection in case of default, bankruptcy or liquidation of the obligor, that is, other custodian holding the collateral. In case of emergence of another credit event

specified in the transactions documentation, the degree of correlation between the value of underlying asset representing credit protection and credit quality of the obligor shall not exist or may exist only to a small extent.

### **3.4.2.2. Financial Collateral**

#### **Recognition criteria**

##### **Article 77**

The following financial instruments may be recognized as financial collateral:

- 1) deposited cash or other instruments that could be deemed as cash in bank;
- 2) gold;
- 3) debt securities issued by central governments or central banks having credit rating assigned by a recognized external institution which corresponds to at least credit quality step four;
- 4) debt securities issued by institutions having credit rating assigned by a recognized external institution which corresponds to at least credit quality step three;
- 5) debt securities issued by other entities having credit rating assigned by a recognized external institution which corresponds to at least credit quality step three;
- 6) debt securities having short-term credit rating assigned by a recognized external institution which corresponds to at least credit quality step three;
- 7) shares or convertible bonds included in the main stock exchange index.

If the issuer of the aforesaid securities has two credit ratings assigned by recognized external institutions, the less favourable of the two shall be applied; if the issuer has more than two credit ratings, the less favourable of the two most favourable ratings shall be applied.

The following shall also be treated as debt securities issued by central governments and central banks referred to in paragraph 1 point 3) of this Article:

- 1) debt securities issued by regional and local authorities the exposure to which is treated as the exposure to central government;
- 2) debt securities issued by public sector entities the exposure to which is treated as the exposure to central government;
- 3) debt securities issued by Multilateral Development Banks to which a 0% risk weight is assigned;
- 4) debt securities issued by international organizations to which a 0% risk weight is assigned.

The following shall also be treated as debt securities issued by institutions under paragraph 1 point 4) of this Article:

- 1) debt securities issued by units of regional governments and local authorities the exposure to which is treated as the exposure to institutions;
- 2) debt securities issued by public sector entities the exposure to which is treated as the exposure to institutions;

- 3) debt securities issued by Multilateral Development Banks the exposure to which is treated as the exposure to institutions.

### **Other financial instruments**

#### **Article 78**

Notwithstanding financial instruments under Article 77 hereof, debt securities issued by unrated institutions may also be recognized as financial collateral provided that the following conditions have been met:

- 1) securities are quoted on a recognized stock exchange;
- 2) securities is considered as senior debt;
- 3) all other issues of securities of the same seniority as the issuing institution have credit rating assigned by recognized external institution which corresponds to credit quality step three, in accordance with the rules for weighting exposures to institutions or rules for weighting short-term exposures;
- 4) the bank has no information that would suggest that the credit rating of the issue is less favourable than that indicated in point 3) above; and
- 5) securities readily tradable in the market.

### **Treatment of holdings in open investment funds**

#### **Article 79**

Holdings in open investment funds may be recognized as financial collateral provided that the following conditions have been met:

- 1) they have a daily public price quote; and
- 2) the investment fund is limited to invest in instruments that are eligible for recognition as financial collateral in accordance with the provisions of this Decision.

The use of financial derivatives to hedge against holdings in investment funds shall not prevent holdings in that investment funds from being recognized as financial collateral.

### **Additional recognition criteria under the Comprehensive Method**

#### **Article 80**

Where a bank uses the comprehensive method for calculating effects of financial collateral, the following financial items may be recognized as eligible collateral:

- 1) financial collateral under Article 77-79 hereof;
- 2) equities or convertible bonds not included in a main index but traded on a recognized exchange;
- 3) shares in open investments funds which meet the requirements under Article 79 hereof, where in addition to investments under Article 79, point 2) hereof, investments of the fund in financial instruments under point 2) of this Article, may be treated as recognized collateral.

## **Minimum requirements for recognising financial collateral**

### **Article 81**

A financial instrument may be recognized as financial collateral provided that the following conditions have been met:

- 1) the degree of correlation between the obligor and the financial instrument is not undue, meaning that:
  - credit quality of the obligor and the value of the collateral must not have a material positive correlation,
  - the financial instrument is not debt securities issued by the obligor or the entity constituting a group of related parties with the obligor,
- 2) there is legal certainty to realise the collateral, meaning that:
  - the bank can fulfil any contractual and statutory requirements in respect of, and take all steps necessary to ensure, the enforceability of the collateral arrangements under the applicable regulations,
  - the bank has ensured legal review confirming the enforceability of the collateral arrangements in all relevant jurisdictions in which it operates and undertakes activities as necessary to ensure continuing enforceability of those arrangements;
- 3) the bank has met the following operational requirements:
  - collateral arrangements are properly documented, including clear procedures for the timely realization of collateral,
  - the bank has employed adequate procedures and processes to control any risks arising from the use of collateral, including risks of applicability or reduced applicability of credit protection, valuation risks, risks associated with the termination of the credit protection, and concentration risk arising from the use of collateral,
  - the bank has adopted acts that are defining types and amounts of acceptable collateral,
  - the bank has calculated the market value of the collateral, and revalue it accordingly, with a minimum frequency of once every three months, that is more frequently if it has reason to believe that a significant decrease in the market value of collateral has occurred,
  - where the collateral is held by a third party, the bank must take adequate activities to ensure that the third party is recording the collateral separately from its own assets.

### **3.4.2.3. On-Balance Sheet Netting**

#### **Use of On-balance sheet netting**

### **Article 82**

Bank may, with a view to mitigating credit risk, use on-balance sheet netting of mutual cash claims and liabilities with the counterparty.

Cash claims and liabilities referred to in paragraph 1 of this Article shall be considered only loans and deposits in bank.

### **Minimum requirements**

#### **Article 83**

On-balance sheet netting may be used provided that the following conditions have been met:

- 1) there is maturity match between claims and liabilities of counterparties;
- 2) on-balance sheet netting agreement must be legally effective and enforceable in all relevant jurisdictions, including in the event of counterparty liquidation or bankruptcy;
- 3) bank must be able to determine at any time the assets and liabilities that are the subject of the netting agreement;
- 4) bank monitors and controls risks associated with the termination of credit protection;
- 5) bank monitors and controls the relevant exposures on a net basis.

The maturity match referred to in paragraph 1 point 1) of this Article shall exist when the maturity date of bank's liabilities is shorter than or equal to the maturity date of the bank's claim on the counterparty.

#### **3.4.2.4. Master Netting Agreement**

##### **Use of master netting agreements**

#### **Article 84**

Bank which uses the comprehensive method for recognition of financial collateral may for credit risk mitigation use bilateral agreements that include repurchase transactions, securities or commodities lending or borrowing transactions, and/or other transactions capital market-driven transactions.

Received collateral, that is securities or commodities borrowed based on the agreement from the paragraph 1 of this Article have to meet the criteria for recognition under Article 77-81 hereof.

##### **Minimum requirements for recognising master netting agreements**

#### **Article 85**

Bank may use a master netting agreement under Article 84 paragraph 1 hereof, provided that the following minimum requirement have been met:

- 1) Agreement is applicable and enforceable in all relevant jurisdictions, including its enforceability in case of liquidation or bankruptcy of the counterparty;
- 2) Agreement gives the right to all contracting parties to terminate or conclude any transactions based on the agreement if the counterparty fails to meet the

- 3) Agreement foresees that gains and losses from transactions concluded based on the agreement are offset in a way that single net amount is owed by one party to the other.

### **3.4.2.5 Other Instruments of Funded Credit Protection**

#### **Recognition criteria**

##### **Article 86**

For the purpose of credit risk mitigation, a bank may recognize the following instruments as the funded credit protection:

- 1) cash deposits or cash assimilated instruments (cash equivalents) deposited with a third party other than the counterparties and pledged to the bank, providing that conditions under Article 87 paragraph 1 of this Decision are met
- 2) life insurance policies pledged to the bank, providing that conditions stated in Article 87 paragraph 2 of this Decision are met;
- 3) banks instruments redeemable at request, providing that conditions stated in Article 87 paragraph 3 of this Decision are met.

#### **Minimum requirements for recognition**

##### **Article 87**

A bank may use funded credit protection under Article 86 point 1) of this Decision if the following conditions have been met:

- 1) the borrower's claim on a third party (bank depository) must be pledged or transferred to the bank and such a pledge or transfer must have the possibility of liquidation in order to collect the claims, enforceable in all relevant jurisdictions in which the bank is operating;
- 2) the third party (bank depository) must be informed on the pledge or the transfer, and on the basis of such information, the third party (bank depository) may make payments only to the bank or to other parties with the consent of the bank creditor;
- 3) pledge or the transfer is unconditional and irrevocable.

A bank may use the funded credit protection referred to in Article 86 point 2) hereof if the following conditions have been met:

- 1) the insurance company is the subject to relevant supervision;
- 2) the life insurance policy is pledged or assigned to the bank creditor;
- 3) the insurance company is informed on the pledge or assignment and may not effect payments under the insurance agreement without the consent of the bank creditor;
- 4) the declared surrender value of the life insurance policy is non-reducible;
- 5) the bank creditor is entitled to cancel the life insurance policy and receive the surrender value in a timely way in the event of the default of the borrower;

- 6) the bank creditor must be informed of any non-payments under the policy by the policy-holder;
- 7) funded credit protection must be provided for the loan maturity, and where this is not possible because the insurance relationship ends before the credit agreement expires, the bank must ensure that the amount deriving from the insurance contract serves the bank as security until the end of the duration of the credit agreement;
- 8) the pledge or assignment must be legally effective and enforceable in all relevant jurisdictions at time of the conclusion of the credit agreement.

A bank may use the funded credit protection from Article 86 point 3) of this Decision if the following conditions have been met:

- 1) the institution which has issued the instruments must have rating assigned by an external institution which corresponds to the credit quality step one in accordance with the rules for weighting exposures to institutions;
- 2) the institution which has issued the instruments must prove that such instruments are liquid.

### **3.4.3. Unfunded Credit Protection and Credit Derivatives**

#### **3.4.3.1. Types of Unfunded Credit Protection and Credit Derivatives**

##### **Types of unfunded credit protection**

###### **Article 88**

Unfunded credit protection may be in the form of guarantees and counter-guarantees.

Unfunded credit protection may be recognized only if the party providing the protection is sufficiently reliable and the agreement on protection is enforceable in all relevant jurisdictions where the bank is performing its activities and provides the adequate security with regard to the degree of the attained credit protection.

##### **Types of credit derivatives**

###### **Article 89**

The following types of credit derivatives may be used by the bank as eligible credit protection:

- 1) credit default swaps (hereinafter: CDS);
- 2) total return swaps (hereinafter: TRS);
- 3) credit linked notes (hereinafter: CLN) to the extent of their cash funding.

Where a bank purchases credit protection through total return swaps and books new payments based on TRS as net income, but it does not book appropriate deterioration of the value of property being protected, such credit protection shall not be deemed acceptable.

## **Internal hedging**

### **Article 90**

Where a bank is undertaking internal hedging using a credit derivative, that credit derivative shall be regarded as credit protection providing that the credit risk transferred to the trading book shall be transferred to the third party or third parties.

Where the condition under paragraph 1 of this Article is met, the minimum requirements prescribed under this Decision for guaranties shall be applied.

## **Recognition of guaranties**

### **Article 91**

A bank may use guaranties as a type of unfunded credit protection only if the minimum requirements for the recognition of the unfunded credit protection provider under Article 92 hereof have been met, including the minimum of the requirements for guaranties from Article 93 and additional requirements for guaranties under Article 95 hereof.

## **Unfunded credit protection providers**

### **Article 92**

The following entities are recognized as the unfunded credit protection providers:

- 1) central governments and central banks,
- 2) regional governments and local authorities,
- 3) multilateral development banks,
- 4) international organizations exposures which are assigned a 0% risk weight in accordance with this Decision,
- 5) public sector entities,
- 6) institutions,
- 7) legal persons supervised by the Central Bank,
- 8) other corporates, including parent and subsidiary companies of bank provided that they have been assigned credit ratings by a recognized external institution corresponding to at least the credit quality step two.

Notwithstanding providers of unfunded credit protection under paragraph 1 of this Article, other financial institutions may be also recognized as eligible, providing that the following conditions have been met:

- 1) institution has a license or operational permit issued by the authorised body, responsible for issuing operating licenses and supervision of credit institutions;
- 2) supervision of the institution is performed by the authorised body, responsible for supervision of credit institutions; and
- 3) institution is subject to prudential requirements equivalent to those applied to credit institutions.

## **Joint minimum requirements for guarantees and credit derivatives**

### **Article 93**

For the recognition of unfunded credit protection arising from the guarantees and credit derivatives, the following conditions must be met:

- 1) credit protection is direct;
- 2) the scope of the credit protection is clearly defined and may not be disputed;
- 3) the unfunded credit protection agreement does not contain any clause, the fulfilment of which is outside the direct control of the creditor and which may:
  - allow the protection provider to unilaterally cancel the protection,
  - increase the effective cost of protection as a result of deteriorating credit quality of the protected exposure,
  - prevent the protection provider from making payment in a timely manner in the event that the original obligor fails to make any payments due, or
  - allow the maturity of the credit protection to be reduced by the protection provider;
- 4) unfunded credit protection must be legally effective and enforceable in all relevant jurisdiction at the time of the conclusion of credit agreement,
- 5) a bank has the strategy for using guarantees and credit derivatives which is integrated in the processes of managing overall risk profile and the established systems for managing potential risk concentration arising from the use of guarantees and credit derivatives.

## **Minimum requirements for counter-guarantees**

### **Article 94**

Exposure protected by a guarantee which is counter-guaranteed by a central government or a central bank, a public sector entity treated as central government in weighting assets, multilateral banks which are assigned a 0% risk weight, or by a public sector entity treated as institution in weighting assets, may be treated as exposure which is protected by guarantees of those entities provided that the following conditions have been met:

- 1) the counter-guarantee covers all credit risk elements related to exposure;
- 2) both the original guarantee and the counter-guarantee meet the requirements under Article 93 and additional requirements for guarantees set out in Article 95 hereof, except that counter-guarantee do not have meet the conditions under Article 95 paragraph 1 point 1) of this Decision;
- 3) the coverage is robust and there is no historical evidence to suggest that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct guarantee by the entity in question.

A bank may apply the same treatment on exposures which are counter-guaranteed by entities other than those listed under paragraph 1 of this Article provided that such exposures are directly guaranteed by one of the listed entities under paragraph 1 of this Article and that all conditions under paragraph 1 points 1)-3) of this Article have been met.

## **Additional requirements for guarantees**

### **Article 95**

In addition to the requirements under Article 93 of this Decision, a guarantee may be recognized as an acceptable form of unfunded credit protection provided that the following conditions have been met:

- 1) in case of default by the counterparty, the bank creditor has the right to pursue, within a reasonable deadline, the guarantor for monetary amount due under the claim for which the protection has been provided, whereby the payment by the guarantor shall not be subject to the obligation of a bank creditor to pursue the obligor first;
- 2) in case of unfunded credit protection covering residential loans, the conditions under Article 93 paragraph 1 point 3) indent 3 hereof and point 1 of this paragraph do not have to be met within first 24 months; or in case of default by the counterparty, the bank has the right to foreclose the collateral, and in case of the unsuccessful realisation of the collateral, no later than within 24 months, the bank shall be obliged to call the guarantee, i.e. pursue the guarantor for payment;
- 3) the guarantee is explicitly documented obligation assumed by the guarantor;
- 4) the guarantee covers all types of payments arising from the claim, and in the event that certain types of payment are excluded from the guarantee, the recognized value of the guarantee shall be reduced to reflect the limited coverage.

If guarantees given in the context of mutual guarantee schemes, guarantees or counter-guarantees have been issued by entities listed under Article 94 of this Decision, the requirements under paragraph 1 point 1) of this Article shall be considered to have been met provided that one of the following conditions have been met:

- 1) the bank creditor has the right to obtain in a timely manner a provisional payment by the guarantor calculated to represent a adequate estimate of the amount of loss, including losses resulting from the non-payment of interest and other types of payment which the obligor is obliged to make and which is likely to be incurred by the bank proportional to the coverage of the guarantee; or
- 2) the bank creditor may prove the loss-protecting effects of the guarantee (including losses resulting from the non-payment of interest and other types of payments which the borrower is obliged to make).

## **Additional requirements for credit derivatives**

### **Article 96**

Credit events specified under the credit protection agreement shall as a minimum include:

- 1) the failure to pay the amounts due under the terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with or shorter than the grace period in the underlying obligation);

- 2) liquidation, bankruptcy, written statement of its inability to pay its debts as they become due, and analogous events; and,
- 3) the restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (e.g. value adjustment, provisions or other similar debit to the profit and loss account).

Where the credit events specified under the credit protection agreement do not include restructuring of the underlying obligation as described in paragraph 1, point 3), the credit derivative may nonetheless be recognized by the bank as a unfunded credit protection, subject to a reduction in the recognized value as specified in Article 116, paragraph 3, hereof.

Credit protection agreement has to clearly define the contacting party responsible for determining whether a credit event has occurred. This determination shall not be the sole responsibility of the protection provider. The protection buyer shall have the right/ability to inform the protection provider of the occurrence of a credit event.

In case of credit derivatives allowing for cash settlement, a comprehensive valuation process shall be in place in order to estimate loss reliably. This includes a clearly specified period for obtaining post-credit-event valuations of the underlying obligation.

If the protection purchaser's right and ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation shall provide that any required consent to such transfer may not be withheld.

### **Mismatch between underlying and reference obligation**

#### **Article 97**

A mismatch between the underlying obligation and the reference obligation under the credit derivative or between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible only if the following conditions are met:

- 1) 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;
- 2) 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 there are in place legally enforceable cross-default or cross-acceleration clauses).

### **3.4.4. Calculating credit risk mitigation effect**

#### **Article 98**

The provisions of this Decision referred to the calculation of the effect of credit risk mitigation shall apply for calculating risk weighted exposures that are subject to funded and unfunded credit protection.

Risk weighted exposure amount obtained applying credit risk mitigation techniques may not be higher than the risk weighted amount before credit risk mitigation techniques have been applied

#### **3.4.4.1. Valuation of funded credit protection**

##### **3.4.4.1.2. Valuation of financial collateral**

#### **Methods for calculating effect of financial collateral**

#### **Article 99**

When calculating the effects of financial collateral, bank may use simple or comprehensive method for calculating the effect of financial collateral.

Bank may not use simple and comprehensive method for calculating the effect of financial collateral simultaneously.

##### **3.4.4.1.2.1. Simple method**

#### **Value recognized financial collateral**

#### **Article 100**

Recognized financial collateral shall be assigned with the value that is equal to its market value, provided that the conditions from Article 81, point 3) hereof, have been met.

#### **Calculating credit risk-weighted exposures**

#### **Article 101**

Part of the exposure, which is collateralised up to the market value of recognized collateral, shall be assigned a risk weight that the bank would have assigned if it had a direct exposure to the collateral.

Risk weight of minimum 20% shall be assigned to the unsecured part of exposure, except in cases under the Article 102-104 hereof.

Risk weight to the unsecured part of exposure shall be assigned in compliance with provisions hereof, which prescribe the manner of assigning risk weight to asset items exposed to the credit risk.

## **Repurchase transactions and securities lending or borrowing transactions**

### **Article 102**

A 0% risk weight shall be assigned to the collateralized portion of the exposure arising from repurchase transactions, reverse repurchase transactions and securities or commodities lending or borrowing transactions to/from the counterparty, which meet the conditions under Article 107 hereof.

A 10% risk weight shall be assigned to the collateralized portion of the exposure if the counterparty in the transaction under paragraph 1 above fails to meet the condition set forth in Article 107, point 8) hereof.

## **Transactions with OTC derivatives**

### **Article 103**

The exposure values determined under provisions hereof regulating the manner of calculation of capital requirement for settlement/delivery risk and counterparty credit risk for the derivative instruments listed in Annex 1 hereof and subject to daily marking-to-market shall be assigned the following weights to the collateralised portion:

- 1) a 0% risk weight shall be assigned if collateralised by cash or an instrument which can be considered as cash and in case there is no currency mismatch;
- 2) a 10% risk weight shall be assigned if collateralized by debt securities issued by:
  - central governments or central banks which are assigned a 0% risk weight
  - multilateral development banks assigned a 0% risk weight, or
  - debt securities issued by international organizations assigned a 0% risk weight.

## **Other transactions**

### **Article 104**

A bank shall apply a 0% risk weight if both the exposure and the collateral are denominated in the same currency and provided that the collateral is:

- 1) cash deposit or cash assimilated instrument; or
- 2) in the form of debt securities issued by central governments or central banks or international organizations eligible for a 0% risk weight, whereby the ratio of the secured portion of the original exposure to the market value of the collateral is 1:1.20.

Debt securities issued by central governments and central banks, under paragraph 1 point 2) of this Article, shall be considered debt securities issued by entities referred to in Article 103 point 2) hereof.

### 3.4.4.1.2.2. Comprehensive method

#### Financial collateral valuation

##### Article 105

When a bank uses Financial Collateral Comprehensive Method for valuing financial collateral, the financial collateral valuation shall be performed applying volatility adjustments to the market value of collateral in order to take account market values volatilities under Article 107-109 hereof.

Where the collateral consists of a number of recognised items, the volatility adjustment shall be calculated applying the following formula:

$$H = \sum_i a_i H_i$$

where:

- ***a<sub>i</sub>*** - is the proportion of an item to the collateral as a whole, and
- ***H<sub>i</sub>*** - is the volatility adjustment applicable to that item.

In case of OTC derivatives transactions covered by netting agreements, where financial collateral is denominated in a currency that differs from the settlement currency or the currency in which the underlying exposure is denominated, an adjustment reflecting currency volatility shall be added to the volatility adjustment appropriate to the financial collateral as set out in Article 108 of this Decision.

In case where multiple currencies are involved in the transactions referred to in paragraph 1 of this Article, bank shall apply only a single volatility adjustment reflecting currency volatility.

#### Calculating net adjusted value of the exposure and collateral

##### Article 106

Bank using Financial Collateral Comprehensive Method shall calculate net adjusted value of the exposure applying the following formula:

$$(E^*) = \max\{0, [E_{VA} - C_{VAM}]\}$$

where:

***E\**** - is the fully adjusted exposure value,

***E<sub>VA</sub>*** - is the volatility-adjusted exposure amount;

***C<sub>VAM</sub>*** - is the volatility-adjusted value of the collateral further adjusted for any maturity mismatch in accordance with the formula set forth in Article 121 hereof.

The volatility-adjusted value of the exposure ( $E_{va}$ ) set forth in the formula under paragraph 1 above (except in case OTC derivative transactions where  $E_{va} = E$ ) shall be calculated as follows:

$$E_{VA} = E \times (1 + H_E)$$

where:

**E** - is the exposure value determined under the Standardised Approach and for each off balance sheet exposure a conversion factor of 100% shall be used.

**H<sub>E</sub>** - is the volatility adjustment appropriate to the exposure ( $E$ ), as calculated under the provisions of Articles 107-109, and **H<sub>E</sub>** for credit exposure shall be 0%.

The volatility-adjusted value of the collateral ( $C_{va}$ ) set forth in the formula under paragraph 1 above shall be calculated as follows:

$$C_{VA} = C \times (1 - H_C - H_{FX})$$

where:

**C** - is the market or mortgage lending value of the collateral before the application of volatility adjustments;

**H<sub>C</sub>** - is the volatility adjustment appropriate to the collateral, as calculated under the provisions of Articles 107-109 of this Decision;

**H<sub>FX</sub>** - is the volatility adjustment appropriate to currency mismatch, as calculated under the provisions of Articles 107-109 of this Decision.

## Volatility adjustments

### Article 107

Bank using exposure and/or collateral valuations on daily basis shall determine volatility adjustments using supervisory volatility adjustments set out in the following tables:

Credit quality step with which the credit assessment of the debt security is associated	Residual maturity	Volatility adjustments for debt securities issued by central governments and central banks			Volatility adjustments for debt securities issued by institutions and corporates		
		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	≤ 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	4,243	3	2,121	8,485	6	4,243

	years						
	> 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	-	-	-

Credit quality step with which the credit assessment of a short term debt security is associated	Volatility adjustments for debt securities issued by central governments and central banks with short-term credit assessments			Volatility adjustments for debt securities issued by institutions and corporates 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

Volatility adjustment for other collateral			
	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 recognised exchange	35,355	25	17,678
Cash	0	0	0
Gold	21,213	15	10,607

Volatility adjustment for currency mismatch		
20-day liquidation period (%)	10-day liquidation period (%)	5-day liquidation period (%)
11,314	8	5,657

The liquidation period shall be as follows for the following transactions:

- 1) For secured lending transactions the liquidation period shall be 5 business days. For repurchase transactions (except insofar as such transactions involve the transfer of commodities or guaranteed rights relating to title to

- commodities) and securities lending or borrowing transactions the liquidation period shall be 20 business days;
- 2) For other capital market driven transactions, the liquidation period shall be 10 business days.

The credit quality steps set out in tables under paragraph 1 are credit quality steps that the Central Bank has determined during the allocation of credit assessments of eligible external institutions in accordance with the provisions of this Decision.

For unrated debt securities issued by institutions and satisfying the eligibility criteria in Article 78 hereof, 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.

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 recognised exchange.

For eligible units in open investment funds under Article 79 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 2, 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.

### **Scaling up of volatility adjustments**

#### **Article 108**

If the bank does not perform valuation of exposure and/or collateral on daily basis, but it performs it for longer periods, it shall, for the purpose of calculation of adjusted value of exposure and/or collateral, increase volatility adjustment set forth in Article 107 hereof applying the following formula:

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

where:

**H** – is the volatility adjustment to be applied;

**H<sub>M</sub>** – is the volatility adjustment where there is daily revaluation;

**N<sub>R</sub>** – is the actual number of business days between revaluations;

**T<sub>M</sub>** – is the liquidation period for the type of transaction in question.

## **Conditions for applying a 0% volatility adjustment**

### **Article 109**

Bank may, instead of applying the volatility adjustments calculated under Article 107 and/or 108, apply a 0% volatility adjustment to repurchase, reverse repurchase transactions and securities lending or borrowing transactions, provided that the following conditions are met:

- 1) Both the exposure and the collateral are cash or debt securities issued by central governments or central banks within the meaning of the provisions of this Decision and eligible for a 0% risk weight;
- 2) Both the exposure and the collateral are denominated in the same currency;
- 3) Either the maturity of the transaction is no more than one day or both the exposure and the collateral are subject to daily marking-to-market or daily remargining;
- 4) It is considered that the time between the last marking-to-market before a failure to remargin by the counterparty and the liquidation of the collateral shall be no more than four business days;
- 5) The transaction is settled across a settlement system proven for that type of transaction;
- 6) The documentation covering the agreement is standard market documentation for repurchase transactions or securities lending or borrowing transactions in the securities concerned;
- 7) 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;
- 8) The counterparty is considered a 'core market participant' by the competent authorities. Core market participants shall include the following entities:
  - central governments and central banks exposures to which are assigned a 0 % risk weight under the provisions of this Decision,
  - institutions,
  - other financial institutions, including insurance companies, exposures to which are assigned a 20% risk weight under the provisions of this Decision,
  - regulated open investment funds that are subject to capital or leverage requirements,
  - regulated pension funds,
  - recognised clearing organisations.

## **Calculating risk-weighted exposure amounts**

### **Article 110**

For the purpose of calculating capital requirement for credit risk, net adjusted exposure value  $E^*$  as calculated under Article 106 above shall be taken as the exposure value to which appropriate risk weight is applied in accordance with the provisions of the Decision regulating credit risk exposure weights.

## Calculating fully adjusted exposure values under master netting agreements

### Article 111

When calculating fully adjusted exposure value  $E^*$  for the exposures subject to an eligible master netting agreement covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market-driven transactions, Supervisory Volatility Adjustments Approach as set out in Article 107 hereof shall be applied.

Fully adjusted exposure value  $E^*$  shall be calculated according to the following formula:

$$E^* = \max \{0, [(\sum(E) - \sum(C)) + \sum(|NPS| \times Hsec) + (\sum|Efx| \times Hfx)]\}$$

where:

$E^*$  - is the fully adjusted exposure value;

$E$  - 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, purchased or received or the cash borrowed or received in respect of each such exposure;

$\sum(E)$  - is the sum of all exposures under the master netting agreement;

$\sum(C)$  - is the sum of all securities or commodities borrowed, purchased or received or the cash borrowed or received in respect of each such exposure;

$NPS$  - is net position of the same securities or commodities;

$Efx$  - is the net position (positive or negative) in a given currency other than the settlement currency of master netting agreement;

$Hsec$  - is the volatility adjustment appropriate to a particular type of security;

$Hfx$  - is the foreign exchange volatility adjustment.

Bank shall calculate the net position in each 'type of security' or commodity by subtracting from the total value of the securities or commodities of that type lent, sold or provided under the master netting agreement, the total value of securities or commodities of that type borrowed, purchased or received under the agreement.

For the purposes of paragraph 4, '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, within the meaning of Article 107 hereof.

Bank shall calculate the net position in each currency, other than the settlement currency of the master netting agreement, by subtracting from the total value of securities denominated in that currency lent, sold or provided under the master netting agreement added to the amount of cash in that currency lent or transferred under the agreement, the total value of securities denominated in that currency borrowed, purchased or received under the agreement added to the amount of cash in that currency borrowed or received under the agreement.

The volatility adjustment appropriate to a given type of security or cash position shall be applied to the absolute value of the positive or negative net position in the securities of that type.

The foreign exchange risk volatility adjustment ( $H_{FX}$ ) shall be applied to the net positive or negative position in each currency other than the settlement currency of the master netting agreement.

### **Calculating risk weighted exposure based on master netting agreements**

#### **Article 112**

Fully adjusted exposure value  $E^*$  calculated under Article 111 hereof shall represent the exposure amounts to a counterparty to which corresponding risk weight is assigned in accordance with the provisions of the decision regulating credit risk exposure weights.

#### **3.4.4.1.3. Other funded credit protection**

##### **Deposits with third party institutions**

#### **Article 113**

Bank may treat funded credit protection under Article 86 point 1) above as guarantee by the institution - third party in the manner set out in the provisions of the decision regulating unfunded credit protection, if the conditions set out in Article 87 paragraph 1 above are satisfied.

##### **Insurance policies**

#### **Article 114**

Bank may treat funded credit protection under Article 86 point 2) above as guarantee by the issuing institution in the manner set out in the provisions of the decision regulating unfunded credit protection, if the conditions set out in Article 88 paragraph 2 above are satisfied.

The value of the credit protection recognised under Article 88 point 2) shall be the surrender value of the life insurance policy.

##### **Treatment of other instruments of protection**

#### **Article 115**

Bank may treat funded credit protection under Article 86 point 3) above as guarantee by the issuing institution in the manner set out in the provisions of the decision regulating unfunded credit protection, if the conditions set out in Article 87 paragraph 3 above are satisfied.

The value of the credit protection recognised under Article 86 point 3) shall be the following:

- 1) where the instrument will be repurchased at its face value, the value of the protection shall be that amount;
- 2) 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 77 above.

#### **3.4.4.2. Unfunded credit protection**

##### **Valuation of unfunded credit protection**

###### **Article 116**

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 or non-payment of the borrower or on the occurrence of other specified credit events.

In case of credit derivatives which do not include as a credit event restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that result in a credit loss event (e.g. value adjustment, provisioning or other similar debit to the profit and loss account), credit protection shall be reduced as follows:

- 1) where the amount that the protection provider has undertaken to pay is not higher than the exposure value, the value of the credit protection shall be reduced by 40%;
- 2) where the amount that the protection provider has undertaken to pay is higher than the exposure value, the value of the credit protection shall be no higher than 60% of the exposure value.

##### **Valuation of currency mismatch**

###### **Article 117**

Where unfunded credit protection is denominated in a currency different from that in which the exposure is denominated (a currency mismatch) the value of the credit protection shall be reduced by the application of the following formula:

$$G^* = G \times (1 - H_{FX})$$

where:

$G^*$  - is G adjusted for the amount of unfunded credit protection;

$G$  - is the nominal amount of credit protection;

$H_{FX}$  – is the volatility adjustment for any currency mismatch between the credit protection and the underlying obligation.

Where there is no currency mismatch,  $G^*=G$ .

The volatility adjustments for any currency mismatch shall be calculated based on the data from the table under Article 107 hereof.

### **Partial protection - tranching**

#### **Article 118**

Where the bank transfers a part of the risk of a loan in one or more tranches with different risk profiles to protection provider, the provisions of the Decision regulating securitisation shall apply.

Materiality thresholds on payments below which no payment shall be made in the event of loss are considered to be equivalent to retained first loss positions and to give rise to a tranching transfer of risk.

### **Calculating risk weighted exposures**

#### **Article 119**

Bank shall calculate risk weighted exposure amount for the exposures which are fully protected by unfunded protection depending on the amount of exposure protection in one of the manner specified in paragraphs 2 – 4 of this Article.

If the exposure is fully covered by unfunded credit protection, the exposure shall be assigned a risk weight that would be applied to the unfunded protection provider, whereby adjustment for any maturity mismatch shall be made in the manner specified in Article 122 hereof;

The risk weight that is applied for debtor shall be applied to the unprotected exposure amount.

Where the protected amount is less than the exposure value and the protected and unprotected parts are of equal seniority (bank and the protection provider share losses on a pro-rata basis), risk-weighted exposure amounts shall be calculated in accordance with the following formula:

$$RWE = (E-Ga) \times r + Ga \times g$$

where:

**RWE** – is the risk weighted exposure amount;

**E** – is the exposure value;

**Ga** – is the value of **G\*** as calculated under Article 117 of this decision further adjusted for any maturity mismatch as laid down in Article 122 hereof;

**r** – is the risk weight of exposures to the obligor as specified in the provisions of the Decision regulating credit risk weighted exposures;

**g** - is the risk weight of exposures to the protection provider as specified in the provisions of the Decision regulating credit risk weighted exposures.

Exposure covered by counter-guarantee shall be risk weighted as follows:

- 1) risk weight that is applied to the exposures to the issuer of counter-guarantee shall be the same applied to a portion of exposure covered by counter-guarantee for which the conditions under Article 95 paragraph 1 have been satisfied, and risk weighted exposure amount applied to debtor shall be applied to the remainder or risk weight applied to the issuer of guarantee if it is recognised guarantee;
- 2) risk weight that is applied to the exposures to the issuer of counter-guarantee shall be the same applied to a portion of exposure covered by counter-guarantee for which the conditions under Article 95 paragraph 2 have been satisfied, and risk weighted exposure amount applied to debtor shall be applied to the remainder or risk weight applied to the issuer of guarantee if it is recognised guarantee.

### **3.4.5. Maturity mismatches between exposures and credit protection**

#### **Maturity mismatch**

##### **Article 120**

For the purposes of calculating risk-weighted exposure amounts, bank shall include impact of maturity mismatch of funded and/or unfunded credit protection and underlying obligation in the manner prescribed in Article 121, and/or Article 122 hereof.

Maturity mismatch between credit protection and underlying obligation shall be when the remaining portion of credit protection maturity is shorter than the exposure maturity subject to credit protection.

By way of derogation from paragraph 1 above, when a bank uses simplified method for calculating financial collateral effects, the remaining maturity of credit protection must be at least equal to the remaining exposure maturity subject to credit protection.

Where there is a maturity mismatch the credit protection shall not be recognised where:

- 1) the original maturity of the protection is less than 1 year;
- 2) the remaining term to maturity of credit protection is shorter than three months and shorter than maturity of underlying exposure.

Subject to a maximum of 5 years, the effective maturity of the underlying shall be the longest possible remaining time before the obligor is scheduled to fulfil its obligations.

The maturity of the credit protection shall be the time to the earliest date at which the protection may terminate or be terminated.

Where there is an option to terminate the protection which is at the discretion of the protection seller, the maturity of the protection shall be taken to be the time to the earliest 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 buyer and the terms of the arrangement at origination of the protection contain a positive incentive for the user of credit protection to call the transaction before contractual maturity, the maturity of the protection shall be taken to be the time to the earliest date at which that option may be exercised; otherwise such an option may be considered not to affect the maturity of the protection.

Where a credit derivative is not prevented from terminating prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay the maturity of the protection shall be reduced by the amount of the grace period.

Where credit protection provided by only one protection provider has different maturities, approach under Article 121 and/or 122 hereof shall be applied to each of those maturities.

### **Maturity mismatch between funded credit protection and exposure**

#### **Article 121**

Where a bank uses financial collateral comprehensive method for calculating effects of the financial collateral for the transactions subject to funded credit protection, the maturity of credit protection and that of the exposure shall be reflected in adjusted value of the collateral applying the following formula:

$$C_{VAM} = C_{VA} \times (t - t^*) / (T - t^*)$$

where:

**C<sub>va</sub>** – is the volatility adjusted value of the collateral as specified in Article 106 paragraph 3 hereof 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 definition of maturity, or the value of **T**, whichever is the lowest;

**T** - is the number of years remaining to the maturity date of the exposure calculated in accordance with definition of maturity set out in Article 120, or 5 years, whichever is the lower;

**t\*** - is 0.25

**C<sub>vam</sub>** - shall be taken as **C<sub>va</sub>** (adjusted value of collateral set out in Article above) further adjusted for maturity mismatch to be included in the formula for the calculation of the fully adjusted value of the exposure (**E\***) set out in Article 106 paragraph 1 above.

## **Maturity mismatch between unfunded credit protection and exposure**

### **Article 122**

The maturity of the credit protection and that of the exposure shall be reflected in the adjusted value of the credit protection according to the following formula:

$$\mathbf{Ga} = \mathbf{G}^* \times (t - t^*) / (T - t^*)$$

where:

**G\*** - is the amount of the protection adjusted for any currency mismatch

**Ga** – is **G\*** adjusted for any maturity mismatch

**t** - is the number of years remaining to the maturity date of the credit protection calculated in accordance with definition of maturity, or the value of **T**, whichever is the lowest;

**T** - is the number of years remaining to the maturity date of the exposure calculated in accordance with definition of maturity set out in Article 117 above, or 5 years, whichever is the lower;

**t\*** - is 0.25,

**Ga** – **Ga** is taken from Article 119 paragraph 4 hereof.

### **3.4.6. Credit risk mitigation techniques for basket of exposures**

#### **First-to-default credit derivatives**

##### **Article 123**

Where a bank obtains credit protection for a number of exposures under terms that the first default among the exposures shall trigger payment and that this credit event shall terminate the contract, the bank may modify the calculation of the risk-weighted exposure amount which would, in the absence of the credit protection, produce the lowest risk-weighted exposure amount, but only if the exposure value is less than or equal to the value of the credit protection.

#### **N<sup>th</sup>-to-default credit derivatives**

##### **Article 124**

Where the nth default among the exposures triggers payment under the credit protection, the bank purchasing the protection may only recognise the protection for the calculation of risk-weighted exposure amounts if protection has also been obtained for defaults 1 to n-1 or when n-1 defaults have already occurred.

In case referred to in paragraph 1, the methodology under Article 123 hereof shall apply for first-to-default derivatives appropriately modified for nth-to-default products.

### **3.5. Approval to use ratings assigned by external institutions and distribution of credit ratings**

#### **3.5.1. Approval to use rating**

##### **Manner of approval**

###### **Article 125**

The Central Bank may allow the use of credit ratings established by external institutions for the calculation of capital requirement for credit risk in the following manner:

- 1) by allowing the use of credit ratings assigned by external institutions without a separate request for issuing approval, in accordance with Article 92 hereof; and
- 2) by issuing approval at bank request for the use of ratings established by external institutions, in accordance with Articles 127 and 128 hereof.

External institutions approved in line with paragraph 1 of this Article shall be included in the List of recognized external institutions which ratings may be used in the procedure of calculating capital requirement for credit risk.

The List of external institutions referred to in paragraph 2 of this Article shall contain the following information:

- 1) name and head office of recognized external institutions,
- 2) distribution of credit ratings of the recognized external institutions under specified credit quality steps.

The Central Bank shall announce the List of recognized external institutions under paragraph 3 of this Article on its website.

##### **Approval to use ratings without specific request**

###### **Article 126**

The Central Bank may, without a specific request, allow the use of credit ratings assigned by external institutions provided that those institutions have been previously recognized by competent authorities of EU Member States or other states with which the Central Bank has concluded cooperation agreements in the field of banking supervision.

In case under paragraph 1 of this Article, the Central Bank shall distribute credit ratings of those external institutions in certain credit quality steps.

##### **Granting approval to use rating at bank's request**

###### **Article 127**

Bank which intends to use credit ratings assigned by an external institution which credit ratings have not been approved by the Central Bank in line with Article 125 of

this decision shall submit a request to the Central Bank for obtaining approval for the use of credit ratings of that external institution.

The request referred to in paragraph 1 of this Article shall be supplemented with documents prescribed in a special regulation of the Central Bank.

### **Conditions for recognition**

#### **Article 128**

The Central Bank shall issue the approval to bank for the use of credit ratings of the external institution provided that the criteria of objectivity of the methodologies for assessment, institutional independence, transparency of findings and access to information, adequacy of resources and credibility of the external institution have been met.

### **Objectivity of methodology**

#### **Article 129**

The methodology for assigning credit ratings used by an external institution must be conservative, systematic and comprehensive, and the valuation must be based on the existing previous experience.

External institution shall provide informative and well-grounded opinions on creditworthiness of all of entities that have been assigned credit ratings and these opinions must be based on all relevant information available.

External institution must have:

- 1) quantitative records on the production power of the methodology for assigning credit ratings (by using statistical techniques such as analyses on default and transition matrices) which prove the comprehensiveness and ability of predicting credit ratings over time and through different sector exposures;
- 2) the documentation which proves that the processes which are used in the evaluation of parameters that determine the creditworthiness are implemented and included in the credit assessment methodology,
- 3) the documentation confirming that the procedures which ensure consistent application of the defined methodology for all credit assessments are fully in place.

The methodology of external institution must contain the obligation of ongoing monitoring and reviewing of credit ratings at least once a year, and the obligation to change the credit ratings depending on the change of the financial position of the entities holding credit ratings.

The methodology for the assessment of every market segment must contain the obligation of performing the back-testing for the period of at least one year.

If the external credit assessment institution uses different methodologies for assigning credit ratings considering the specific nature of exposures to certain market segments, it is obliged to indicate the concrete specificities and to determine whether the basic or the key principles of the credit assessment methodology are being applied in the same manner.

In case stated under paragraph 6 of this Article, the Central Bank shall, in the procedure of considering the requests under the Article 125 paragraph 1 of this Decision, evaluate every individual methodology from paragraph 6 of this Article.

## **Independence**

### **Article 130**

The external institution must be independent from any political influence and restriction, as well as from any public pressures that may affect its credit assessments.

The Central Bank shall assess independence of the external institution on the basis of the following elements:

- 1) the ownership and organizational structures of the external institution;
- 2) the sources of the external institution funding;
- 3) the commitment to work and the competence of the staff of the external institution; and
- 4) the manner of managing the external institution.

The external institution is obliged to document and to prove that:

- 1) the internal procedures are accepted and successfully applied and providing for all credit assessments to be performed in a consistent and objective manner especially in situations where there is a possibility of emergence of conflict of interest that could jeopardise the objectivity of assessment,
- 2) the mechanisms are in place that identify the actual and potential conflict of interests and that appropriate measures are being undertaken with a view to their preventing, adequate managing and eliminating in order to prevent the independence, objectivity and high-quality of credit assessments to be jeopardised,
- 3) the mechanisms are being applied which protect the process of credit assessment and independence of the ownership structure,
- 4) the organisational structure of the external institution contains an organisational unit which deals with credit assessments and which is separated from other organisational units of the external institution,
- 5) the external institution is adequately protected from the influence of major clients in order to prevent biased credit assessments,
- 6) the employees have adequate skills and experience required for performing their tasks,
- 7) it has appropriate staffing that can perform consistent assessments and maintain cooperation with their clients in accordance with the applicable methodology,

- 8) it has an independent internal audit function in place, and if this not being the case it must have a similar function established which performs the same duties as internal audit,
- 9) that the integrity of credit assessment process is ensured through adequate written procedures and rules for overall management, then independent policies and, where deemed necessary, the internal code of ethics.

## **Transparency**

### **Article 131**

External institution shall meet the transparency criterion if it:

- 1) provides to potential clients the public availability of the methodology it applies in the process of credit assessment in a simple and easily understandable manner;
- 2) uses appropriate disclosure procedures which enable wide public availability of the disclosed information elements; and
- 3) provides the availability of internal credit ratings to all interested banks under equal terms

The equal terms referred to in paragraph 1 point 3) of this Article, in the context of assessing the criteria of transparency, shall not mean that every interested party should have equal access to and use of the requested information, but that there may not be any pricing discrimination among interested parties under the same economic conditions.

## **External institution credibility**

### **Article 132**

Credit ratings of the external institution must be recognizable on the market, i.e. the external credit assessment institution must prove that users of that information consider its credit ratings trustworthy and reliable.

The Central Bank shall evaluate the credibility of the external institution by using the following parameters:

- 1) market presence of the external institution in relation to certain market segments, countries and regions,
- 2) duration of the external institution on the market, with a minimum of three years;
- 3) revenues and sources of funding of the external credit assessment institution,
- 4) the existing of any kind of pricing of services of the external institution that would be based on credit assessments, and
- 5) the use of internal credit ratings of the external credit assessment institution for the issuing of bonds and/or the assessment of credit risk by other banks or users.

If the level of market presence of a certain external institution is low, the Central Bank shall perform a more detailed procedure of assessment so as to evaluate the manner in which the criteria for issuing the approval have been met.

The Central Bank may consider other parameters of market credibility of the external institution, the choice of which shall depend on the specific nature of the market in which the external institution is operating.

### **3.5.2. Allocation of credit ratings (mapping)**

#### **Allocation procedure**

##### **Article 133**

The Central Bank shall, based on certain quantitative and qualitative parameters, perform the procedure of allocating marks for credit ratings used by the recognized external institution into appropriate credit quality steps under the rating scale and form an appropriate rating scale for credit assessments of that external institution.

#### **Quantitative parameters**

##### **Article 134**

With a view to determining the difference between risk items presented through every credit rating, the Central Bank shall consider the quantitative parameters that refer to all items falling under the same credit rating.

The quantitative parameters referred to in paragraph 1 of this Article shall be long-term rate of default on obligations and other quantitative parameters of similar characteristics.

#### **Treatment of external institutions**

##### **Article 135**

External institutions that do not have sufficiently long historical data on the rates of default on obligations or other similar quantitative parameters are obliged to create assessments of long-term rates of default on obligations and/or other similar quantitative parameters for all items falling under the same credit rating.

#### **Comparison of quantitative parameters**

##### **Article 136**

The Central Bank shall compare the rates of default on obligations and/or other similar quantitative parameters valid for each credit rating of a certain external institution with the reference values determined on the basis of rates of default on obligations and/or other similar quantitative parameters that refer to clients of other

external institutions, and which the Central Bank considers that they correspond to the equal credit risk level.

### **Changes in rating scale**

#### **Article 137**

Whenever the Central Bank evaluates that the rates of default on obligations and/or other similar quantitative parameters for credit ratings of the recognized external institution are high or much higher than the established reference values, then the credit ratings of the aforesaid external institution may be assigned less favourable rank within the rating scale for that institution.

If the external institution proves that the rates of default on obligations and/or other similar quantitative parameters referring to specific credit ratings are no longer high or much higher than the established reference values, the Central Bank may change the previously assigned credit ratings within the rating scale for that institution.

### **Qualitative parameters**

#### **Article 138**

The Central Bank shall, in the procedure of distributing credit ratings of the recognized external institution under the rating scale, also consider the relevant qualitative parameters, in particular:

- 1) the size and the number of the entities assessed by the external institution,
- 2) the range of credit ratings assigned by that external institution,
- 3) the meaning of every credit rating,
- 4) the definition of default on obligations used by that external institution.

### **Monitoring of recognised external institutions**

#### **Article 139**

The recognized external institution is obliged to continuously meet the criteria it has fulfilled in the recognition process.

The Central Bank shall monitor the fulfilment of criteria that were the basis for issuing the approval for the use of credit ratings established by that external institution.

The Central Bank may request from the recognized external institution and banks information significant for the assessment of fulfilment of the criteria that were the basis for issuing the approval for the use of credit ratings established by that external institution.

## **Revocation of approval to use ratings**

### **Article 140**

The Central Bank may, on the basis of the submitted reports and information and other relevant data, initiate the procedure of re-examination of ratings established by the recognized external institution.

In the procedure referred to in paragraph 1 of this Article, the Central Bank shall evaluate, in an adequate manner, the fulfilment of the criteria under Article 128 of this Decision.

Should the Central Bank determine that the recognized external institution no longer fulfils the criteria set out in Article 128 of this Decision, it shall revoke the approval for use of credit ratings established by that external institution and delete this external institution from the List of recognized external institutions.

## **3.6. Securitisation framework**

### **3.6.1. General provisions**

#### **Obligation to calculate securitisation exposures**

##### **Article 141**

The bank shall calculate the risk weighted amount of securitized positions, or securitizing positions which a bank has transferred or acquired under traditional or synthetic securitization schemes.

The management of risks arising from securitisation transactions in relation to which the banks are originators or sponsors shall be evaluated and addressed through appropriate policies and procedures, to ensure in particular that the economic substance of the transaction is fully reflected in the risk assessment and management decisions.

#### **Scope of application by the originator bank**

##### **Article 142**

In case of a traditional securitisation, the originator bank shall exclude the securitised exposures from its calculation of credit risk weighted amounts, and in the case of a synthetic securitisation, the originator bank shall calculate risk weighted exposure in respect of the securitised exposures in accordance with Article 167.

#### **Basic calculation procedures under securitisation**

##### **Article 143**

The risk weighted exposure amount of a securitisation positions shall be included in the calculation of the risk weighted amount of exposures to credit risk.

The risk weights assigned to the exposure value of the position shall be determined based on the credit quality of the position.

The credit quality step under paragraph 2 of a position may be determined by reference to a credit assessment as out in Article 154 hereof.

Where a bank holds an exposure to different tranches in a securitisation scheme, the exposure to each tranche shall be considered a separate securitisation position, while the providers of credit protection to securitisation positions shall be considered to directly hold exposures in the securitisation.

Securitisation positions shall include exposures to a securitisation arising from interest rate or currency derivative contracts.

Where a securitisation position is subject to credit protection, the risk weights shall be determined in accordance with the provisions regulating credit risk mitigation techniques.

### **Recognition of external institutions' ratings**

#### **Article 144**

The risk weight assigned to the securitisation positions shall be determined by comparing the credit assessments of an eligible ECAI against the credit quality steps set out in Article 154.

The Central Bank shall recognise external institution under paragraph 1 if:

- 1) the requirements under Articles 127-132 of the Decision are met;
- 2) its credit assessment process meets the requirements of the Decision on the use of external institution rating;
- 3) it shall have sufficient experience in the assessment of securitisation schemes;
- 4) its assessments shall be sufficiently reliable and accepted by market participants.

A bank shall not use selectively the credit assessments by recognized external institutions if the result of such approach is lower capital requirement.

### **Revolving securitisation exposures**

#### **Article 145**

Where there is a securitisation of revolving exposures subject to an early amortisation provision, the originator bank shall calculate, in accordance with Articles 161 and 162, an additional risk weighted exposure amount in respect of the risk that the levels of credit risk to which it is exposed may increase following the operation of the early amortisation provision.

Revolving exposure, within the meaning of paragraph 1, shall be an exposure whereby customers' outstanding balances are permitted to fluctuate based on their borrowings and repayments, up to an agreed limit.

Early amortisation provision, within the meaning of paragraph 1, shall be a clause which requires, on the occurrence of defined events, investors' positions to be redeemed before the originally stated maturity of the securities issued.

### **Prohibition for providing indirect support**

#### **Article 146**

An originator bank applying Article 142 of the Decision, or a sponsor bank may not provide indirect support to the investors, with a view to reducing their potential or actual losses.

Where an originator bank or a sponsor bank fails to comply with the requirement under paragraph 1, it shall

- 1) calculate risk weighted exposure amount as if securitisation have not been performed; and
- 2) disclose publicly that it had provided non-agreed support and the impact thereof on own funds and/or risk weighted exposure amounts.

Central Bank may impose additional restrictions in cases where an originator bank or a sponsor bank is found to have violated the requirement under paragraph 1 on more than one occasion.

### **3.6.2. Minimum Requirements for Recognition of a Significant Transfer of Credit Risk**

#### **Originator bank obligations**

#### **Article 147**

An originator bank shall apply provisions of Articles 148-151 hereof where significant credit risk associated with the underlying exposures has been transferred under a securitisation scheme.

Where an originator bank has not transferred a significant portion of credit risk within the meaning of paragraph 1 above, it shall not apply provisions of Articles 148-151 hereof.

## **Risk transfer under traditional securitisation**

### **Article 148**

Transfer of significant credit risk under the traditional securitization under Article 147, paragraph 1 shall be recognised where the transfer meets the following requirements:

- 1) the securitisation documentation reflects the economic substance of the transaction;
- 2) the bank and its creditors shall not be entitled to a recourse claim with regard to the securitised exposures in case of bankruptcy or receivership of the bank. This circumstance shall have to be supported by the opinion of qualified legal counsel independent from the bank;
- 3) the securities issued shall not represent payment obligations of the originator bank;
- 4) the transferee is a securitisation special-purpose entity (SSPE);
- 5) the originator bank does not maintain direct or indirect control over the transferred underlying exposures. This condition shall be considered as not complied with if the bank has the right to repurchase from the transferee the previously transferred exposures or if it is obligated to re-assume transferred risk. Where the originator bank services the exposures this shall not of itself constitute indirect control of the exposures;
- 6) where there is a clean-up call option in the agreement, the following conditions shall be satisfied:
  - the clean-up call option is exercisable only at the discretion of the originator bank;
  - the clean-up call option may only be exercised when 90% or more of the original value of the securitised exposures have been amortised;
  - the clean-up call option is not structured as a credit facility or in a way avoiding allocation of losses to positions held by investors.
- 7) The securitisation documentation does not contain clauses that:
  - other than in the case of early amortisation, require the originator bank to improve the quality of the securitisation exposures by a change in the composition of the underlying exposures or other mechanisms;
  - envisage an increase in the yield payable on securitisation positions in case of deterioration in the credit quality of the underlying exposures.

## **Risk transfer under synthetic securitisation**

### **Article 149**

Transfer of significant credit risk under the synthetic securitization under Article 148, paragraph 1 shall be recognised where the transfer meets the following requirements:

- 1) the securitisation documentation reflects the economic substance of the transaction;
- 2) the credit protection provided complies with the requirements under provisions of the Decision with regard to credit risk mitigation. Securitisation special purpose entities (SSPE) shall not be recognised as eligible unfunded protection providers;

- 3) the instruments used to transfer credit risk do not contain terms or conditions that:
  - impose significant materiality thresholds below which credit protection is deemed not to be triggered if a credit event occurs;
  - allow for the termination of the protection due to deterioration of the credit quality of the underlying exposures;
  - other than in the case of early amortisation provisions, require positions in the securitisation to be improved by the originator bank;
  - increase the banks' cost of 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.
- 4) an opinion is obtained from qualified legal counsel independent from the bank confirming the enforceability of the credit protection in all relevant jurisdictions.

### **3.6.3. Using External Credit Assessments**

#### **Requirements to be met by credit assessments**

##### **Article 150**

Credit assessments of an eligible external institution used for the purposes of calculating risk weighted amounts of securitization positions under the provisions of this Decision governing calculation procedures for risk weighted exposure amounts of securitisation positions shall comply with the following conditions:

- 1) 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 securitisation position;
- 2) the credit assessments shall be announced and made publicly available to the market and included in the external institution transition matrix.

#### **Use of credit assessments**

##### **Article 151**

Where a bank uses credit assessments of one or more eligible external institutions, in the calculation of risk weighted exposure amounts for securitisation positions, it shall do so consistently throughout the total period of their application.

Where a securitisation position has two credit assessments given by different external institutions which assign different risk weights, the higher risk weight shall be used.

Where a securitisation position has three or more credit assessments given by different external institutions which assign different risk weights, the assessments assigning the two lowest risk weights shall be used for risk-weighting purposes.

In all other cases, the bank shall use credit assessments by a single eligible external institution to all the tranches in the securitisation scheme.

A credit assessment of a given tranche under traditional securitisation taking into account the availability of credit protection shall be deemed eligible where:

- 1) the credit protection is provided directly to the SSPE;
- 2) the protection meets the requirements of the provisions of the Decision regulating credit risk mitigation techniques.

### **3.6.4. Calculation procedures for risk weighted exposure amounts**

#### **Article 152**

The risk weighted exposure amount of a securitization position shall be calculated by applying to the exposure value of the position the relevant risk weight.

The amount of a securitisation position, within the meaning of paragraph 1 above, shall be its on-balance sheet value.

The amount of the off-balance sheet securitisation positions shall be calculated by multiplying the nominal value by a 100% conversion factor unless otherwise specified in this Decision.

The value of a securitisation position arising from a derivative instrument listed in Annex I hereof, shall be determined in accordance with the methods set forth in the provisions regulating capital requirement for counterparty credit risk.

Where a securitisation position is subject to funded credit protection, the exposure value of that position may be modified in accordance with the provisions of the Decision regulating credit risk mitigation techniques.

### **Risk overlapping in underlying exposures**

#### **Article 153**

Where a bank has two or more overlapping securitisation positions covering the same risk in the underlying exposures, the bank shall be required, to the extent that they overlap, to include that portion of the position that causes the higher capital requirement.

For the purpose paragraph 1, “overlapping” means that the positions, wholly or partially, represent an exposure to the same risk such that to the extent of the overlap there is a single exposure.

### **Calculation of risk weighted exposure amounts**

#### **Article 154**

The risk weighted exposure amount of a rated securitisation position shall be calculated by applying to the exposure value the risk weight associated with the credit quality step according to the following tables:

### Positions with short term credit assessments

<b>Credit quality step</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Other credit quality steps</b>
<b>Risk weight</b>	20%	50%	100%	Deduction from own funds

### Other rated positions

<b>Credit quality step</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Other credit quality steps</b>
<b>Risk weight</b>	20%	50%	100%	350%	Deduction from own funds

### Use of risk weighted amount of underlying exposure

#### Article 155

An originator bank or a sponsor bank may use the risk weighted amount of the underlying exposures which would be calculated had they not been securitised, when it is lower than the risk weighted amount of the securitization positions.

### Treatment of unrated positions

#### Article 156

Unrated securitisation positions shall be deducted from own funds.

Where a bank knows the composition of the pool of exposures securitized all time, it may apply, for the calculation of the risk weighted exposure amounts, the weighted-average risk weight of the underlying exposures multiplied by a concentration ratio. For this purpose, the concentration ratio shall be equal to the ratio of the sum of the nominal amounts of all the tranches to the sum of the nominal amounts of the tranches junior to or pari passu with the tranche held by the bank.

The resulting risk weight shall not be higher than 1000% or lower than any risk weight applicable to a rated more senior tranche.

Where a bank is unable to determine the risk weights that would be applied to the underlying exposures in the manner described in paragraph 2 above, such securitisation positions shall represent deductible item from own funds.

### Treatment of securitisation positions structured as second loss tranches or better in asset backed commercial papers (ABCP) programmes

#### Article 157

A bank may apply the highest risk weight applicable to the underlying exposures, but not lower than 100% where:

- 1) the securitisation exposure is a tranche which is in a second loss position or better in the securitisation scheme and the first loss tranche provides material credit enhancement to the second loss tranche;
- 2) credit assessment of securitisation position is at least equal to the lowest investment grade of the selected external institution.

Paragraph 1 shall apply where a bank does not hold a position in the first loss tranche.

### **Treatment of unrated credit facilities**

#### **Article 158**

A bank shall apply conversion factors to the nominal amounts of liquidity facilities, as follows:

- 1) 20% where the original maturity of one year or less;
- 2) 50% where the original maturity of more than one year.

The liquidity facilities shall be recognized where the following conditions are met:

- 1) the liquidity facility documentation shall clearly identify and limit the circumstances under which the facility may be drawn;
- 2) the facility may not be drawn so as to provide credit support by covering losses already incurred;
- 3) the liquidity facility shall not be used as an instrument for providing permanent or regular funding for the securitisation;
- 4) 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 waiver or deferral;
- 5) where there are credit enhancements from which the liquidity facility would benefit, it shall not be possible for the facility to be drawn after the credit enhancements are exhausted;
- 6) the credit facility agreement shall 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; or
  - that terminates the facility if the average quality of the underlying exposures falls below investment grade, provided the securitised exposures have credit assessments.

The risk weight to be applied shall be the highest risk weight that would be applied to any of the underlying group of exposures.

## **Unrated liquidity facilities that may be drawn only in the event of general market disruption**

### **Article 159**

A 0% conversion factor may be applied to the nominal amount of liquidity facility that is unconditionally cancellable provided that the conditions set out in Article 158 hereof are satisfied.

## **Unrated cash advance facilities**

### **Article 160**

A 0% conversion factor may be applied to the nominal amount of a liquidity facility that is unconditionally cancellable provided that the conditions set out in Article 158 hereof are met and if the repayments of draws on the facility are senior to any other claims on the cash flows arising from the securitised exposures.

## **Additional capital requirements for securitisations of revolving exposures with early amortisation provisions**

### **Article 161**

For securitisation of revolving exposures with early amortisation provisions, in addition to the risk weighted exposure amounts calculated in respect of its securitisation positions purchased, an originator bank shall calculate an additional risk weighted exposure amount according to the principles under Articles 162-165.

The originator bank shall apply the treatment set out in paragraph 1 only to the revolving portion of the securitised exposures.

## **Calculation of additional capital requirements for originator's interest and investor's Interest**

### **Article 162**

A bank shall calculate the risk weighted exposure amount under Article 161 paragraph 1 of the originator's interest and investors' interest.

The originator's interest under paragraph 1 means the exposure value of that part of the drawn amounts on securitised positions, the proportion of which in relation to the amount of the total amount of draws on securitised positions determines the proportion of the cash flows generated on the securitised exposures which are not available to make payments to investors investing in securitisation positions.

The claims resulting from the initiator's interest may not be subordinate to the investors' interest.

The originator's interest within the meaning of paragraph 1 shall be the remaining amount of the drawn securitised exposures net of the initiator's interest under paragraph 2.

The exposure of the originator bank, associated with its rights as the originator, shall not be considered a securitisation position but as a direct pro rata exposure to the purchased portion of the securitisation exposures.

### **Exemptions from additional capital requirements**

#### **Article 163**

An originator bank shall be exempt from the requirements under Article 161 where:

- 1) according to the contractual conditions, investors in a securitisation scheme of revolving exposures remain fully exposed to all future draws on the underlying exposures, and the risk on the underlying facilities does not return to the originator bank even in case of events resulting in early amortisation;
- 2) early amortisation provision is not triggered by events related to the performance of the securitised assets or the originator bank.

### **Maximum capital requirements under securitisations of revolving exposures with early amortisation provisions**

#### **Article 164**

The sum total of the amount of the risk weighted exposure amounts in respect of its positions in the investors' interest and the risk weighted exposure amounts calculated under Article 161 shall be no greater than the greater of:

- 1) the risk weighted exposure amounts of the investors' interest; and
- 2) the risk weighted exposure amounts of the underlying up to the amount of the investors' interest as if they had not been securitised.

Net gains arising from the capitalisation of future income within the meaning of Article 4, paragraph 3 shall not be included in the calculation of the maximum exposure amount as set out in paragraph 1 above.

### **Calculation of risk weighted exposure amounts under securitisation of revolving exposures with early amortisation provisions**

#### **Article 165**

The risk weighted exposure amount under Article 161 shall be determined by multiplying the amount of the investors' interest by the product of the appropriate conversion figure as set out in paragraph 2 above and the weighted average risk weight that would apply to the underlying revolving exposures.

The conversion factor applicable to the exposure amount shall be determined based on the average three-month additional spread in accordance with the following table:

<b>3-months average excess spread</b>	<b>Securitisations subject to a controlled early amortisation provision</b>	<b>Securitisations subject to a non-controlled early amortisation provision</b>
Over 133%	0%	0%
From 100% to 133%	1%	5%
From 75% to 100%	2%	15%
From 50% to 75%	10%	50%
From 25% to 50%	20%	100%
Less than 25%	40%	100%

For the purposes of paragraph 2, early amortisation provision shall be considered to be “controlled” where the following conditions are met:

- 1) the originator bank has an appropriate capital and liquidity management plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortisation;
- 2) throughout the period of amortisation of received interest, principal, expenses and losses uncured and amounts recovered on the underlying exposures there shall be pro-rata sharing between the originator’s interest and the investor’s interest based on the amounts drawn established at least once a month;
- 3) the amortisation period is considered sufficient for the repayment or recognition of default of at least 90% of the total interest of the originator bank and the investors at the beginning of the early amortisation period;
- 4) the individual tranches of early repayment shall not exceed the amortisation payment amounts than in case of implementation of the straight-line amortisation over the period set out in point 3.

In 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 level falling to a specified level, banks shall compare the three-month average excess spread level with the excess spread levels at which excess spread is required to be trapped.

The requirement under paragraph 3, point 1 is valid also in case of non-controlled amortization.

Where the early amortisation provision does not explicitly provide for the level at which the excess spread is set, the same level shall be taken to be 450 basis points higher than the excess spread level at which early amortisation is triggered.

A conversion factor of 90% shall be applied to all securitisation positions subject to an early amortisation provision not dealt with under paragraphs 2 - 5 above, and to those not subject to an early amortisation provision – a conversion factor of 100% shall be applied.

## **Recognition of credit protection provided on securitisation positions**

### **Article 166**

Bank may calculate the risk weighted amount of a securitisation position not secured by credit protection in accordance with the provisions of the decision regulating credit risk mitigation techniques.

Where securitisation positions are netted out against capital base positions, a bank shall report in advance to the Central Bank on the existence of a credit protection under paragraph 1 above.

## **Calculation of risk weighted exposure amounts for exposures securitised in a synthetic securitisation**

### **Article 167**

In calculating risk weighted exposure amounts for the entire pool of securitised exposures in a synthetic securitisation scheme, the originator bank of a synthetic securitisation shall calculate the risk weighted amount of the securitisation scheme tranches held by it according to Article 168 and the provisions of the decision regulating the calculation procedures for risk weighted exposures in the securitisation positions.

## **Treatment of maturity mismatches in synthetic securitisations by an originator bank**

### **Article 168**

For the purposes of calculating the risk-weighted exposure amount in accordance with Article 167, paragraph 1, the bank shall take into consideration any maturity mismatch between the credit protection provided and the securitised exposures in accordance with paragraphs 2 and 3 above.

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 a securitisation tranche in the form of credit protection shall be determined in accordance with the provisions of the decision regulating credit risk mitigation.

An originator bank shall ignore any maturity mismatch between the securitisation tranche and the underlying pool of exposures for tranches, which are subject to deduction from the capital base.

For all other tranches, except maturity mismatches under paragraph 4 above, the maturity mismatch shall be calculated according to the following formula:

$$RW^* = \left[ RW(SP) \cdot \frac{(t - t^*)}{(T - t^*)} \right] + \left[ RW(Ass) \cdot \frac{(T - t)}{(T - t^*)} \right]$$

where:

***RW\**** - is the credit risk weighted exposure amount in a securitisation position for the purpose of calculating total credit risk weighed amounts

***RW (Ass)*** – is the risk-weighted exposure amounts for exposures if they had not been securitised;

***RW (SP)*** – is the risk weight calculated under article 167 provided that there was no maturity mismatch;

***T*** – is the residual maturity of the underlying exposures expressed in years;

***t*** - is the residual maturity of the credit protection expressed in years.

#### **IV. CALCULATION OF CAPITAL REQUIREMENTS FOR SETTLEMENT, DELIVERY AND COUNTERPARTY CREDIT RISK**

##### **4.1. Calculating capital requirement for settlement/delivery risk**

###### **Settlement/delivery risk**

###### **Article 169**

Bank shall, subject to the settlement techniques, calculate the capital requirement for settlement/delivery risk in accordance with Article 170 of this Decision for unsettled transactions, and/or in accordance with Article 171 of this Decision for free delivery transactions.

Transactions referred to in paragraph 1 of this Article refer to debt, equity and commodity instruments and currency exchange, excluding repurchase and reverse repurchase contracts and contracts on borrowing securities to and from other counterparty.

Transactions involving settlement/delivery risk shall always be included in the trading portfolio.

###### **Unsettled transactions**

###### **Article 170**

If transactions with positions from the trading book between bank and its counterparty are not settled within five or more business days after the due delivery date, the bank shall calculate the exposure to settlement risk.

Exposure to settlement risk is calculated as the difference between the agreed settlement price for a specific debt, equity or commodity instrument and currency and its current market value, if such difference represents loss for the bank.

Required capital for settlement risk is calculated by multiplying bank exposure calculated in accordance with paragraph 2 of this Article by the appropriate factor in the following table and increased by 25%:

<b>Number of working days after delivery date or due settlement date</b>	<b>Factor</b>
5-15	8 %
16-30	50%
31-45	75%
Over 45	100%

The amount of credit risk weighted exposure for settlement/delivery risk shall be calculated by multiplying capital charge referred to in paragraph 2 above by 10.

### **Free deliveries**

#### **Article 171**

Bank shall calculate the required capital for settlement/delivery risk for transactions executed by application of the free-delivery technique in the following cases:

- 1) if the payment of securities or currency is performed before they are received, or if the securities or currencies are delivered before they are paid; and
- 2) in case of cross-border transactions, if one or several days have elapsed since the payment or delivery referred to in point 1) of this paragraph.

If from the date of payment/delivery by the bank until the end of the fourth business day after the second contracted payment/delivery date, counterparty fails to fulfil the obligation, during such period bank shall calculate required capital for settlement risk in respect of such exposure by applying the risk weight to the value of effected payment/delivery, in accordance with the provisions of this Decision regulating the calculation of required capital for credit risk.

If after the second contracted payment/delivery date more than four business days elapse and the counterparty fails to fulfil its obligation, the bank shall deduct the value of executed payment/delivery, increased by the current positive exposure (if any), from the amount of own funds.

The current positive exposure, within the meaning of paragraph 3 of this Article, is the increased amount of exposure arising from the change in fair value of payment/delivery executed on the first contracted date and fair value of non-executed delivery/payment.

In cases of a system wide failure of a settlement or clearing system, the Central Bank may waive the capital requirements calculated as set out above until the situation is rectified. In this case, the failure of counterparty to settle a trade shall not be deemed a default for purposes of credit risk.

## **4.2. Calculating capital requirement for counterparty credit risk**

### **Calculation procedures**

#### **Article 172**

For the purpose of calculating capital requirement for counterparty risk, bank shall calculate the exposure for the following items from trading and banking books:

- 1) OTC financial derivatives;
- 2) credit derivatives;
- 3) repurchase, reverse repurchase agreements and securities or commodities lending/borrowing agreements;
- 4) long settlement transactions
- 5) margin lending transaction

The bank shall calculate exposures to the items referred to in paragraph 1 point 1) of this Article by using the Original Exposure Method, Mark-to-Market Method, or Standardised Method, with the combined use being allowed on a consolidated basis for the same group of transactions but not on a stand-alone basis.

Notwithstanding paragraph 2 above, the bank entering into transactions with financial instruments under Annex 1 of this Decision shall calculate exposures to the items referred to in paragraph 1 point 1) above using the mark-to-market method or standardised method

The bank shall calculate exposures to the items referred to in paragraph 1 point 2) of this Article using mark-to market method or standardised method.

The bank shall calculate exposures to the items referred to in paragraph 1, points 3) and 4) above applying the provisions of the decision regulating credit risk mitigation techniques, with the respective items being considered, within the meaning of paragraph 2 above, the same group of transactions.

The bank shall calculate exposures to the items referred to in paragraph 1, point 5) above using the original exposure method, mark-to-market method or standardised method regardless of the choice of methods for items referred to in paragraph 1 points 1) to 4) above.

For the purpose of calculating exposures in accordance with the original exposure method and mark-to-market method, the bank shall use notional or nominal amounts of derivative instruments or long settlement transactions, or amounts which represent the appropriate basis for risk measurement.

The bank calculating exposures by using the mark-to-market method or standardised method shall not apply the original exposure method in the next reporting period.

For the purpose of calculating exposures in accordance with the original exposure method, mark-to-market method or standardised method, the exposure to

counterparty shall be the sum of exposures calculated in each netting set with that counterparty.

Bank shall not calculate exposures to a central counterparty that result from the derivative financial instruments, repurchase and reverse repurchase agreements, securities or commodities lending or borrowing transactions, securities margin lending transactions or long settlement transactions if they have been accepted by the central counterparty. The bank shall also not include exposures arising from financial instruments given as collateral to the central counterparty for said transactions in the risk-weighted assets. For the purpose of applying the exemptions, exposures to the central counterparty must be fully collateralised on a daily basis.

For the purpose of calculating risk-weighted exposures, the bank shall treat the exposures calculated in accordance with the original exposure method, mark-to-market method or standardised method and by applying the provisions referred to in paragraphs 2 to 9 above in accordance with provisions of the decision regulating calculation of capital requirement for credit risk.

If a bank protects exposure to credit risk or counterparty credit risk arising from banking book by a credit derivative, capital requirement for protected positions shall be calculated in accordance with provisions of the decision regulating credit risk mitigation techniques whereby it shall not calculate for the respective derivative capital requirement for counterparty credit risk.

Notwithstanding paragraph 12 of this Article, if credit derivative is not in the trading book and if risk transfer does not meet requirements for credit risk mitigation techniques recognition under this Decision, bank may include the respective credit derivative in the calculation of capital requirement for counterparty credit risk, provided the said approach is applied on a consistent basis.

Total risk weighted exposures calculated in accordance with paragraph 10 above shall be included in calculation of risk weighted assets for credit risk calculated in accordance with the provisions regulating calculation of capital requirement for credit risk.

The bank shall notify the Central Bank without any delay on repurchase and reverse repurchase agreements and securities or commodities lending or borrowing agreements with a counterparty if the counterparty defaulted on these transactions.

### **Original exposure method**

#### **Article 173**

In accordance with this method, the exposure of an individual contract represents the product of notional (hypothetical) or nominal amount of that contract and corresponding percentage from the following table:

<b>Original maturity date</b>	<b>Contracts on interest rates</b>	<b>Contracts on foreign currencies and gold</b>
1 year or less	0.5%	2.0%
From 1 to 2 years	1.0%	5.0%
For each following year over two years	1.0%	3.0%

### **Current exposure method**

#### **Article 174**

The bank shall use the method of current exposure (mark-to-market) for calculating the following:

- 1) current exposure of each contract with positive value, which equals the current market value of such contract -derivative;
- 2) potential credit exposure in the period remaining to the maturity date of the contracted liability, obtained when nominal (notional) value of the principal of each contract-derivative is multiplied by corresponding conversion factor from the following table:

<b>Residual maturity</b>	<b>Contracts on interest rates</b>	<b>Contracts on foreign currencies and gold</b>	<b>Contracts on equity instruments</b>	<b>Contracts on precious metals, other than gold</b>	<b>Contracts that cannot be classified into other groups</b>
1 year or less	0%	1%	6%	7%	10%
from 1 to 5 years	0.5%	5%	8%	7%	12%
over 5 Years	1.5%	7.5%	10%	8%	15%

For contracts which do not fall within any of the categories indicated in table above, bank shall use percentages from the category of contracts concerning commodities other than precious metal, according to their residual maturity.

For contracts with multiple exchanges of principal, bank shall multiply the percentages indicated in table above by the number of remaining payments in accordance with the provisions of the contract.

In case of contracts that are structured to settle outstanding exposure of the bank following specified future payment dates and where the terms are reset on that dates (the market value of a contract is zero on each previously specified date in the future), the residual maturity shall be the time until the next reset date. Exceptionally, for interest rate contracts which meet the said conditions and expire in the period longer than one year, bank shall use a percentage not lower than 0.5%, regardless of the residual maturity until the next reset date.

Potential exposure arising from total return swaps and credit default swaps shall be the nominal amount multiplied by the following percentage:

- 1) 5%, if the reference obligation meets the criteria for qualifying items referred to in Article 202 of this Decision; or
- 2) 10%, if the reference obligation does not meet the criteria for qualifying items referred to in Article 202 of this Decision.

Exceptionally, for the purpose of calculating potential exposure for credit default swaps, the protection provider may use a figure of 0%, unless the credit default swap is subject to closeout due to the insolvency of the credit protection buyer (even though the reference obligation has not yet defaulted).

For the purpose of establishing the percentage for the calculation of potential exposure per credit derivative based on nth default, the bank, which is the protection provider, shall use the percentage set out in paragraph 5 of this Article which corresponds to the nth reference obligation arising from the contract with the lowest credit quality.

### **Standardised method for exposure calculation**

#### **Article 175**

In accordance with the standardised method the exposure value shall be calculated separately for each netting set as follows:

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

where

**CMV** – the current market value of the portfolio of transactions within the netting set;

$$CMV = \sum CMV_i$$

**CMV<sub>i</sub>** – the current market value of transaction **i**;

**CMC** – the current market value of the collateral assigned to the netting set;

$$CMC = \sum CMC_l$$

**CMC<sub>l</sub>** – the current market value of collateral **l**;

**i** = index designating transaction **i**;

**l** = index designating collateral **l**;

**j** = index designating hedging set category. These hedging sets correspond to risk factors for which a net risk position is established on which the exposure measure is then based;

**$RPT_{ij}$**  – risk position from transaction  $i$  for the purposes of calculating the net risk position of the hedging set  $j$ ;

**$RPC_{ij}$**  – risk position from collateral  $l$  for the purposes of calculating the net risk position of the hedging set  $j$ ;

**$CCRM_j$**  – CCR multiplier set out in Table under Article 178 of this Decision with respect to hedging set  $j$ ;

**$\beta = 1,4$ .**

For the purposes of calculating the exposure value, collateral received from a counterparty has a positive sign and collateral posted to a counterparty has a negative sign.

For the purposes of recognising collateral in accordance with this method, collateral shall at least comply with the collateral eligibility requirements under the provisions of this Decision regulating credit risk mitigation techniques.

In accordance with this method, for OTC derivative financial instruments (excluding transactions with a non-linear risk profile), the part of the transaction which is settled by a cash payment in gross amount (including the notional amount) is referred to as the payment leg.

For the purposes of calculating the exposure value under this method, each leg of the transaction is included in the interest rate risk position, where the bank may disregard the interest rate risk from the payment leg with a remaining maturity of less than one year.

Banks may treat transactions that consist of two payment legs that are denominated in the same currency as a single aggregate transaction and apply the same treatment as in the case of individual payment legs of the transactions.

OTC financial derivatives (excluding transactions with a non-linear risk profile) relating to equities and equity indices, gold, other precious metals or other commodities shall be treated as the combination of the risk position in the underlying instrument and the interest rate risk position for the payment leg of the transaction. If the payment leg is denominated in a foreign currency it is additionally mapped to a risk position in the respective currency.

OTC financial derivatives (excluding transactions with a non-linear risk profile) relating to debt instruments shall be treated as the combination of the interest rate risk position in the underlying instrument and the interest rate risk position for the payment leg of the transaction. If the underlying debt instrument and/or the payment leg of the transaction are denominated in a foreign currency, the debt instrument is mapped to a risk position in this currency. The exposure value assigned to a foreign exchange basis swap transaction is zero.

The risk position from OTC financial derivative (excluding transactions with a non-linear risk profile) shall be determined by the effective notional value (market price multiplied by quantity) of the underlying instrument (including commodities), except for debt instruments.

For debt instruments and for payment legs, the risk position is the effective notional value of the outstanding gross payments (including the notional amount) multiplied by the modified duration of the debt instrument or payment leg of the transaction.

The risk position from a credit default swap is the notional value of the reference debt instrument multiplied by the remaining maturity of the contract.

The risk position from transactions with a non-linear risk profile (including options and option-like instruments) is equal to the delta equivalent of the notional value of the underlying financial instrument, except in the case of an underlying debt instrument.

For transactions with a non-linear risk profile relating to debt instruments or payment legs of the transaction, the risk position is equal to the delta equivalent of the notional value of the underlying financial instrument or payment leg of the transaction multiplied by its modified duration.

For the purposes of determining the risk position, the collateral received from a counterparty shall be treated as a claim (long position) from OTC financial derivative contract, while the collateral posted by a counterparty shall be treated as an obligation due (short position) to the counterparty under the derivative contract.

## Determining risk positions

### Article 176

For the purposes of determining the size and sign of a risk position, a bank may use the following formulae:

- 1) For all instruments other than debt instruments:
  - effective notional 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: the option price, in all other cases: the value of the underlying instrument itself);  
 **$p$**  = price of the underlying instrument, expressed in the same currency as  **$V$** .

- 2) or debt instruments and the payment legs of transactions:
  - effective notional value/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: the option price; and in other cases: the value of the underlying instrument itself or of the payment leg);  
**r** = interest rate level.

If **V** is denominated in a currency other than the reference currency, the bank shall convert the OTC financial derivative into the reference currency by multiplication with the relevant exchange rate.

**Article 177**

The bank shall group risk positions into appropriate hedging sets and calculate its net risk position for each hedging set. The net risk position represents the absolute value amount of the sum of individual risk positions (arising from transactions and collateral instruments in one netting set) in an individual hedging set as follows:

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

Risk positions from money deposits received from the counterparty as collateral, from payment legs and from underlying debt instruments to which according to Table in Article 201 of this Decision a capital requirement for specific risk of debt instruments of 1.6% or less would be applied, shall be assigned by the bank to one of the hedging sets for each currency as set out in the following table:

	<b>Government referenced interest rates</b>	<b>Other interest rates</b>
Residual maturity	Up to 1 year	Up to 1 year
Residual maturity	from 1 to 5 years	from 1 to 5 years
Residual maturity	over 5 years	over 5 years

For risk positions from the underlying debt instrument or payment leg of the transaction, for which the interest rate is linked to a reference interest rate (e.g. EURIBOR, LIBOR etc.), the residual maturity is the length of the time interval up to next re-adjustment of the interest rate. In all other cases, the residual maturity is the remaining life of the underlying debt instrument or in the case of a payment leg, the remaining life of the transaction.

Risk positions from a reference obligation (debt instrument) that underlies a credit default swap, shall be assigned by the bank to separate hedging sets for each issuer.

The bank shall treat the nth-to-default credit derivative as follows:

- 1) a risk position in a reference obligation shall be equal to the nominal value of the reference obligation multiplied by modified duration of the nth-to-default credit derivative considering the change in credit spread of the reference obligation;
- 2) each reference obligation in the nth-to-default credit derivative makes up one hedging set. Risk positions from different nth-to-default credit derivatives shall not be included in the same hedging set;

- 3) counterparty credit risk multiplier (CCRM) which is applied to a hedging set arising from the nth-to-default credit derivative shall be equal to 0.3% for the underlying debt instrument which has a credit assessment by an eligible ECAI or 0.6% for all other reference obligations (debt instruments).

Risk positions from the underlying debt instruments or money deposits that are posted with a counterparty as collateral, to which according to table in Article 201 of this Decision a risk weight of more than 1.60% is assigned, shall be assigned to separate hedging sets for each issuer. Risk positions from payment legs emulating a debt instrument, shall be assigned to separate hedging sets for each issuer. Risk positions that arise from debt instruments of a certain issuer, payment legs emulating the debt instrument of a certain issuer, or from the reference obligation (debt instrument) of the same issuer underlying a credit default swap, may be assigned to the same hedging set.

Risk positions from financial instruments (other than debt instruments), shall be assigned to separate hedging sets, except in cases where the hedging sets are identical or similar.

The similarity of instruments is established as follows:

- 1) for equities, similar instruments are those issued by the same issuer. An equity index is treated as a separate issuer;
- 2) for precious metals, similar instruments are those of the same metal. A precious metal index is treated as a separate precious metal;
- 3) 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;
- 4) for commodities, similar instruments are those of the same commodity. A commodity index is treated as a separate commodity.

### **Counterparty credit risk multiplier (CCRM)**

#### **Article 178**

The bank shall use counterparty credit risk multipliers (CCRM) for separate hedging sets in accordance with the following table:

<b>No</b>	<b>Hedging set categories</b>	<b>CCRM</b>
1	Interest rates	0.2%
2	Interest rates for risk positions from a reference obligation (debt instrument) that underlies a credit default swap and to which a risk weight of 1.6% or less applies in accordance with the table under Article 201 of this Decision	0.3%
3	Interest rates for risk positions from debt instruments or reference debt instruments to which a risk weight of more than 1.6% in accordance with the table under Article 201 of this Decision	0.6%
4	Exchange rates	2.5%
5	Electricity	4%
6	Gold	5%

7	Equity	7%
8	Precious metals (except gold)	8.5%
9	Other commodities (excluding precious metals and electricity)	10%
10	Underlying instruments of OTC derivative financial instruments that are not in any of the above categories	10%

A bank shall assign underlying instruments of OTC financial derivatives from the table under paragraph 1 above into separate hedging sets based on the category of the underlying instrument.

For transactions with a non-linear risk profile or for payment legs and transactions with debt instruments as underlying for which the bank cannot determine the delta or the modified duration, respectively, the bank shall use the mark- to-market method in accordance with Article 174 of this Decision. Netting shall not be recognised and the exposure value shall be determined on the basis of a netting set that comprises just the individual transaction.

A bank shall have internal controls system in place to verify that a particular transaction is covered by standardised netting contracts in accordance with the provisions of Articles 179-183 of this Decision, prior to including such transaction in a hedging set.

If a bank makes use of collateral to mitigate its counterparty credit risk, it shall have internal controls system in place to verify that the collateral meets the legal certainty standards set out in the provisions of this Decision regulating credit risk mitigation.

## **Contractual netting**

### **Article 179**

For the purpose of reducing exposure to counterparty risk, the following types of contractual netting may be recognised:

- 1) bilateral contracts for novation between a bank and its counterparty under which mutual claims and obligations are automatically amalgamated in such a way that this novation fixes one single net amount each time novation applies and thus creates a legally binding, single new contract extinguishing former contracts;
- 2) other bilateral agreements between a bank and its counterparty.

Counterparty within the meaning of paragraph 1 shall be any legal or natural person that has the power to conclude a contractual netting agreement.

## **Recognising netting agreements**

### **Article 180**

The Central bank shall recognise netting agreement for the purpose of reducing exposure to a counterparty risk if the following conditions are met:

- 1) a bank must have a contractual netting agreement with its counterparty which creates a single legal obligation, covering all included transactions, such that, in the event of a counterparty's failure to perform owing to default, bankruptcy, liquidation or any other similar circumstance, the bank would have a claim to receive or an obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions;
- 2) a bank must have written and reasoned legal opinions to the effect that, in the event of a legal challenge, the relevant courts and administrative authorities would, in the cases described under paragraph 1 point 1) above find that the bank's claims and obligations would be limited to the net sum, as described in paragraph 1 point 1) above, under:
  - 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,
  - the law that governs the individual transactions included, and
  - the law that governs any contract or agreement necessary to effect the contractual netting;
- 3) a bank must have procedures in place to ensure that the legal validity of its contractual netting is kept under review in the light of possible changes in the relevant laws;
- 4) the bank maintains all required documentation in its files,
- 5) 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, and
- 6) credit risk to each counterparty is aggregated to arrive at a single legal exposure across transactions.

The Central Bank must be satisfied, if necessary after consulting the other competent authorities concerned, that the contractual netting is legally valid under the law of each of the relevant jurisdictions. If any of the competent authorities are not satisfied in that respect, the contractual netting agreement will not be recognised as risk-reducing for either of the counterparties. The Central Bank may accept reasoned legal opinions drawn up by types of contractual netting.

No contract containing a provision which permits a non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulter, even if the defaulter is a net creditor (a 'walkaway' clause), may be recognised as risk-reducing.

### **Additional conditions for cross-product netting agreement**

#### **Article 181**

Besides the conditions under Article 180 of this Decision, the following conditions for cross-product netting agreement must be met:

- 1) the net sum referred to in Article 180 paragraph 1 point 1) hereof shall be the net sum of the positive and negative close out values of any included individual bilateral master agreement and of the positive and negative mark-

- 2) the written and reasoned legal opinions referred to in Article 180 paragraph 1 point 2) shall address the validity and enforceability of the entire contractual cross-product netting agreement under its terms and the impact of the netting arrangement on the material provisions of any included individual bilateral master agreement.;
- 3) the bank shall have procedures in place under Article 180 paragraph 1 point 3) to verify that any transaction which is to be included in a netting set is covered by a legal opinion; and
- 4) taking into account the contractual cross-product netting agreement, the bank shall continue to comply with the requirements for the recognition of bilateral netting and the requirements for the recognition of credit risk mitigation in accordance with the provisions of the decision regulating credit risk mitigation.

Contractual cross product netting agreement under paragraph 1 above shall be written bilateral agreement between a bank and a counterparty which creates a single legal obligation covering all included bilateral master netting agreements and transactions belonging to different product categories. Contractual cross product netting agreements do not cover netting other than on a bilateral basis.

For the purposes of cross product netting under paragraph 1 above, the following are considered different product categories:

- 1) repurchase transactions and reverse repurchase transactions;
- 2) securities and commodities lending and borrowing transactions, margin lending transactions;
- 3) OTC financial derivatives under Annex 1 hereof.

## **Recognition of netting**

### **Article 182**

For the purposes of the standardised method set out in Article 175 hereof, netting shall be recognised in accordance with the provisions regulating calculation of capital requirement for counterparty credit risk.

For the purposes of the original exposure method set out in Article 173 hereof and the mark-to-market method set out in Article 174 hereof, netting shall be recognised in accordance with the provisions of Articles 183 and 184 of this Decision.

### **Article 183**

For the purposes of the mark-to-market method, the bank may calculate the current replacement cost and the notional principal amounts by using the net amounts set in contracts for novation.

For the purposes of the original exposure method, the bank may calculate the notional principal amount by taking account of the net amounts set in contracts for novation and shall apply percentages of table in Article 174 of this Decision.

#### Article 184

For the purposes of mark-to-market method for contracts included in a netting agreement the bank may:

- 1) calculate the current replacement cost by taking account of the actual hypothetical net replacement cost which results from the agreement. In the case where netting leads to a net obligation for the bank calculating the net replacement cost, the net replacement cost shall be zero;
- 2) reduce the figure for potential future credit exposure for all contracts included in a netting agreement according to the following formula:

$$PCE_{red} = 0.4 \times PCE_{gross} + 0.6 \times NGR \times PCE_{gross}$$

where:

**$PCE_{red}$**  – the reduced figure for potential future credit exposure for all contracts with a given counterparty included in a legally valid bilateral agreement;

**$PCE_{gross}$**  – the sum of the figures for potential future credit exposure for all contracts with a given counterparty which are included in a legally valid bilateral netting agreement and are calculated by multiplying their notional principal amounts by the percentages set out in table in Article 174 of this Decision;

**$NGR$  (*net-to-gross ratio*)** – the quotient of the net replacement cost for all contracts included in a legally valid bilateral netting agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a legally valid bilateral netting agreement with that counterparty (denominator).

For the purposes of calculating the potential future credit risk exposure according to the formula referred to in paragraph 1 above, the bank may take into account perfectly matching contracts included in the netting agreement as a single contract with a notional principal equivalent to the net receipts.

Perfectly matching contracts within the meaning of paragraph 2 above shall be forward foreign exchange contracts or similar contracts in which a notional principal is equivalent to cash flows if the cash flows fall due on the same value date and fully or partly in the same currency.

For the purposes of the original exposure method:

- 1) the bank may take into account perfectly matching contracts included in the netting agreement as a single contract with a notional principal equivalent to the net receipts, where the notional principal amounts are multiplied by the percentages given in table under Article 173 of this Decision; and
- 2) for all other contracts included in a netting agreement, not perfectly matched, the bank may reduce the percentages applicable as indicated in the following table:

<b>Original maturity</b>	<b>Interest rate contracts</b>	<b>Foreign exchange contracts and gold</b>
One year of less	0.35%	1.50%
More than one year but not more than two years	0.75%	3.75%
Additional allowance for each additional year	0.75%	2.25%

## **V. CALCULATION OF THE CAPITAL REQUIREMENT FOR MARKET RISKS**

### **5.1. Capital requirement for market risks**

#### **Capital requirement**

##### **Article 185**

Bank is obliged to calculate the capital requirement for market risks in accordance with the provisions of this Decision.

Capital requirement for market risks represents the sum of capital required for:

- 1) position risk, which includes price risk and interest rate risk;
- 2) FX risk, and
- 3) Commodity risk.

### **5.2. Trading book**

#### **Positions in trading book**

##### **Article 186**

Trading book shall include the positions in financial instruments for trading, or for hedging particular positions from the trading book and for which there are no restrictions for trading, nor limits for hedging of these positions.

Bank may include positions arising from internal hedging in its trading book if the criteria set forth in Article 189 hereof are met.

Positions held for trading purposes shall be those that the bank holds for sale in short period and/or with the intention of generating income in short period from actual or expected difference between their purchased and sold price, or from other changes in prices or interest rates.

The term “position” shall include proprietary positions of bank, positions arising from client servicing and other positions arising from market making.

Items allocated under the category financial assets or liabilities at fair value at the account of income and loss for trading in accordance with International Accounting Standards shall also be allocated into the trading book.

By way of derogation from paragraph 5 of this Article, embedded derivatives which are considered separate financial instruments in accordance with the provisions of International Financial Reporting Standards and do not meet the conditions referred in paragraph 1 of this Article, shall not be considered trading book positions and be included in the calculation of capital requirements for market risks.

If an embedded derivative does not represent a trading book position, the bank shall adequately monitor, measure and manage risks arising from this instrument and take them into account in the internal capital adequacy assessment process.

The Central Bank may exclude individual instruments from the trading book by adopting a decision to that effect, regardless of their classification under International Accounting Standards, if it establishes that they are not held for trading.

The Central Bank may include individual instruments in the trading book by adopting a decision to that effect, regardless of their classification under International Accounting Standards.

## **Requirements for trading**

### **Article 187**

The following conditions must be satisfied for the positions/portfolios with a trading intent:

- 1) Clearly documented trading strategy for individual position/instrument or portfolio defining the expected holding horizons of positions or portfolios in the trading book;
- 2) Clearly defined policies and procedures for active management of trading book positions including the following:
  - bank's organizational units authorized to enter into positions in the trading book (trading desk);
  - position limits and the frequency of their review;
  - authorisations to individual employees for entry into positions within prescribed limits and in accordance with the prescribed trading strategy;
  - the system of reporting to senior management on positions and utilization of limits which is integrated in the bank's daily risk management process; and
  - the process of monitoring positions with reference to the assessment of their marketability or hedge-ability or its component risks, and the system of quality assessment and availability of market prices, which includes monitoring the turnover and size of positions traded in a certain market; and

- 3) clearly defined policies and procedures for monitoring trade book positions with reference to the prescribed trading strategy, including monitoring the turnover and size of inactive trade book positions.

### **Treatment of repurchase transactions and securities lending or borrowing transactions**

#### **Article 188**

Positions arising from repurchase agreements, reverse repurchase agreements and securities lending or borrowing to the counterparty may be included in the trading book for the purposes of calculating initial capital requirements for position risks if the bank can prove the intention to trade on this positions and if it is including such positions in the trading book in the consistent manner.

For the purposes of calculating the capital requirement for credit risk the positions from paragraph 1 of this Article shall be treated with provisions hereof that prescribe calculation of capital requirements for the settlement/delivery and counterparty credit risks.

### **Internal hedging**

#### **Article 189**

An internal hedge is a protection relation entered into by the organisational unit responsible for the active management of trading book positions and other organizational units of a bank which materially or completely reduces individual risks of a non-trading book position or a set of positions.

Positions arising from internal hedges may be included in the trading book, if such positions are held with trading intent and that the bank treats them in accordance with provisions of Articles 186 to 188, and Articles 190 and 191 of this Decision and provided that all of the following criteria are met:

- 1) internal hedges shall not be primarily intended to reduce capital requirements,
- 2) each internal hedge relation shall be properly documented, subject to management board approval and proscribed internal audit procedures;
- 3) the internal hedging transactions shall be entered into at market conditions,
- 4) the bulk of the market risk that is generated by the internal hedge shall be dynamically managed within the framework of existing position limits; and
- 5) bank shall have in place a system of monitoring position generated by internal hedging transactions.

Where a bank is using internal hedges to offset interest rate risk arising from a non-trading book position or a set of positions, a bank shall take into account the effects of internal hedges when calculating exposure to interest rate risk in the non-trading book.

By way of derogation from paragraph 1 of this Article, if a bank uses internal hedging for protecting exposure to credit risk arising from a non-trading book position or a set of positions and if a bank bought the credit derivative from an eligible protection

seller thus transferring credit risk to that protection seller, and provided the credit derivative bought is eligible as an instrument of credit protection in accordance with the provisions hereof, neither the internal hedge nor the purchased credit derivative shall be included in the trading book, if the bank has not applied provisions of Article 90 hereof.

### **Trading book position valuation system**

#### **Article 190**

Bank shall carry out a daily valuation of trading book positions marked-to-market based on prices and other market information published by an independent source.

Bank shall perform the verification of market prices and valuation model inputs at least monthly or more frequently, as appropriate, depending on the nature of the reference market or trading strategy of the bank relating to individual trading book positions.

Bank shall prescribe in its internal acts at a minimum:

- 1) clearly defined scope of responsibilities of different organizational units involved in the valuation process;
- 2) valuation methods for individual positions, procedures and frequency of review of their appropriateness;
- 3) sources of market parameters used in the valuation process, procedures and frequency of review of their appropriateness;
- 4) timing of prices and other market information used for valuation purposes; and
- 5) conditions and procedures used for adjustments of valuation methods.

Bank's organisational units responsible for the valuation of trading book positions or participating in the valuation process or verification of market prices and model input data, shall be independent of the organizational unit responsible for the active management of trading book positions.

Bank shall set up an organizational structure that provides fulfilment of requirements from paragraph 4 of this Article.

### **Application of valuation model (mark-to-model)**

#### **Article 191**

Bank shall carry out a valuation adjustment of trading book positions by using the valuation model if independent sources of market information are unavailable, if the bank doubts their objectivity or in cases of less liquid positions in the trading book.

Less liquid positions under paragraph 2 of this Article are position from the non-trading book whose liquidity has been reduced due to market events or bank-related situations.

Bank shall prescribe in its internal acts the criteria based on which it shall use valuation model instead of market information and *vice versa* for valuation of trading book positions, as well as ongoing review of prescribed criteria with the objective of reviewing their continued applicability.

When the bank is performing the valuation of trading book position by valuation model, the following conditions shall be met:

- 1) bank shall document all qualitative and quantitative elements of the valuation model and prescribe procedures for subsequent changes to the model,
- 2) bank shall identify all material risks arising from positions valued by the internal model and the possibility of them being hedged by instruments for which there are active markets,
- 3) senior management shall be aware of the elements of the trading book whose market value is established by using the model and shall understand the uncertainty this creates in the reporting of the risk and operating results arising from the trading book positions,
- 4) where the valuation model is developed by the bank itself, it shall be developed and approved by the organizational unit independent of the unit responsible for the active management of trading book positions. The model shall be tested by an organizational unit which did not participate in the development of the model, with the test including at least the review of the appropriateness of mathematical formulae, assumptions and the quality of the model application support,
- 5) bank shall provide a copy of the model to be used to regularly check the accuracy of the calculations of the valuation model used,
- 6) organisational unit of the bank responsible for risk management shall be aware of the weaknesses of the model used in order to adequately evaluate their impact on results of the valuation , and
- 7) bank shall subject the model to regular review to determine its validity.

When performing the valuation of trading book position by valuation model, the bank shall in particular take into account the following:

- 1) general factors – credit spreads, close-out costs, operational risks, early termination of positions and model risk;
- 2) factors relating to the assessment of liquidity of individual positions – the amount of time it would take to hedge out the position or risks within the position, the volatility and average of bid/offer spreads, the availability of market quotes and the volatility and average of trading volumes, market concentrations and the time of holding individual positions in the trading book.

### **5.3. Capital requirements for position risks**

#### **Article 192**

Bank shall calculate capital requirements for the bank's trading book positions in accordance with the provisions of this Decision, which prescribe calculation of capital requirements for position risks.

Notwithstanding paragraph 1 above, the bank shall calculate capital requirements for the bank's trading book positions in accordance with the provisions of this Decision, which prescribe calculation of capital requirements for credit risk, where the total value of bank's trading book positions:

- 1) does not exceed 5% of its total business for longer than three days in one calendar month; or
- 2) does not exceed EUR 12 million for longer than three days in one calendar month; or
- 3) never exceeds 6% of its total business and never exceeds EUR 15 million.

When determining the value of its total business, banks shall take into account the value of on- and off-balance sheet items in the following manner:

- 1) debt instruments shall be valued at their nominal or market prices,
- 2) equities shall be valued at their market prices;
- 3) financial derivatives are valued according to the nominal or market values of the instruments underlying them.

Central Bank may, regardless of the fact the bank meets the criteria under paragraph 2 above, require the bank to apply, for the calculation of capital requirement for trading book positions, the provisions of this Decision regulating calculation of capital requirement for position risk, if it establishes that the trading book business of a bank is material in proportion to its total business.

## **Capital requirement**

### **Article 193**

Capital requirements for position risk equal the sum of capital requirements for positions in:

- 1) debt financial instruments, and
- 2) equity instruments

## **Netting**

### **Article 194**

Capital requirements for position risk shall be calculated based on the net position of each individual financial instrument in the bank's trading book.

Net position for each financial instrument (equity and debt instrument, convertible securities, financial derivatives) represents the amount of its long/short positions which exceeds the amount of short/long positions in that instrument.

When calculating net positions, financial derivatives are treated as positions in underlying (and hypothetical) instruments.

For the netting purposes in trading book, equivalent securities are those of the same issuer, with the same interest rate and maturity, those that are denominated in the same currency and have the same legal standing in the event of bankruptcy.

For the purposes of calculating capital requirements for position risks, positions in convertible securities may be treated as positions in debt or equity securities, depending on the likelihood of a particular convertible security being converted. No netting shall be allowed between a convertible securities positions and positions in securities for which these securities may be replaced.

### **5.3.1. Capital requirement for positions in debt instruments**

#### **Capital requirement**

##### **Article 195**

Capital requirement for positions in debt securities shall represent a sum of capital requirement for specific risk and capital requirement for general risk of debt financial instruments.

In calculating capital requirement for position risk, the treatment of positions in debt instruments shall have items in risk-free zero coupon debt securities derived from equity derivatives.

#### **Allocation and netting**

##### **Article 196**

Bank shall allocate net positions in debt instruments, in accordance with the currency in which they are denominated and calculate capital required for the specific and general risk in each currency separately.

For the purpose of calculating capital requirement for specific risk, the positions in the same debt instruments arising from derivative instruments may be netted mutually or with positions in underlying instruments.

#### **Treatment of financial derivatives and other financial instruments**

##### **Article 197**

For the purpose of calculating capital requirement for position risks, financial derivatives (excluding options) are treated as the combination of hypothetical long, or are broken down to positions in underlying securities.

Hypothetical long/short positions shall be positions for which bank has set interest to be received/paid at some date in the future.

Long position in interest-rate futures shall be treated as the combination of short position in zero coupon government bonds, with maturity matched by the maturity of the futures contract and long position in risk-free zero coupon debt security, with maturity equal to the maturity of interest rate futures increased by period of the relevant contract.

Forward-rate agreement sold shall be treated as the combination of long positions in zero coupon government bonds with maturity equal to the maturity of the forward-rate agreement increased by the period of the relevant contract and short position in zero coupon government bonds with maturity matched by the maturity of the forward-rate agreement.

Forward purchase/sale agreement on debt instruments shall be treated as the combination of short/long position in zero coupon government bonds with the maturity matching the maturity of the forward agreement and long/short position of the debt instrument of relevant contract, with appropriate maturity.

Currency forward and futures contracts shall be treated as the long/short positions in zero coupon government bonds in purchased/sold currency and with maturity matched with the maturity of the contract.

Swap contracts (interest rate swap and currency interest rate swap) shall be treated as two hypothetical positions in government bonds with corresponding maturities, so that:

- 1) Interest rate swap is treated as the combination of long and short position in government bonds with fixed or floating interest rate and corresponding maturities,
- 2) Currency interest rate swap shall be treated as the combination of long and short position in government bonds in particular currency with fixed or floating interest rate (depending on whether the interest refers to that currency) and with corresponding maturities.

Options on interest rates, debt and equity securities, indices, forward agreements, swap, foreign currencies and warrants related to debt and equity securities shall be treated in accordance with Articles 235-240 hereof.

## **Treatment of protection seller**

### **Article 198**

When calculating the capital requirement for market risk, the protection seller shall treat positions under credit derivative contracts as debt instruments up to their notional amounts, unless otherwise specified in this Decision.

For the purpose of calculating the specific risk charge, other than for total return swaps, the maturity of the credit derivative contract is applicable instead of the maturity of the obligation.

Pursuant to paragraphs 1 and 2 above:

- 1) A total return swap shall be treated as a combination of long position of the reference obligation with a maturity equivalent to a maturity of total return swap (for calculating capital requirement for general and specific position risk) and as short positions in risk free debt securities with a maturity equivalent to

- 2) A credit default swap shall be treated as hypothetical loan position of the reference obligation when calculating specific position risk. Exceptionally, a rating is assigned to a credit default swap and if this credit derivative satisfies the requirements for qualified debt item under Article 202 of this Decision, it shall be treated as long position of that derivative instrument. If premium or interest payments under credit default swap are due during period of the contract, these cash flows shall be treated, when calculating capital requirement for general position risk, as hypothetical position in risk free debt security with corresponding interest rate and maturity which is equivalent to maturity of the contract.
- 3) A single name credit linked note shall be treated, when calculating capital requirement for general position risk, as long position in underlying debt instrument. For the purpose of calculating specific position risk, a single name credit linked note shall be treated as hypothetical long position in reference obligation and as long position in debt instrument. Exceptionally, if a single name credit linked notes assigned credit rating and if the respective note satisfies the requirements for qualifying debt items under Article 202 of the Decision, it shall be treated, for the purpose of calculating specific position risk, as single long position of the note;
- 4) Multiple name credit linked note shall be treated, when calculating capital requirement for general position risk, as long position in an underlying debt instrument. A multiple name credit linked note providing proportional protection of underlying reference obligations shall be treated, when calculating capital requirement for specific position risk, as long position in debt instrument and long position in each reference obligation in the amount that corresponds to the portion of individual reference obligation in total notional amount of multiple name credit linked note. Where more than one obligation of a reference entity can be selected, it shall be treated as single long position with corresponding credit risk weight equivalent to the highest weight assigned to the respective obligations. Exceptionally, multiple name credit linked note is assigned with an external credit rating and if it meets the conditions for a qualifying debt item set out in Article 202 of this Decision, it shall be treated as a single long position of the note;
- 5) A first-to-default credit derivative when calculating capital requirement for specific position risk, as long position in an obligation of each reference entity. Capital requirement for specific position risk under credit derivative must be at least equal to the maximum payment amount. Exceptionally, if a first-to-default credit derivative is assigned with an external credit rating and if it meets the conditions for a qualifying debt item set out in Article 202 of this Decision, it shall be treated as a single long position in debt instrument for the purposes of calculating specific position risk. If premium or interest payments under credit derivative are due during period of the contract, these cash flows shall be treated, when calculating capital requirement for general position risk, as hypothetical position in risk free debt security with corresponding interest rate and maturity which is equivalent to maturity of the contract.
- 6) An nth-to-default credit derivative when calculating capital requirement for specific position risk, as long position in an obligation of each reference entity

For the purpose of calculating capital requirement for credit risk, total exposure under credit notes under paragraph 1 points 3) and 4) shall be equal to 0.

### **Treatment of protection buyer**

#### **Article 199**

When calculating capital requirement for position risks, the protection buyer shall treat the positions under credit derivative contract as the mirror image of the protection seller, with the exception of a credit linked note as it entails no short position in the issuer. If at a given moment there is a call option in combination with a step-up, such moment shall be treated as the maturity of the protection.

In case of first-to-default credit derivative, the protection buyer may include in the calculation of the capital requirement for specific position risk of debt instrument short position of the reference obligation with the lowest risk weight in accordance with table under Article 201 hereof.

In case of nth-to-default credit derivative, the protection buyer may include the said instrument in the calculation of the capital requirement for specific position risk only if it has long credit protection for n-1 of reference obligation in place or if credit event for n-1 of reference obligations has already occurred. In such a case, nth-to-default credit derivative shall be treated, for the purposes of calculating capital requirement for specific risk, as the mirror image of the treatment of the first-to-default credit derivative.

### **Treatment of specific positions**

#### **Article 200**

Positions arising from repurchase, reverse repurchase and securities lending and borrowing transactions in accordance with Article 188 of this Decision shall be treated as:

- 1) long position in the underlying security with corresponding maturity and short position in government bond with the contract maturity and the interest rate

- 2) long position in government bond with the contract maturity and the interest rate equal to the repurchase rate, for reverse repos and contracts on borrowing from counterparty.

### 5.3.1.1. Specific risk of debt instruments

#### Capital requirement

##### Article 201

For the purpose of calculating capital required for specific risk of debt instruments, bank shall allocate net positions in debt instruments to appropriate categories, depending on the issuer/obligor, borrower's rating and the residual maturity, and multiply them with the prescribed weights from the following tables:

	Category	Specific risk weight
1)	<ul style="list-style-type: none"> <li>- debt securities issued or guaranteed by central governments, issued by central banks, international organizations, multilateral development banks or Member States' regional government or local authorities which would qualify for credit quality step 1 or which would receive a 0 % risk weight;</li> <li>- debt instruments issued or guaranteed by Montenegro;</li> </ul>	0%
2)	<ul style="list-style-type: none"> <li>- debt instruments issued or guaranteed by central governments, issued by central banks, international organizations, multilateral development banks or Member States' regional government or local authorities which would qualify for credit quality steps 2 or 3;</li> <li>- debt financial instruments issued or guaranteed by the institution which would qualify for credit quality steps 1 or 2;</li> <li>- debt financial instruments issued or guaranteed by commercial companies would qualify for credit quality steps 1 or 2;</li> <li>- other qualifying items as defined in Article 202 of this decision;</li> </ul>	0.25% (residual maturity of 6 months)  1.00% (residual maturity from 6 to 24 months)  1.60 % (residual maturity exceeding 24 months)
3)	<ul style="list-style-type: none"> <li>- debt financial instruments issued or guaranteed by central government, issued by central banks, international organizations, multilateral development banks or Member States' regional government or local authorities which would qualify for credit quality steps 4 or 5;</li> <li>- debt financial instruments issued or guaranteed by institutions which would qualify for credit quality step 3;</li> </ul>	8.00%

	- debt financial instruments issued or guaranteed by commercial companies which would qualify for credit quality steps 3 or 4 and exposures for which credit assessment by recognized external institution is not available;	
4)	- debt financial instruments issued or guaranteed by central government, issued by central banks, international organizations, multilateral development banks or Member States' regional government or local authorities which would qualify for credit quality step 6; - debt financial instruments issued or guaranteed by commercial companies which would qualify for credit quality steps 5 or 6;	12.00%

Capital requirement for specific risk of debt instruments shall be calculated as a sum of weighted positions referred to in paragraph 1 above increase by 25%.

Bank shall not calculate specific risk for own debt instruments included in trading book.

Debt instruments not treated as eligible items under Article 202 hereof shall be assigned risk weight of 8% or 12%, in accordance with the table under paragraph 1 above, and the Central Bank may assign and apply higher risk weight on those instruments for the purpose of the calculation of capital required for specific risk of debt instruments and/or prohibit the possibility of their netting for the purpose of calculation of capital requirement for general risk of debt instruments.

### **Eligible items**

#### **Article 202**

When calculating capital requirement for the specific risk of debt instruments, eligible items shall include:

- 1) Long and short positions in debt instruments allocated according to the credit quality rating equal or higher than BBB determined by Standard & Poor's or other equivalent rating;
- 2) Long and short positions in debt instruments without rating determined by recognized external institutions, and those instruments that meet the following conditions:
  - they are sufficiently liquid;
  - their credit quality is equal to or higher than credit quality of debt instruments referred to point 1) above;
  - they are listed on at least one regulated market of EU Member States or on a recognized stock exchange of another country;
- 3) Long and short positions in debt instruments issued by credit institutions, and those instruments meet the following conditions:
  - they are considered to be sufficiently liquid;
  - their credit quality is equal to or higher than credit quality of debt instruments referred to point 1) above;

- 4) Long and short positions in debt instruments with credit quality of the issuer equal to or higher than credit quality step 2.

### **Increase of risk weight**

#### **Article 203**

The Central Bank may assign risk weight to individual debt instrument higher than the assigned weight from table under Article 201 paragraph 1 hereof if it determines that the exposure to specific risk arising from such debt instrument is higher than the exposure based on which such instrument is classified under specific exposure from the table above.

### **5.3.1.2 General risk of debt instruments**

#### **Methods for calculating capital requirement**

#### **Article 204**

For the purpose of calculating capital requirement for general risk of debt instruments, bank shall use the maturity-based method or, with approval of the Central Bank, duration-based method.

#### **Maturity-based method**

#### **Article 205**

For the purpose of calculating capital requirement for general risk of debt instruments using the maturity-based method, bank shall allocate net positions in debt instruments based on the residual maturity (i.e. based on the time remaining until the following determination of interest rate for instruments with floating interest rate) and the interest rate using the following table:

<b>Zone</b>	<b>Maturity band</b>		<b>Weight (in %)</b>
	<b>Interest rate of 3% or more</b>	<b>Interest rate less than 3%</b>	
One	0 ≤ 1 month	0 ≤ 1 month	0,00
	>1 ≤ 3 months	>1 ≤ 3 months	0,20
	>3 ≤ 6 months	>3 ≤ 6 months	0,40
	>6 ≤ 12 months	>6 ≤ 12 months	0,70
Two	>1 ≤ 2 years	>1,0 ≤ 1,9 years	1,25
	>2 ≤ 3 years	>1,9 ≤ 2,8 years	1,75
	>3 ≤ 4 years	>2,8 ≤ 3,6 years	2,25
Three	>4 ≤ 5 years	>3,6 ≤ 4,3 years	2,75
	>5 ≤ 7 years	>4,3 ≤ 5,7 years	3,25
	>7 ≤ 10 years	>5,7 ≤ 7,3 years	3,75
	>10 ≤ 15 years	>7,3 ≤ 9,3 years	4,50
	>15 ≤ 20 years	>9,3 ≤ 10,6 years	5,25
	>20 years	>10,6 ≤ 12,0 years	6,00

		> 12,0≤20,0 years	8,00
		>20,0 years	12,50

Each position shall be multiplied by weight for that maturity band.

All weighted long positions in each maturity band and all weighted short positions in each maturity band shall be summed up separately.

The sum of long weighted positions matching the sum of weighted short positions for each maturity band shall be considered a matched weighted position in that maturity band. The residual amount shall be considered a (long or short) unmatched position for that maturity band.

Total matched weighted positions shall be calculated in all maturity bands as a sum of matched weighted positions for each maturity band.

The sum of all unmatched long positions which matches the sum of all unmatched weighted short positions for the same zone shall be the matched weighted position for that zone.

The sum of all unmatched long weighted positions which matches the sum of all short unmatched weighted positions in the same zone shall be considered the matched weighted position for that zone, and the residual amount shall be considered a (long or short) matched weighted position for that zone.

The amount of unmatched weighted long/short position for zone one that matches the unmatched weighted long/short positions for zone two shall be the matched weighted position between zone one and zone two. The residual unmatched weighted position for zone two that matches the unmatched weighted position for zone three shall be the matched weighted position between zone two and zone three.

The amount of the residual unmatched weighted position of zone one that matches the unmatched weighted position for zone three shall be the matched weighted position between zone one and zone three.

The remainder of the unmatched weighted positions for all zones shall be then summed.

Capital requirement for general risk of debt instruments shall be calculated as a sum of the following items, increased by 25%:

- 1) 10% of the sum of the matched weighted positions in all maturity bands;
- 2) 40% of the matched weighted position in zone one;
- 3) 30% of the matched weighted position in zone two;
- 4) 30% of the matched weighted position in zone three;
- 5) 40% of the matched weighted position between zones one and two;
- 6) 40% of the matched weighted position between zones two and three;
- 7) 150% of the matched weighted position between zones one and three; and
- 8) 100% of the residual unmatched weighted positions.

## Duration-based method

### Article 206

For the purposes of calculating capital requirement for general risk of debt instruments in accordance with the duration-based method:

- 1) for fixed interest rate debt instruments, bank shall calculate yield to maturity (implied discount rate) based on their market value;
- 2) for floating interest rate debt instruments, the bank shall calculate yield to maturity (on the assumption that the principal is due when the interest rate can next be changed) based on their market value.

Bank is obliged to consistently apply the manner of calculation of yield to maturity referred to in paragraph 1 above for all positions in the trading book for which it calculates general risk of debt securities.

## Calculation of modified duration

### Article 207

For the purposes of calculation of capital requirement for general risk of debt instruments, modified duration of each debt instrument shall be calculated applying the following formula:

$$D_{\text{mod}} = \frac{D}{(1+r)}$$
$$D = \frac{\sum_{t=1}^m \frac{tC_t}{(1+r)^t}}{\sum_{t=1}^m \frac{C_t}{(1+r)^t}}$$

<p><math>D_{\text{mod}}</math> = modified duration <math>D</math> = duration <math>r</math> = yield to maturity <math>C_t</math> = cash payment in time <math>t</math> <math>m</math> = total maturity <math>t</math> = time</p>
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## Capital requirement

### Article 208

Bank shall allocate each debt instrument, based on its modified duration calculated pursuant to Article 207 hereof, in appropriate zone referred to in the following table:

Zone	Modified duration in years	Assumed interest rate change in %
One	> 0 ≤ 1,0	1,00
Two	> 1,0 ≤ 3,6	0,85
Three	>3,6	0,70

After the appropriate allocation of the debt instruments, within the meaning of paragraph 1 above, bank shall calculate the duration-weighted position for each instrument by multiplying its market price by its modified duration and by the assumed interest rate change for instrument with that particular modified duration referred to in table above.

The bank shall calculate duration-weighted long and duration-weighted short positions for each zone.

Sum of all duration-weighted long positions that are matched by the sum of all duration-weighted short positions shall be the matched duration-weighted position for that zone. The residual amount shall be the unmatched duration-weighted long/short positions for that zone.

The amount of unmatched duration-weighted long/short positions in zone one which matches the unmatched duration-weighted short/long positions in zone two shall be the matched duration-weighted positions between zones one and two.

The remaining of the unmatched duration-weighted position in zone two which matches the unmatched duration-weighted position in zone three shall be the matched duration-weighted positions between zones two and three.

The remaining unmatched duration-weighted position in zone one which matches the unmatched duration-weighted position in zone three shall be the matched duration-weighted positions between zones one and three.

The remaining unmatched duration-weighted position shall be calculated as a sum of all unmatched duration-weighted positions in all zones.

Capital requirement for general risk of debt instrument shall be calculated as the sum of the following items, increased by 25%:

- 1) 2% of the matched duration-weighted position for each zone;
- 2) 40% of the matched duration-weighted positions between zones one and two;
- 3) 40% of the matched duration-weighted positions between zones two and three;
- 4) 150% of the matched duration-weighted position between zones one and three;
- 5) 100% of the residual unmatched duration-weighted positions.

### **5.3.2. Capital requirement for positions in equity instruments**

#### **Types, reporting and allocating equity instruments**

##### **Article 209**

Equity instrument, within the meaning of this decision, shall be shares, depository receipts, stock indices, convertible securities and financial derivatives relating to the shares or stock exchange indices.

The position in individual equity instrument shall be reported at its market value.

The position in equity instrument shall be allocated on the national market where security is listed and the procedure of calculation shall be applied separately for each national market.

## **Capital requirement**

### **Article 210**

Capital requirement for position risk based on equity instruments shall be equal to the sum of capital requirement for general risk and capital requirement for specific risk of equity instruments.

Capital requirement for general risk on equities shall be 8% of total net position of the bank in equity instruments, calculated in accordance with Article 211 hereof, increased by 25%.

Capital requirement for specific risk on equities shall be 4% of total gross position of the bank in equity instruments calculated in accordance with Article 212 hereof, increased by 25%..

## **Calculation of total net position**

### **Article 211**

Bank shall calculate net long or short position in individual equity instrument in accordance with Article 194 of this Decision.

Depository receipts may be netted with underlying equity securities according to the exactly defined ratio only if such receipts and underlying equities are convertible for the purpose of settlement.

For the purpose of calculating capital requirement for specific and general risks, positions in same equity instruments arising from the derivative instruments in accordance with Article 212 of this Decision may be netted mutually or with positions in underlying instruments.

Net long positions and net short positions shall be summed up separately.

Total bank net positions in equity instruments shall be equal to the difference between net long and short positions.

## **Calculation of total gross position**

### **Article 212**

Total gross position of bank in equity instruments shall be equal to the sum of absolute net long and net short positions.

## **Treatment of equity financial derivatives**

### **Article 213**

Equity futures and forwards relating to individual equity instruments, equity portfolios or stock exchange indices shall be treated as the combination of long/short positions in equity instrument of the relevant contract and short/long positions in zero coupon government bonds with contracted maturities.

Equity swaps shall be treated as the combination of long positions in equity instrument and/or equity instruments portfolio or stock exchange indices based on which bank receives the amount based on the change in the price of that equity instrument and/or equity instrument portfolio or stock exchange indices and short position in equity instrument or equity instrument portfolio or stock indices based on which bank pays the amount based on the change in the value of such equity instrument or equity instrument portfolio or stock exchange indices.

Stock index forward or futures shall be treated as the combination of long/short positions in equity instruments that make up the base of such index and short/long positions in zero coupon government bonds with the contracted maturities.

For the purpose of calculation of capital requirement for specific and general risks, the positions in equity instruments that make up the basis of such index may be netted with positions in the same equities.

Position in a stock exchange index may be treated as the position in special equity instrument (without its breakdown to integral shares) and is subject to the calculation of required capital for specific and general risks.

Exceptionally, if the positions under paragraph 5 hereof are traded at stock exchanges, and if these stock exchange indices are well diversified, only capital requirement for both specific and general risk.

### **5.3.3. Underwriting**

#### **Treatment of positions**

### **Article 214**

A bank may include positions arising from underwriting of debt and equity instruments in the calculation of initial capital requirements for position risks in the following manner:

- 1) it shall calculate the net position by deducting the amount of securities it became unconditionally committed to accept at an agreed price by positions which are subscribed or sub-underwritten by third parties on the basis of formal agreements;
- 2) it shall reduce the obtained net position by the reduction factors under the following table:

<b>Working day</b>	<b>Reduction factor</b>
Working day 0	100%
Working day 1	90%
Working days 2 to 3	75%
Working day 4	50%
Working 5	25%
After working day 5	0%

- 3) it shall include the reduced net positions in the calculation of initial capital requirements.

“Working day zero” shall be the working day on which the bank becomes unconditionally committed to accepting a known quantity of securities at an agreed price.

The bank shall demonstrate to the Central Bank that it has sufficient capital against the risk of loss which exists between the time of the initial commitment and working day 1.

#### **5.3.4. Trading book positions hedged by credit derivative**

##### **Capital requirement**

###### **Article 215**

For trading book positions hedged by credit derivatives, the bank shall calculate capital requirement for specific position risk arising from both legs, except in cases under Articles 216-218 hereof.

##### **Excluding the positions**

###### **Article 216**

Bank may exclude from the calculation of capital requirement for specific position risk both legs if the values of such legs move in opposite direction and broadly to the same extent. This will be the case in the following situations:

- 1) the two legs consist of completely identical instruments; or
- 2) a long cash position is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure (i.e., the cash position). The maturity of the swap itself may be different from that of the underlying exposure.

In cases under paragraph 1 above, a specific risk capital charge should not be applied to either side of the position.

### **Reducing the exposure**

#### **Article 217**

Banks may reduce the exposure to specific position risk by reducing the position with higher risk weight by 80% of the transferred risk, and the second positions are excluded from the specific risk capital charge if the following conditions are met:

- 1) the value of two legs always move in the opposite direction;
- 2) there is an exact match in terms of the currency of both the reference obligation and the underlying exposure from trading book;
- 3) reference obligation and credit derivative have the same maturity
- 4) the key features of the credit derivative contract do not cause the price movement of the credit derivative to materially deviate from the price movements of the cash position.

The specific risk capital charge for the side of the transaction with the higher capital charge shall be reduced by 80%, whereas the specific risk requirement on the other side shall be 0%.

### **Excluding one position**

#### **Article 218**

Bank may reduce exposure to specific position risk by excluding the position with lower risk weight from the calculation of specific risk capital charge if the following conditions are met:

- 1) trading book positions is hedged by total return swap position, but there is mismatch between reference obligation and the underlying exposure of the positions, where:
  - the reference obligations ranks pari passu with or is junior to the underlying obligation;
  - the underlying obligation and the reference obligation share the same obligor and have legally enforceable cross default or cross acceleration clauses.
- 2) the positions satisfy the criteria set out in Article 216 point 1) or Article 217 hereof, but there is a currency or maturity mismatch between the credit protection and the underlying asset;
- 3) the positions satisfy the criteria under Article 217 hereof, but there is a mismatch between the cash position and the credit derivative of the positions, whereas the underlying asset is included in the deliverable obligations in the credit derivative documentation.

In cases under paragraph 1 above, the bank shall apply the higher of the two capital requirements for specific risk calculated for each side of the transaction.

### **5.3.5. Capital charges for positions in open investment funds**

#### **Capital requirement**

##### **Article 219**

Capital requirement for general and specific position risks for positions in open investment funds in trading book under Article 186 shall be 32%.

The sum of capital charge for position risks and foreign exchange risk for positions in open investment funds shall not exceed 40%.

No netting shall be permitted between the underlying investments of an open investment funds and other positions held by the bank in trading book, unless otherwise specified in this Decision.

#### **General criteria**

##### **Article 220**

The general eligibility criteria for calculating capital charge for general and specific position risk using the methods under Articles 221-223 of this Decision, for positions in open investment funds issued by companies supervised or incorporated within the EU Member States or Montenegro are the following:

- 1) the prospectus of open investment fund or equivalent document shall include:
  - the categories of assets the fund is authorized to invest in;
  - the applicable investment limits and the methodology to calculate them (if investment limits are applicable);
  - the maximum level of leverage allowed (if leverage is allowed);
  - the policy to limit counterparty risk arising from the allowed transactions in OTC derivatives, repo transactions, reverse repo transactions, securities lending and borrowing (if the said transactions are allowed);
- 2) the business of the open investment fund shall be reported at least twice a year to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period;
- 3) the open investment fund shall give daily quotations for the buy-back of its units/shares;
- 4) investments in the open investment fund shall be segregated from the assets of the open investment fund management company;
- 5) the investing bank shall make an adequate risk assessment of the open investment fund.

The bank may use methods under Articles 221-222 of the Decision for calculating capital requirement for general and specific position risk for positions in open investment funds from non-EU member states if the requirements in paragraph 1 above are met and if the Central Bank deems acceptable the said investment in open investment funds.

### **Article 221**

Where the bank is aware of the underlying investments of the open investment fund on a daily basis, it may treat positions in open investment fund as positions in securities in order to calculate the capital requirements for position risk (general and specific) for those positions in accordance with the methods set out in the provisions of this section of the Decision.

For the purpose of calculating capital requirement for position risk (general and specific), netting is permitted between positions in the underlying investments of the open investment fund and other positions in the trading book held by the bank, as long as the bank holds a sufficient quantity of units in open investment fund which may be shown as positions in securities for the underlying investments.

### **Article 222**

For the purpose of calculating capital requirements for position risk (general and specific) for positions in open investment funds, the bank may treat those positions as hypothetical positions in stock exchange indices or basket of equity or debt instruments and include them in the calculation of capital requirement for position risk (general and specific) in accordance with the provisions of this section of the Decision if the following conditions are met:

- 1) the purpose of the open investment fund's mandate is to replicate the composition and performance of an externally generated index or fixed basket of equities or debt securities; and
- 2) a minimum correlation of 0.9 between daily price movements of the open investment fund and the index or basket of equities or debt securities it tracks can be clearly established over a minimum period of six months. 'Correlation' in this context means the correlation coefficient between daily returns on the open investment fund and the index or basket of equities or debt securities it tracks.

### **Article 223**

Where a bank is not aware of the underlying instruments of the open investment fund on a daily basis, it may calculate the capital requirements for position risk (general and specific) in accordance with the provisions of this Decision, provided that:

- 1) it will assume that the open investment fund first invests to the maximum extent allowed under its investment limits in assets with the highest capital requirement for position risk, and then continues making investments in descending order until the maximum total investment limit is reached. The position in the open investment fund will be treated as a direct holding in the assumed positions;
- 2) in calculating the capital charge for position risk, the bank shall take account of the maximum indirect exposure that it could achieve by taking leveraged positions through the open investment fund and shall proportionally increase the position in the open investment fund up to the maximum exposure to the underlying investments allowed by the investment limits;

- 3) the capital requirement for position risk (general and specific) calculated under paragraph 1 above shall not exceed the capital requirement for position risk (general and specific) calculated in accordance with Article 219 paragraph 1 hereof.

#### **Article 224**

For the purpose of reporting capital requirements for position risk (general and specific) for positions in the open investment fund, bank may rely on a third party under Articles 221-223, provided that the correctness of the calculations in the reports is ensured.

### **5.4. Calculation of capital requirement for FX risk**

#### **Obligation of capital requirement calculation**

##### **Article 225**

A bank shall calculate capital requirement for foreign exchange risk if its total open foreign exchange position of the bank, including net position in gold calculated in accordance with Article 227 exceeds 2% of its total own funds.

#### **Amount of capital requirement**

##### **Article 226**

The amount of capital requirement for FX risk shall be calculated as the amount of total open FX position, calculated in accordance with Article 227 of this Decision, multiplied by 10%.

#### **Calculating total open FX position**

##### **Article 227**

Total open FX position of a bank shall be calculated according to the following procedure:

- 1) open FX positions shall be calculated individually for each currency (and gold separately), so that the following elements are included in the calculation of that position:
  - net spot position, which shall be equal to the difference between FX assets and FX liabilities in that currency, including any outstanding interest and spot transactions which are agreed but not booked;
  - net forward position, which represents the difference between all amounts to be received and all amounts to be paid based on currency forward agreements (and forward agreements for gold), including also currency futures contracts (and futures contracts for gold) and principal of currency swaps which is not included in spot position;
  - irrevocable guarantees, uncovered letters of credit and similar instruments based on which the banks is obligated to make payment and that such funds will likely not be recoverable,

- net delta for the total amount of options on individual foreign currency or options on gold;
  - the market value of any other options denominated in a foreign currency and gold which underlying variable is shown in foreign currency.
- 2) Based on the calculated open FX positions for each currency, all long and short FX positions shall be calculated, whereby:
    - Long FX position in a particular currency is an open FX position in that currency where a sum of elements referred to in paragraph 1 point 1) above has positive sign;
    - Short FX position in a particular currency is an FX position in that currency where sum of elements referred to in paragraph 1 point 1) has negative sign;
  - 3) Total long FX position and total short FX position shall be calculated, whereby:
    - Total long FX position of a bank represents a sum of all long FX positions of the bank in individual currencies.
    - Total short FX position of a bank represents a sum of all short FX positions of the bank in individual currencies;
  - 4) The comparison of total amount of long and short FX positions shall be made and higher of the two amounts is added to the net position in gold, and the obtained result shall represent total open FX position;

FX assets and liabilities shall also be FX assets and liabilities that are indexed to currency (contract with FX clause).

### **Treatment of investing in open investment funds**

#### **Article 228**

When calculating capital requirement for foreign exchange risk, bank shall treat investments in investment fund according to the actual currency structure of such a fund and it shall include obtained positions into calculation of open foreign exchange position.

If the bank is not aware of the foreign exchange positions in an open investment fund, it shall assume that the fund's investments in foreign exchange instruments reach the maximum allowed limit under the fund's prospectus or equivalent document.

The bank shall take account of the maximum indirect exposure that it could achieve by taking leveraged positions through the open investment fund. This shall be done by proportionally increasing the position in the open investment fund up to the maximum exposure to the underlying investments under the investment limits.

The assumed position of the open investment fund in foreign exchange shall be treated as a separate currency, according to the investments in gold, and if it is known whether this position is long or short, the total long position shall be added to the total long open foreign exchange position and the total short position shall be added to the total short open foreign exchange position.

In case under paragraph 4 above, no netting shall be allowed between positions before the calculation.

In calculating foreign exchange positions generated by investments in an open investment fund, a bank may rely on a third party to report the foreign exchange positions of the open investment fund, where the correctness of the reporting is adequately ensured.

## **5.5. Calculating capital requirements for commodities risk**

### **5.5.1 Positions in commodities**

#### **Calculation procedures**

##### **Article 229**

A bank shall calculate the capital requirement for commodities risk applying simplified approach under Article 233 hereof or maturity ladder approach under article 234 hereof.

For the purpose of calculating capital requirement for commodities risk, bank shall use the same approach for the same commodities within one reporting period, while for different commodities is may use different approach.

#### **Positions in commodities**

##### **Article 230**

For the purposes of this Decision, a commodity shall be a physical product which is or can be traded on a secondary market, e.g. agricultural products, minerals (including oil), precious metals (excluding gold) and derivative financial instruments relating to these products.

Each position in a commodity shall be expressed in terms of the standard unit of measurement.

The bank may exclude positions arising purely from stock financing from the calculation of the capital requirement for commodities risk. The bank shall include these positions in the calculation of capital requirements for other relevant market risks.

The bank shall include all positions arising from derivative instruments relating to commodities and positions arising from commodities repurchase and reverse repurchase agreements and commodities lending and borrowing agreements, which are not included in the calculation of the capital requirement for commodities risk, in the calculation of the capital requirement for general risk of debt instruments and the calculation of the capital requirement for position risk and/or foreign exchange risk.

If a bank has a short position in a commodity which falls due before the long position in the same commodity, it shall take into account the risk of liquidity shortfall which may exist in some markets.

## **Treatment of financial derivatives**

### **Article 231**

Commodity futures and forwards shall be treated as a combination of a long/short position in the underlying commodity and a short/long position in a government bond without a coupon and shall be reported as notional amounts in terms of the standard unit of measurement and maturity equal to that of the contract.

Commodity swaps shall be treated as a combination of long positions in the commodity on the basis of which the bank pays a fixed price and receives a floating price and short positions in the commodity on the basis of which the bank receives a fixed price and pays a floating price.

If the bank uses the maturity ladder approach as set out in Article 234 of this Decision, the commodity swap shall be treated as a series of positions equal to the notional amount of the contract, with each position corresponding with one payment on the swap and slotted into the maturity ladder set out in table in Article 234 of this Decision.

Commodity swaps where the sides of the transaction are in different commodities shall be included in the relevant maturity band pursuant to the underlying commodity in accordance with the maturity ladder set out in table in Article 234 of this Decision.

Options on commodities or on commodity derivatives shall be treated as described in accordance with the provisions of this Decision regulating the option treatment.

Warrants relating to commodities shall be treated in the same way as the instruments referred to in paragraph 3 of this Article.

## **Treatment of repurchase transactions and lending agreements**

### **Article 232**

Non-trading book positions in commodities repurchase agreements and commodities lending agreements shall be included in the calculation of the capital requirement for commodities risk in accordance with the provisions of this Decision.

Trading book positions in commodities repurchase agreements, commodities reverse repurchase agreements and commodities lending or borrowing agreements shall be treated as:

- 1) a long position in the underlying commodity and a short position in a risk-free debt security with a maturity date and interest rate equal to the repurchase rate, for repurchase agreements and commodities lending agreements;

- 2) a long position in a risk-free debt security with a maturity date and interest rate equal to the repurchase rate, for reverse repurchase agreements and commodities borrowing agreements.

## **5.5.2. Methods for calculating capital requirement**

### **Simplified approach**

#### **Article 233**

For the purposes of calculating the capital requirement for commodities risk under this approach, the bank shall first calculate the net position for each commodity that represents the amount of its long/short positions which exceeds the amount of short/long positions in that commodity.

Long positions in commodities and long positions in underlying commodities (for derivative financial instruments relating to commodities) shall have a positive sign (+), while short positions in commodities and short positions in underlying commodities shall have a negative sign (-).

Gross position in a commodity shall be the sum of the absolute values of long and short positions in that commodity.

The initial capital requirement for each commodity shall be calculated as the sum of the following items, increased by 25%:

- 1) 15% of the net position in the absolute value, multiplied by the spot price for the commodity;
- 2) 3% of the gross position, multiplied by the spot price for the commodity.

The overall initial capital requirement for commodities risk shall be calculated as the sum of capital requirements for commodity risk relating to each commodity, increased by 25%.

### **Maturity ladder approach**

#### **Article 234**

For the purposes of calculating the capital requirement for commodities risk, a bank shall use a maturity ladder in accordance with the following table for each commodity.

<b>Maturity band</b>	<b>Spread rate (in %)</b>
0 ≤ 1 month	1.50
>1 ≤ 3 months	1.50
>3 ≤ 6 months	1.50
>6 ≤ 12 months	1.50
>1 ≤ 2 years	1.50
>2 ≤ 3 years	1.50
>3 years	1.50

All positions in that commodity shall be assigned to the appropriate maturity bands in accordance with table in paragraph 1 above. Positions in physical stocks shall be assigned to the first maturity band of up to one month.

The bank may offset and assign positions in the same commodity to the appropriate maturity bands on a net basis, if one of the following conditions is met:

- 1) positions mature on the same date; or
- 2) positions mature within 10 days of each other if the contracts from which they arise are traded on markets which have daily delivery dates.

The bank shall calculate the sum of the long positions and the sum of the short positions in each maturity band. The sum of long/short positions which are matched by the sum of short/long positions in a given maturity band shall be the matched positions in that band. The residual amount shall be the long/short unmatched position for the same maturity band and shall be matched by the unmatched short/long position for a maturity band further out.

The amount of the unmatched long/short position for a given maturity band that is matched by the unmatched short/long position for a maturity band further out shall be the matched position between two maturity bands. The residual amount shall be the (long or short) unmatched position between the two maturity bands.

The bank shall calculate the capital requirement for each commodity as the sum of the following:

- 1) the sum of absolute amounts of the matched long and short positions within a maturity band multiplied by the appropriate spread rate in accordance with table referred to in paragraph 1 above and by the spot price for that commodity;
- 2) the absolute amount of the unmatched position in one maturity band or between two maturity bands which is carried forward in the following maturity band, multiplied by 0.6% carry rate and by the spot price for that commodity; and
- 3) the absolute amount of the residual unmatched position multiplied by 15% outright rate and by the spot price for that commodity.

The overall initial capital requirement for commodities risk shall be calculated as the sum of the capital requirements for each commodity calculated in accordance with this Article.

## **5.6. Treatment of options for calculating capital requirement for market risks**

### **Methods of calculating the capital requirements**

#### **Article 235**

When calculating capital requirements for position FX risk from positions in options, the bank shall apply:

- 1) simplified method, for positions in options purchased; and
- 2) delta plus method, for positions in options sold

Provisions of Articles 236-240 of this Decision shall apply to:

- 1) options from a trading book with respect to interest rates, debt and equity securities, indices, forward contracts, swaps and foreign currencies, when calculating capital requirement for position risk;
- 2) options from trading and banking books concerning foreign currency, gold, financial instruments denominated in foreign currency, FX or gold forwards, when calculating capital requirements for FX risk.

### **Simplified method**

#### **Article 236**

Bank shall use the simplified method for calculating capital requirements for market risks for trading book items in options purchased.

Notwithstanding paragraph 1 of this Article, in calculating capital requirements for FX risk, in addition to trading book options, bank shall include options from banking book related to financial instruments denominated in foreign currency.

If a bank has a position in option sold which is completely protected by identical position in option purchased, those positions may be excluded from calculating required capital for position and FX risk.

Capital requirement for market risks for positions purchased calculated in accordance with simplified method shall include both general and specific risks and the bank shall sum it up with capital requirement for appropriate risk.

For purchased call or put options, capital requirement shall be either of the lower of:

- 1) market value of underlying securities or foreign currency (underlying instrument) multiplied by the sum of corresponding factors for the specific and general risks, and for options with underlying foreign currency, the corresponding factor for the specific and general risks is 10%;
- 2) market value of the option.

For positions that represent the combination of purchased put options and long positions in the underlying securities or currency, or for the positions representing a combination of purchased call options and short positions in underlying securities or currency, the capital requirement shall be calculated by multiplying the market value of the underlying securities or currency by the sum of corresponding factors for specific and general risks and decreased by the amount that is in the money.

If in case of paragraph 6 above bank shall exclude positions in purchased put/call option and long/short position in underlying securities or currency subject to option from the calculation of capital requirement in accordance with other provisions set out in this decision.

Notwithstanding paragraph 7 of this Article, for combination of items in purchased put/call option related to financial instrument denominated in a foreign currency and long/short position in underlying securities, the bank shall include both items in the calculation of capital requirements for FX risk.

### **Delta plus method**

#### **Article 237**

A bank having a position in written options, for the purposes of calculating capital requirement for market risk in accordance with the provisions of this Decision, shall include positions in options in their delta equivalents, representing the output of market value of instruments subject to option and accompanied delta coefficient.

Notwithstanding paragraph 1 of this Article, for the purposes of calculating capital requirement for FX risk, the bank shall include options from the banking book related to financial instruments denominated in foreign currency in calculating capital requirements for FX risk at their market value.

For options traded on stock market, bank shall use the delta ratio calculated by such stock exchange.

A bank may trade options at over-the-counter market only if having established internal model for calculating delta, gamma, and vega ratios approved by the Central Bank.

For the purposes of calculating the capital requirements for market risks, delta equivalents of positions in options may be netted with positions in identical underlying securities or financial derivatives, whereby purchased call/sold put options are treated as long positions, and sold call/purchased put options as short positions.

In addition to calculating capital requirements for general and specific risks, bank applying the delta plus method shall also calculate the additional capital requirements for gamma risk and vega risk of the total position in options, in accordance with Articles 239 and 240 hereof.

## Gamma and Vega Ratios

### Article 238

For options traded on the stock exchange, bank shall use the gamma and vega ratios established by such a stock exchange.

In order to calculate total gamma and vega risks of total position in options, individual positions in options shall be grouped according to risk categories.

Special risk category consists of:

- 1) each pair of currencies and gold – for option on currency or gold;
- 2) every national market – for options on equity instruments or stock exchange indices, while, in case equity instrument is listed in several national markets, reference market shall be determined by a country in which the issuer of equity instrument is incorporated;
- 3) each maturity band from the table under Article 205 or each zone from the table under Article 208 hereof (depending on the method used by the bank) - for options on debt instruments or interest rates, whereby if the underlying instrument has more than one maturity, the bank shall apply longer maturity date in calculating gamma and vega effects of the option;

Netting of gamma and vega effects of single positions may be performed only within individual risk categories under paragraph 3 of this Article.

## Capital requirements for gamma risk of options

### Article 239

For the purpose of calculating capital requirements for gamma risk of the total position in options, the bank shall previously calculate gamma effect on each individual option by approximation of the option price by Taylor series.

$$\text{Gamma effect} = \frac{1}{2} \text{Gamma} \times N \times \text{VU}^2$$

where:

**VU** = variation of the underlying instrument,

**N** = quantity of underlying instrument

Variation of the underlying instrument of the option is calculated in the following manner:

- 1) for options on debt instruments or interest rates – market value of such instrument is multiplied by appropriate weights from the table under Article 205 or by appropriate changes of interest rates from the table under Article 208 hereof (depending on the method used by the bank);
- 2) for options on equity instruments or stock exchange indices – market value of such instrument is multiplied by 10%;
- 3) for options on currency or gold – market value of currency or gold is multiplied by 10%.

For the purpose of calculating capital requirement for gamma risk of the total position in options, individual gamma effects within an individual risk category are summed up under Article 238 hereof.

Net gamma effects for each risk category may have a positive or a negative value.

The sum of absolute values of all negative net gamma effects according to all risk categories, increased by 25%, represents the capital requirement for gamma risk of the total position in options.

### **Capital requirement for vega option risk**

#### **Article 240**

For the purpose of calculating capital requirements for vega risk of total position in options, bank shall previously calculate the vega effect for each individual option by approximating the option price by the Taylor series.

$$\text{Vega effect} = \text{Vega} \times N \times \frac{\text{volatility}}{4}$$

Where:

**N** = quantity of underlying instrument.

It is assumed that the change of volatility amounts to one quarter of the current volatility (+/25%).

For the purpose of calculating capital requirement for vega risk of total position in options, individual vega effects within an individual risk category are summed up in accordance with Article 238 hereof and the obtained result represents the net vega effects for each individual risk category.

Net vega effects for each individual risk category may have a positive or a negative value.

The sum of absolute values of all net vega effects according to all risk categories, increased by 25%, represents the total capital requirement for vega risk of total position in options.

## **VI. CALCULATING CAPITAL REQUIREMENT FOR OPERATIONAL RISK**

### **6.1. Methodologies**

#### **Methodology for calculating capital requirement**

##### **Article 241**

For calculating capital requirement for operational risk, the bank may, under provisions prescribed hereof, use:

- 1) Basic Indicator Approach, or
- 2) Standardized Approach

### **6.1.1. Basic Indicator Approach**

#### **Use of Basic Indicator Approach**

##### **Article 242**

Bank shall use Basic Indicator Approach prescribed hereof for calculating capital requirement for operational risk, unless it has the approval of the Central Bank to use the standardised approach.

#### **Calculating capital requirements**

##### **Article 243**

Capital requirements for operational risk shall be calculated by multiplying the base for calculating capital requirement for operational risk, determined in accordance with paragraphs 2 and 3 of this Article, by coefficient 0.15 and increase the obtained result by 25%.

The base for calculating capital requirement for operational risk shall be the average of net interest bearing and net non-interest bearing income for the last three consecutive financial years.

Bank shall calculate capital requirement for operational risk based on audited reports. If audited reports are not available, the bank may use unaudited data or estimates.

Notwithstanding paragraph 2 of this Article, the year in which a sum of net interest bearing and net non-interest bearing bank income is negative shall not be included in the calculation of capital requirement for operational risk.

#### **Bank's net income**

##### **Article 244**

When calculating annual net interest and net non-interest income of a bank, the following items shall be included:

- 1) interest income;
- 2) interest expense;
- 3) income from dividends;
- 4) fee and commission income;
- 5) fee and commission expenses;
- 6) net gains or losses from financial activities;
- 7) fees paid for outsourcing services, rendered by third parties which are parent company, or subsidiary of the bank registered in Montenegro, or legal person

- 8) other income,

Annual income shall be calculated before any provisions are deducted.

When calculating capital requirements for operational risk the following positions shall not be used in the calculation:

- 1) gains and losses from sale of financial assets held to maturity;
- 2) income not arising from regular operations of the bank,
- 3) income arising from insurance

### **6.1.2. Standardised approach**

#### **Use of approaches**

##### **Article 245**

For the purposes of calculating capital requirements for operational risk, bank may use the standardized approach only with the approval by the Central Bank.

The Central Bank shall issue approval under paragraph 1 of this Article, if it estimates that the bank meets the following criteria:

- 1) it has clearly defined and well-documented operational risk assessment and management system, with clearly defined responsibilities within the system.
- 2) this system shall identify exposures to operational risk and track relevant operational risk data, including material loss data.
- 3) operational risk assessment and management system in the bank are subject to regular independent reviews by internal and/or external audit;
- 4) operational risk measurement system of the bank is integrated in the process of operational risk management of the bank and the results of operational risk measurement represent an integral part of the process of monitoring and control of operational risk in the bank;
- 5) the bank has an established reporting system which provides the appropriate structures in a bank with reports on operational risks, as well as procedures for undertaking necessary actions on the basis of obtained information.

Bank which uses the standardized approach for calculating capital requirements for operational risk may shift to the Basic Indicator Approach only with a prior approval by the Central Bank.

Bank may use a combination of the Basic Approach and the Standardised Approach, with the approval of the Central Bank, only in cases which may require a specific transition period for the implementation of the Standardised Approach for new activities.

Bank shall state, in its application for obtaining approval under paragraph 4 above, reasons for the combined use of the Basic Approach and the Standardised

Approach, and timeframe needed for transition to Standardised Approach for all business lines.

### Calculating capital requirement

#### Article 246

According to the standardized approach, capital requirement for operational risk shall represent an annual average of capital requirement for operational risk for the last three consecutive business years, increased by 25%.

Capital requirement for operational risk for an individual year under paragraph 1 of this Article shall represent the sum of capital requirements for all business lines of a bank, as established in table under paragraph 3 of this Article.

Capital requirement for an individual business line of a bank shall be calculated by applying the appropriate percentage hereof to the base for calculating capital requirements under Article 247 hereof, as specified in the following table:

No.	Business line	Type of activity	Coefficient
1.	Corporate financing and financial consultancy	<ul style="list-style-type: none"> <li>- Underwriting of financial instruments</li> <li>- services related to underwriting of financial instruments</li> <li>- investment advice</li> <li>- advice to corporates on capital structure, business strategy and similar issues and advice and services related to status change of companies</li> <li>- research in the field of investments and financial analysis, as well as other forms of consultancy related to financial instruments</li> </ul>	0.18
2.	Trading and sales	<ul style="list-style-type: none"> <li>- dealing on own account,</li> <li>- brokerage,</li> <li>- reception and transmission of orders related to one or more financial instruments,</li> <li>- execution of orders on behalf of clients,</li> <li>- offering financial instruments without firm commitment basis,</li> <li>- multilateral trading facility management,</li> </ul>	0.18
3.	Retail brokerage (households, small and medium-sized enterprises)	<ul style="list-style-type: none"> <li>- reception and transmission of orders related to one or more financial instruments</li> <li>- execution of orders on behalf of clients</li> <li>- placing of financial instruments without firm commitment basis</li> </ul>	0.12
4.	Commercial banking	<ul style="list-style-type: none"> <li>- acceptance of deposits and other repayable funds</li> <li>- lending</li> </ul>	0.15

		<ul style="list-style-type: none"> <li>- financial leasing</li> <li>- issuing of guarantees and assuming of other off-balance sheet commitments</li> </ul>	
5.	Retail banking (natural persons and entrepreneurs)	<ul style="list-style-type: none"> <li>- acceptance of deposits and other repayable funds</li> <li>- granting loans</li> <li>- financial leasing</li> <li>- issuing of guarantees and assuming of other off-balance sheet commitments</li> </ul>	0.12
6.	Payment and settlement	<ul style="list-style-type: none"> <li>- payment systems</li> <li>- issuing, processing and recording of payment instruments</li> </ul>	0.18
7	Agency services	<ul style="list-style-type: none"> <li>- safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management and renting safe deposit boxes</li> </ul>	0.15
8	Asset management	<ul style="list-style-type: none"> <li>- portfolio management</li> <li>- management of investment funds</li> <li>- other forms of asset management</li> </ul>	0.12

For a year in which a sum of net interest and net non-interest income from all business lines is negative or equal to zero, capital requirements for operational risk for that year shall be assigned a zero value.

### **Calculating the base**

#### **Article 247**

The base for calculating capital requirements for operational risk by applying the standardized approach, for an individual business line, shall represent a sum of total net interest and net non-interest income from that business line in the period for which the capital requirements are calculated.

The base for calculating capital requirement for operational risk shall be calculated for each business area and for each year used in calculating the average under Article 246 paragraph 1 hereof.

The calculation of net interest and net non-interest income from individual business areas shall be performed in accordance with the methodology under Article 244 hereof.

Capital charge for an individual business line shall be included in the calculation of capital requirements for a year for which the capital requirements are calculated, regardless of whether the calculated capital for that business line is below or above zero.

## Definition of business lines

### Article 248

For the purpose of calculating capital requirement for operational risk by applying the standardized method, bank is obliged to develop and document special policies and criteria for the classification of activities into business lines under Article 246 paragraph 3 hereof, based on the following principles:

- 1) all bank activities must be classified into business lines in the way to enable their comprehensiveness and exclusiveness;
- 2) banking business or non-banking activity which cannot be explicitly classified under some of the specified business lines and represents an ancillary business activity to the core business under some of the specified business lines, shall be classified under a business line in which the main activity is classified. If more than one business line is supported through the ancillary activity, an objective-mapping criterion must be used;
- 3) for new business activities bank shall provide documented explanation for its classification into the specific business line;
- 4) activity which cannot be classified and does not belong to any business line shall be classified under business line with the highest coefficient established;
- 5) bank may use internal pricing methods to allocate the relevant indicator between business lines. Costs generated in one business line which are imputable to a different business line may be reallocated to the business line to which they pertain, for instance by using a treatment based on internal transfer costs between the two business lines;
- 6) classification of activities into business lines for calculating capital requirement for operational risk must be in accordance with business lines the bank established for credit and market risks,
- 7) accountability of executive directors for policies of defining business lines shall be defined;
- 8) the process of establishing business lines must be subject to independent assessment of internal and external audits;

The criteria for the classification of activities into business lines must be reviewed and adjusted as appropriate for new or changing business activities and risks.

## VII. CAPITAL ADEQUACY

### 7.1. Solvency ratio

#### Solvency ratio calculation

##### Article 249

Solvency ratio, as a relative indicator of bank exposure to business risks, shall be calculated according to the following formula:

$$\frac{SS}{RPAK + 10 (PKT + PKO) + RPADR} \times 100 = \text{_____} \% \text{ (solvency ratio),}$$

Elements of the formula under paragraph 1 of this Article shall have the following meaning:

**SS** - amount of bank own funds;

**RPAK**- amount of risk weighted assets for credit risk (including risk weighted assets for counterparty credit risk);

**PKT** – amount of capital requirement for market risks;

**PKO**- amount of capital requirement for operational risk;

**RPADR**- amount of total risk weighted assets for other risks

## **7.2. Internal capital adequacy assessment process**

### **Internal capital adequacy assessment process**

#### **Article 250**

Bank shall have in place sound, effective and comprehensive strategies and processes to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of the risks to which they are or might be exposed.

Strategies and processes under paragraph 1 above shall be subject to regular internal review to ensure that they remain comprehensive and proportionate to the nature, scale and complexity of the activities of the bank.

Bank shall undertake internal capital adequacy assessment process at least once a year, and more frequently in case of any significant changes in the bank's risk profile.

Bank shall adopt annual plans for capital management.

### **Reporting to the Central Bank**

#### **Article 251**

Bank shall submit to the Central Bank report on the internal capital adequacy and assessment process to include, as the minimum:

- 1) organisational structure, with the description of delegated powers and responsibilities to persons and organisational units included in the internal capital adequacy process,
- 2) description of methodologies used for establishing internal capital for other risks,
- 3) description of the system of measurement/assessment of risks,
- 4) the manner of controlling and techniques of minimizing risks,
- 5) description of stress testing bank uses in the internal capital adequacy assessment process and results of these tests,
- 6) the assessment of the internal capital adequacy assessment that should identify weaknesses and shortcomings of the process itself and timely corrective measures to be undertaken for their removal,

- 7) for banks which parent bank has registered office outside Montenegro, the adjustment of the internal capital adequacy assessment process with that of the parent bank.

Bank shall submit to the Central Bank reports on internal capital adequacy assessment process for the previous year not later than by 30 April of the current year.

## **Supervisory review and evaluation process**

### **Article 252**

Central Bank shall review the strategies, processes and mechanisms implemented by banks in accordance with the requirements of the Banking Law and this Decision and evaluate the risks to which banks are or might be exposed in their operations.

On the basis of the review and evaluation referred to paragraph 1 above, the Central Bank shall determine whether the arrangements, strategies, processes and mechanisms implemented by the bank and its own funds ensure a sound management and coverage of the risks in its operations.

Central Bank shall establish the frequency and intensity of the review and evaluation under paragraph 1 above bearing in mind the size, systemic importance, nature, scale and complexity of the activities of the bank concerned and taking into account the principle of proportionality. The review and evaluation shall be updated at least on an annual basis.

The supervisory review process shall include also the Central Bank's dialogue with a bank.

Supervisory review process under paragraph 1 above shall include as a minimum the following:

- 1) the level of credit, market and operational risks taken by the bank;
- 2) the stress testing results;
- 3) the level of the interest rate risk in the banking book;
- 4) the level of country risk;
- 5) the level and management of liquidity risk;
- 6) the level and management of concentration risk and large exposures;
- 7) the robustness, suitability and manner of application of the policies and procedures implemented by the bank for the management of the residual risk associated with the use of recognized credit risk mitigation techniques;
- 8) the extent to which the own funds held by a bank in respect of assets which it has securitised are adequate taking into account the economic substance of the transaction, including the degree of risk transfer achieved;
- 9) the impact of diversification effects and how such effects are factored into the risk measurement system;
- 10) the suitability of the assessments under Article 191 above and the amount of time it would take to sell or hedge out the risks in such positions, so as to

**Article 253**

Internal Capital Adequacy Assessment Process (ICAAP) and Supervisory Review and Evaluation Process (SREP) shall be performed in accordance with the principles and guidelines incorporated in Annexes 2 and 3 which make an integral part of the Decision.

**VIII. FINAL PROVISIONS**

**Article 254**

The Decision on Capital Adequacy of Banks (OGM 60/08, 41/09) shall be repealed on the day of entry into force of this Decision.

**Article 255**

This Decision shall enter into force on the eighth day following that of its publication in the Official Gazette of Montenegro, and it shall be applied from 1 January 2012.

**COUNCIL OF THE CENTRAL BANK OF MONTENEGRO**

**CHAIRMAN**

**G O V E R N O R,**

**Radoje Žugić**

Decision No. 0101-4014/17-3  
Podgorica, 12 July 2011

## TYPES OF FINANCIAL DERIVATIVES

### **I. Financial derivatives on interest rate:**

- 1) single-currency interest rate swaps;
- 2) basis swaps;
- 3) forward interest rate contracts;
- 4) futures interest rate contracts;
- 5) purchased interest rate options;
- 6) other contracts with similar characteristics.

### **II. Financial currency and gold derivatives:**

- 1) cross-currency interest rate swaps;
- 2) currency forward contracts;
- 3) currency futures contracts;
- 4) purchased currency options;
- 5) other contracts with similar characteristics;
- 6) contracts with similar characteristics as contracts under item 1) -4) under this paragraph which involve gold.

Contracts which are similar in nature to contracts under paragraph 1 points 1) – 5) and paragraph 2 points 1) - 4) of this Article relating to other underlying instruments or indices, shall include, as a minimum, the following instruments:

- 1) options, futures contracts, swap contracts, forward interest rate contracts and any other financial derivatives relating to securities, foreign exchange, interest rates, yield or some other derivative financial instrument, financial index or financial measures, and which may be settled physically or in cash;
- 2) options, futures contracts, swap contracts, forward interest rate contracts and all other financial derivatives relating to interest rate, and must be settled in cash or can be settled in cash on the request of one of parties to a contract (or in case of counterparty default or some other event which results in closing of transaction);
- 3) financial contracts for differences.

## **Supervisory Review Process**

### **I. Introduction**

The purpose of the Supervisory Review Process (hereinafter: SRP) is to ensure that banks have sufficient capital to support all material risks to which they are exposed in their operations. It should therefore reinforce the link between risk and capital, so that the bank's risk management strategy, approaches and systems are integrated with its capital planning.

The capital requirement calculated in accordance with the methodology under the Capital Adequacy Decision (hereinafter the Decision) is based on uniform rules and is a minimum requirements for own funds. However, no set of uniform rules can capture all aspects of a bank's overall risk profile. For banks and supervisors alike, judgements on risk and capital adequacy must be based on the bank's overall risk profile, and therefore require more than a simple assessment of compliance with minimum capital requirements. Therefore, banks should develop their reliable processes for risk management which adequately identify, measure, monitor and control risks. Banks should have adequate assessment process in place, which encompasses all key elements of planning and managing the capital and as a result, has adequate capital for those risks.

Moreover, banks should operate above the minimum capital requirements for risks for which the methodology for calculation of capital requirement is prescribed. Requiring overall capital over and above minimum capital requirements set under the Decision is one of several regulatory tools that can be used by supervisors in the supervisory review process to address identified risks, after fully and carefully considering other supervisory measures and other actions to improve the overall quality of the bank's own risk management process.

Supervisory review process is based on the following main principles:

- banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels (ICAAP);
- Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with own funds requirements.
- Supervisors should take supervisory action if they are not satisfied with the result of ICAAP;
- Supervisors should expect banks to operate above the minimum own funds requirements and should have the ability to require them to hold capital in excess of the minimum;

- Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular institution and should require rapid remedial action if capital is not maintained or restored.

These principles are implemented in the part of regulation governing banking operations.

Under the first principle, board of directors of a bank bears primary responsibility for ensuring ICAAP. Sound internal governance is especially important in this context, which are further elaborated in the chapter of this document on internal governance and ICAAP.

The remaining principles which require supervisors to review and evaluate the ICAAP, to perform their own assessment of the bank's risk profile, to identify any weaknesses or inadequacies, and to take supervisory measures if necessary are further elaborated in the chapters of this document on the supervisory review and evaluation process (SREP), risk assessment system (RAS), and Dialogue and prudential measures.

## **II. Guidelines on internal governance and ICAAP**

### **2.1. Internal governance**

The purpose of this guidance on Internal Governance is not to establish new or additional requirements with regard to the requirements defined in the Banking Law and other regulations, but rather to assist supervisors in achieving greater consistency in their assessment of bank's internal governance.

In these guidelines, the term 'internal governance' is used, as opposed to the term 'corporate governance.' While corporate governance has a wider scope and includes issues that concern the shareholders and other stakeholders, internal governance focuses on the responsibility of the Board of Directors and senior management of the bank (management). It is mainly concerned with setting the bank's business objectives and its appetite for risk, how the business of the bank is organised, how responsibilities and authority are allocated, how reporting lines are set up and what information they convey, and how internal control (including compliance function and internal audit) is organised.

Guidelines on internal governance include guidelines that refer to corporate structure and organisation of banks, board of directors, internal control and public disclosure and transparency.

#### **2.1.1. Guidelines on corporate structure and organisation**

- **Banks should have a corporate structure that is transparent and organised in a way that promotes and demonstrates the effective and**

The structure of a bank should be clear and transparent both to the bank's employees and to the relevant supervisory authorities. This is essential for supervisory oversight and for ensuring the effective and prudent management of the bank. Where appropriate, the supervisory authority may assess the legal organisation and the position of a bank within a group on a case by case basis.

- **The reporting lines and the allocation of responsibilities and authority within a bank should be clear, precise, well-defined, transparent, coherent, and enforced.**

There should be clear, precise and well-defined reporting lines and a clear and precise allocation of responsibilities and authority within a bank. Opaque or 'shadow' structures within a bank damage the ability of the board of directors to conduct business in a prudent and efficient fashion.

Board of directors should set and enforce clear lines of responsibility and authority within the bank. It is important that employees understand and adhere to policies and procedures concerning their authority and responsibilities. Employees receiving the information must be given adequate powers and authority to act.

Internal reporting has a dual function: (i) it is used by the board of directors and bank management as a tool for their oversight of the entire institution, and (ii) employees use the information they receive from internal reports to carry out the responsibilities they have been given.

In cases where the business reporting lines do not match the legal structure of the bank or banking group, board of directors should ensure that areas of responsibility and authority are sufficiently clear and transparent.

- **Bank should ensure that the risk management function is organised in a way that facilitates the implementation of risk policies and the management of the bank's risks.**

The risk management function should be a central organisational feature of a bank. It should be structured in a way that permits it to achieve its objectives of implementing risk policies and managing risk within the bank. Large, complex and sophisticated banks could consider establishing risk management functions to cover each material business line.

Risk management includes ongoing identification, measurement and assessment of all material risks that could adversely affect the achievement of the bank's goals. The procedures for risk monitoring and assessment need

to be updated regularly. Board of directors should prepare strategy and risk management policies.

### **2.1.2. Guidelines on management body of the bank**

- **The responsibilities of the board of directors should be clearly defined in a written document. They should include setting the bank's business objectives, risk strategies and risk profile, and adopting the policies needed to achieve these objectives.**

These issues are the basis for the sound and prudent conduct of business, and should be decided at the level of the board of directors.

Management of the bank is responsible for the implementation of the strategies and policies set by the board of directors. Written guidelines, manuals and other means that are deemed necessary should be used to facilitate the accurate implementation of the bank's overall objectives. Documentation should include the essential duties and working procedures of the board of directors. These documents, along with the minutes of the meetings of the board of directors should help the supervisor to evaluate the operation of the board of directors.

- **Management of the bank should ensure that strategies and policies are communicated to all relevant employees throughout the bank.**

Management of the bank should inform and update the employees concerning the bank's strategies and policies, at least to the level needed to carry out their particular duties. This may be done through written guidelines, manuals or other means. It is also important that the employees understand and adhere to policies and procedures pertaining to their duties and responsibilities.

- **Board of directors should systematically and regularly review the strategies and policies for managing the risks of the bank.**

Bank should have effective processes for identifying, managing, monitoring and reporting the risks that it is exposed to. Board of directors should ensure that the relevant strategies and policies are amended when necessary to reflect changing internal and external factors. This is particularly true for the macroeconomic environment in which the bank operates and the position in the business cycle.

- **Board of directors should develop and maintain strong internal control systems.**

Strong internal control systems are essential to the ICAAP. Board of directors is responsible for developing and maintaining systems to ensure effective and efficient operations, adequate control of risks, prudent conduct of business,

reliability of financial and non-financial information reported or disclosed both internally and externally, and compliance with laws, regulations and the bank's internal policies and procedures.

There are several instruments at the disposal of the board of directors for maintaining a sufficiently high standard of internal control, including compliance and internal audit functions.

- **Board of directors should ensure that internal control systems provide for adequate segregation of duties, in order to prevent conflicts of interest.**

In developing the internal control system, board of directors should ensure that there is a clear, transparent and documented decision making process and a clear allocation of responsibilities and authority to ensure compliance with internal decisions and procedures. The internal control mechanisms should be adequate in relation to the business performed by the bank, and should constitute sound administrative and accounting procedures.

- **Board of directors should set effective strategies and policies to maintain, on an ongoing basis, amounts, types and distribution of both internal capital and own funds adequate to cover the risks of the bank.**

Board of directors should ensure that the bank's strategies and policies regarding both internal capital and own funds are both comprehensive and proportionate. Documentation should specify what types of own funds may be used (core and supplementary capital). Furthermore, the distribution of own funds within a banking group must comply with legal requirements concerning the allocation of capital to subsidiaries.

- **Board of directors should monitor and periodically assess the effectiveness of the bank's internal governance structure.**

At least once a year, board of directors should review and, if necessary, amend its policies for the internal governance structure of the bank. This frequency applies only to the internal governance issues covered by these guidelines.

A review of the internal governance structure itself should also be performed annually. This review should focus on any changes in internal and external factors affecting the bank.

- **Board of directors should be active and independent, and should be able to explain its decisions to the supervisory authority and other interested parties.**

Notwithstanding their obligations towards other stakeholders, the members of the board of directors should be free to take decisions in the best interest of

the bank. Their decisions should be clearly based on the information received and should take into account all relevant factors.

The members of the board of directors should have the necessary expertise to carry out their duties, and should be able to make their own judgements and decisions.

- **The board of directors should have policies for selecting, compensating, monitoring and planning the succession of key executives.**

One of the primary tasks of board of directors is to ensure that the bank has, and will continue to have, qualified and experienced key executives.

The compensation schemes of the board of directors should not be structured in a way that encourages unhealthy risk taking or maximisation of short term profits.

- **The management body should promote high ethical and professional standards and an internal control culture.**

Implementing such standards throughout the bank should help reduce the risks to which it is exposed. For example, when the reputation of a bank is called into question, the loss of trust can be difficult to rebuild and can have repercussions throughout the market. In particular, operational risk will be reduced if these standards are given high priority. The board of directors should therefore have clear policies for how these standards should be met, and they should perform a continuing review of their implementation.

### **2.1.3. Guidelines on internal control**

- **Bank should establish, making adequate allowance for the principle of proportionality, compliance function, and internal audit function.**

These internal control functions should be independent of the business lines they monitor and control.

These internal control functions should also be organisationally independent from each other, since they perform different functions. The reporting lines should run directly from the abovementioned functions to the board of directors. The compliance function and the internal audit function should have all have sufficient resources (qualified and experienced staff and adequate number of employees).

- **The compliance function should identify and assess compliance risk.**

Board of directors is responsible for the approval of the bank's policy with regards to compliance risk. Compliance risk is defined as the risk of legal or

regulatory sanctions, material financial loss, or loss to reputation a bank may suffer as a result of its failure to comply with compliance laws, rules and standards.

In order to fulfil this responsibility the board of directors should establish and communicate in a bank a compliance policy. Management of the bank should ensure that it is observed, and report to the board of directors on the management of the compliance risk by the bank. Furthermore, board of directors should establish a permanent and effective compliance function.

The compliance function should advise the management of the bank on compliance laws, rules and standards, including keeping them informed on developments in the area. The compliance function can also assess the possible impact of any changes in the legal environment on the operations of the bank. The compliance function also has the role of verifying that new products and new procedures are in compliance with the current legal environment and any known amendments to the legislation that has not yet entered into force.

- **The internal audit function should allow board of directors to ensure that the quality of the internal controls is both effective and efficient.**

Board of directors is responsible for establishing the internal control framework in compliance with regulatory requirements. The internal audit function is responsible for the assessment of the adequacy of internal controls and should report its findings to the board of directors.

The internal audit function should have free access to the board of directors and audit committee. The reports on all proposals given by the internal audit for important improvements on internal controls should be directly submitted to the board of directors. All internal audit recommendations should be subject to formal follow-up procedure by specific management levels to ensure their resolution and deliver report thereof.

The internal audit function should evaluate the adequacy of the internal control framework of the institution (including the compliance function) and report its findings. It should also have unfettered access to relevant documents and information in all business lines. It should evaluate the compliance of all activities and divisions with the bank's policies and procedures. The internal audit function must also evaluate whether existing policies and procedures remain adequate.

- **There should be effective internal control systems and reliable information systems covering all significant activities of the bank.**

A critical component of a bank's activities is the establishment and maintenance of management information systems that cover the full range of its activities. This information is typically provided through both electronic and

non-electronic means. Banks must be particularly aware of the organisational and internal control requirements related to processing information in an electronic form. Management decision making could be adversely affected by unreliable or misleading information provided by systems that are poorly designed and controlled.

Information systems, including those that hold and use data in electronic form, must be secure, independently monitored and supported by adequate contingency arrangements.

- **Bank should put in place appropriate internal alert procedures for communicating internal governance concerns from the staff.**

Banks are encouraged to adopt appropriate internal alert procedures that staff can use to draw attention to significant and legitimate concerns regarding matters connected with internal governance. These procedures should respect the confidentiality of the staff that raises such concerns. There should be an opportunity to raise these kinds of concerns outside regular reporting lines (e.g. to the head of compliance or internal auditor). The procedures on how to make their concerns known should be made available in writing to all staff within the bank. Information provided by the staff through the alert procedure should, if relevant, be made available to the board of directors.

#### **2.1.4. Guidelines on public disclosure and transparency**

- **Banks should meet the generally agreed transparency requirements in the conduct of their business.**

For majority of banks, the expectations of investors, customers, rating agencies and others may require a higher degree of transparency.

Besides disclosure of information in accordance with the Banking Law and other regulations, public disclosure is also desirable in the following areas: basic organisational structure, the incentive/remuneration structure of the bank and the nature and extent of transactions with related parties. Such disclosures enable interested parties to form a true and accurate assessment of the bank.

Banks may also find it desirable to describe how their risk management, compliance and internal audit functions are organised. Finally, they may want to outline the major tasks performed by these functions, describe how performance is monitored by the board of directors.

- **Each bank should present its current position and future prospects in a balanced, accurate and timely way.**

Information about the current position of the bank should comply with any legal requirements regarding the disclosure of such information. The information should be accurate, relevant, timely and accessible, in order to meet the needs of supervisors, investors, customers, clients, rating agencies, external credit assessment institutions (ECAIs), and the public.

In cases where ensuring a high degree of accuracy would delay the release of time sensitive information, the bank should make a judgement as to the appropriate balance between timeliness and accuracy, bearing in mind the requirement to provide a true and fair picture of the bank's situation. This reasoning should not be used to delay regular reporting requirements, and a satisfactory explanation of the circumstances warranting an exception should be provided.

Disclosures should include, but not be limited to, material information on the financial and operating results of the bank, foreseeable risk factors and governance structures and policies.

## **2.2. Guidelines on ICAAP**

### **2.2.1. ICAAP**

The main objective of the internal capital adequacy assessment process (hereinafter ICAAP) is to improve the relationship between risk profile of the bank, its risk management and capital.

The ICAAP is a process to ensure that the bank:

- Adequately identifies, measures, aggregates and monitors risks it is exposed to;
- Holds adequate internal capital in relation to its risk profile;
- Establishes sound risk management systems and develops them further.

The bank is responsible for defining and developing its ICAAP. The bank should demonstrate, during its dialogue with its supervisor that its internal capital assessment is comprehensive and adequate to the nature of risks arising from its business activities and its operating environment. The framework under which an institution should develop its ICAAP is designed to be risk-based. Banking regulation emphasises the importance of capital planning, but also the importance of management, and other qualitative aspects of risk management.

When assessing their capital needs, all banks should be able to take into account the impact of economic cycles, and sensitivity to other external risks and factors. For larger and/or more complex banks, this may mean developing an appropriately detailed and rigorous stress and scenario testing framework.

Banks have developed various methodologies for assessing their risk exposure and setting capital against it. The introduction of the ICAAP is not meant to suggest that existing methods, which have met the needs of banks over the years, necessarily need to be replaced. However, all banks should have adequate processes in place.

The ICAAP should be embedded in the bank's business and organisational processes.

### 2.2.2. GUIDELINES ON ICAAP

- **Every bank must have an ICAAP.**

Every bank licensed by the Central Bank must establish an ICAAP.

- **Bank is responsible for adequacy of ICAAP**

Each bank is responsible for its ICAAP, and for setting internal capital targets that are consistent with its risk profile and operating environment. The ICAAP should be tailored to the bank's circumstances and needs, and it may use the inputs and definitions that the bank regularly uses for internal purposes.

At the same time, the bank should be able to demonstrate how its ICAAP meets supervisory requirements.

The bank shall retain full responsibility for their ICAAP regardless of the degree of outsourcing, and it should understand that outsourcing does not relieve it of the need to ensure that its ICAAP fully reflects its specific situation and individual risk profile.

- **The ICAAP's design should be fully specified, the bank's capital policy should be fully documented, and the board of directors and management of the bank should take responsibility for the ICAAP**

The responsibility for initiating and designing the ICAAP rests with the board of directors and management of the bank. The board of directors should approve the conceptual design of ICAAP (the scope, general methodology and objectives), and the technical concepts of ICAAP is the responsibility of the management of the bank.

The board of directors is also responsible for integrating capital planning and capital management into the bank's overall risk management culture. The management of the bank should ensure that capital planning and management policies and procedures are communicated and implemented bank wide and supported by sufficient authority and resources.

Bank's ICAAP (i.e. the methodologies, assumptions and procedures) and capital policy should be formally documented, and it should be reviewed and approved by the board of directors.

The results of the ICAAP should be reported to the board of directors.

- **The ICAAP should form an integral part of the management processes and decision-making culture of the bank.**

The ICAAP should form an integral part of bank's management processes so as to enable the board of directors to assess, on an ongoing basis, the risks that are inherent in their activities and material to the bank.

The bank uses the results of capital adequacy assessment also for the following:

- Defining and monitoring the implementation of the risk management strategy;
- Capital allocation;
- Passing decision in credit and planning processes;
- Passing important strategic decisions (e.g. new products offer, new market entrances, etc.).

- **The ICAAP should be reviewed regularly.**

The ICAAP should be reviewed by the bank as often as is deemed necessary to ensure that risks are covered adequately and that capital coverage reflects the actual risk profile of the bank. This review should take place at least annually.

Any changes in the bank's strategic focus, business plan, operating environment or other factors that materially affect assumptions or methodologies used in the ICAAP should initiate appropriate adjustments to the ICAAP. New risks that occur in the business of the institution should be identified and incorporated into the ICAAP.

- **The ICAAP should be risk-based.**

The adequacy of bank's capital is a function of its risk profile. Banks should set capital targets which are consistent with their risk profile and operating environment.

Bank may take other considerations into account in deciding how much capital to hold, such as external rating goals, market reputation and strategic goals. However, if other considerations are included in the process, the bank must be able to show in its dialogue with its supervisor how they influenced its decisions concerning the amount of capital to hold.

There are some types of (less readily quantifiable) risks for which the focus of the ICAAP should be more on qualitative assessment, risk management and mitigation. The bank should clearly establish for which risks a quantitative measure is warranted, and for which risks a qualitative measure is performed.

The bank that uses methodologies set forth in the Decision as a starting point for its ICAAP may also consider developing a fully risk based

methodology.

- **The ICAAP should be comprehensive.**

The ICAAP should capture all the material risks to which the bank is exposed, albeit that there is no standard categorisation of risk types and definition of materiality. The ICAAP should cover: risks for which the methodology is set forth in the Decision for the calculation of capital requirement, risk that refers to such risks, all material risks not fully captured under the Capital Adequacy Decision and risk factors external to the bank.

For defining risks, the bank may use definitions from the banking laws and secondary legislation governing banking operations as well as the following definitions:

- Concentration risk is part of credit risk, which refers to large (connected) individual exposures and significant exposures to groups of counterparts whose likelihood of default is driven by common underlying factors, e.g. sector, economy, geographical location, etc.).
- Reputation risk is the current or prospective risk to earnings and capital arising from adverse perception of the image of the financial institution on the part of customers, counterparties, shareholders, investors or regulators.
- Residual risk is subcategory of credit risk and is the risk that recognized risk measurement and mitigation techniques used by the bank prove less effective than expected.
- Settlement risk is the risk, that the bank will deliver the sold asset or cash to the counterparty and will not receive the purchased asset or cash as expected.
- Strategic risk is the current or prospective risk to earnings and capital arising from changes in the business environment and from adverse business decisions, improper implementation of decisions or lack of responsiveness to changes in the business environment.

- **The ICAAP should be forward-looking.**

The ICAAP should take into account the bank's strategic plans and how they relate to macro-economic factors.

The bank should develop an internal strategy for maintaining capital levels which can incorporate factors such as loan growth expectations, future sources and uses of funds and dividend policy, and any procyclical variation of minimum own funds requirements.

Annual capital plan should incorporate the following:

- Strategic objectives and the time horizon for achieving those objectives, taking into account impact of macro economic factors and changes in economic cycle to strategic plans;
- Capital planning process and the responsibilities for that process;

- Bank’s compliance with capital requirements in the future;
- Any relevant limits related to capital;
- general contingency plan (for example, raising additional capital, restricting business, or using risk mitigation techniques).

Banks should conduct appropriate stress tests which take into account, for example, the risks specific to the jurisdiction(s) in which they operate and the particular stage of the business cycle. Bank should analyse the impact that new legislation, the actions of competitors or other factors may have on their performance, in order to determine what changes in the environment they could sustain.

- **The ICAAP should be based on adequate measurement and assessment processes.**

Banks should have a documented process for assessing risks.

The results and findings of the ICAAP should feed into a bank’s evaluation of its strategy and risk appetite. For less sophisticated banks, for which genuine strategic capital planning is likely to be more difficult, the results of the process should mainly influence the bank’s management of its risk profile (for example, via changes to its lending behaviour or through the use of risk mitigants).

There is no single ‘correct’ process. Depending on proportionality considerations and the development of practices over time, banks may design their ICAAP in different ways.

- **The ICAAP should produce a reasonable outcome.**

The ICAAP should produce a reasonable overall capital number and assessment. The bank should be able to explain in an adequate manner to the supervisor the similarities and differences between its ICAAP (which should cover all material risks) and its own funds requirements.

The banks might be encouraged to make greater disclosures of information which is not proprietary or confidential. This may provide them a means for comparing their ICAAP with their peer group, for internal purposes.

### **III. Guidelines on SREP and RAS**

#### **3.1. SREP**

The obligation of Supervisory review and evaluation process (SREP) is prescribed by the Decision. In order to evaluate the ICAAP, including the adequacy of capital held by a bank, the supervisory authority must review the bank’s exposure to all material risks (its risk profile), the adequacy and reliability of its internal governance and ICAAP. The supervisor must also assess whether capital is the correct means of addressing the bank’s vulnerabilities.

The SREP should be structured to ensure consistency of treatment across banks, keeping in mind that banks differ in risk profile, strategy and management. Supervisors should have arrangements in place for the collection and verification of relevant information, and procedures to maintain the quality and consistency of risk assessments. An essential element of the SREP is the ability to assess qualitatively each type of risk and its management, within the overall context of the bank's internal governance.

Supervisors assess the risk profile of a bank using a variety of sources (including statistical analysis of off-site inspectors, on-site inspections, and communication with bank's management) as part of risk based prudential supervision. These should provide the basis for the supervisor to undertake (among other things) an evaluation of the bank's risk profile. They should also enable the supervisor to apply prudential measures over a period determined by the supervisor, and to maintain an accurate and up-to-date picture of the bank's risk profile in light of its progress in implementing prudential measures and/or other events which may have a significant impact on the risk assessment.

### **3.1.1. Guidelines on SREP**

- **The SREP should be an integrated part of the overall risk-based approach to supervision.**

The supervisory and review evaluation process is an integral, explicit and formal part of the overall risk-based supervisory approach.

The evaluation process underpins the supervisor's dialogue with the bank.

- **The SREP should be applied to all licensed banks.**

The SREP as a part of prudential risk based supervision is applied to all banks licensed in accordance with the Banking Law.

- **The SREP should cover all the activities of a bank.**

All significant business units of the bank, whether operating domestically or overseas, will be considered in the evaluation process.

- **The SREP should cover all material risks and internal governance.**

The supervisory authority will evaluate the bank's business risks and internal governance (including compliance and internal audit).

The evaluation will focus on identifying each bank's risk profile and assessing the quality of the bank's risk management system. The business risks covered should span all activities and all significant business units. The evaluation of supervisor should include, at a minimum, an assessment of the

quality of internal governance, management body, organisational structure, the risk management and internal audit and compliance functions. Supervisor should review the systems that have been put in place to mitigate risk, as well as the adequacy and composition of capital held against those risks.

The evaluation should be forward looking in the sense that it should consider, based on information known at the time, whether the risk profile of the bank is likely to change over the forthcoming period.

The supervisor can use stress tests to help determine the need for early intervention.

- **The SREP will assess and review the bank's ICAAP.**

The supervisor will assess the bank's ICAAP as part of its SREP. This should include a consideration of the assumptions, components, methodology, coverage and outcome of the bank's ICAAP. This review should cover both the bank's risk management processes and its assessment of adequate capital. Supervisors should review the controls that have been put in place to mitigate risk, as well as the adequacy and composition of capital held against those risks.

- **The SREP will assess and review the bank's compliance with the prescribed requirements.**

As part of the SREP, the supervisor must also evaluate the bank's compliance with the various minimum requirements under the Decision.

- **The SREP should identify existing or potential problems and key risks faced by the bank and deficiencies in its risk management frameworks, and it should assess the degree of reliance that can be placed on the outputs of the bank's ICAAP.**

This process will enable the supervisory authority to tailor its approach to the individual bank, provide the foundation for the supervisor's general approach to the bank and its actions, and encourage banks to improve their risk management systems.

- **The SREP will inform supervisors about the need to apply prudential measures.**

Once it has evaluated the adequacy of a bank's capital in relation to its risk profile, the supervisor should immediately identify any prudential measures or other supervisory actions required.

- **The results of the SREP will be communicated to the bank at the appropriate level together with any action that is required of the bank and any significant action planned by the supervisory authority.**

The supervisor will convey the SREP results to the bank. This may be done as part of the dialogue between the supervisor and the bank on the internal systems used to assess capital adequacy.

This review and evaluation allows the supervisor, among other things, to provide qualitative feedback to the bank about the adequacy of its risk management and internal controls in relation to its business risk profile, and to assess and understand the extent to which the output of the ICAAP can serve as an input to the SREP.

- **The supervisory evaluation should be formally reviewed at least on an annual basis, to ensure that it is up-to-date and remains accurate.**

The SREP may not always constitute a full risk assessment. However, supervisory authorities should at least take into account any significant changes to the overall risk profile over the past year. They will take into account the results of any supervisory activity and other information received during the period, and will consider whether the timing of the next full assessment, as agreed during the previous full assessment process, remains appropriate. Notwithstanding the above, any significant new information received in the course of ongoing monitoring and supervision which may affect the bank's risk profile will trigger consideration by the supervisory authority of the need for a formal review or a full risk assessment.

## **3.2. RAS**

Risk assessment system (RAS) is the supervisor's tool for organising (i.e. planning, prioritising and allocating) the use of supervisory resources, and performing and managing the supervisory risk assessment. It provides structure and a practical step-by-step guide to the first phase of the SREP. It is therefore fundamentally a tool for internal supervisory purposes.

### **3.2.1. Guidelines on RAS**

- **In order to carry out an overall assessment of a bank, the supervisory authority should define guidelines covering both assessment of risks and controls in the bank.**

The overall assessment of the risks and controls should be done in a way that facilitates the allocation of resources to those banks (or those areas within banks) that require the most attention.

The supervisor should set an individual rating of risk and control levels. For example, it may be useful to set a default score or rating for particular risks within business units of banks. In certain circumstances, for example where there is insufficient information to set a score or rating at the outset, the

supervisory authority may set a conservative or high default score or rating and then correct it in the light of further analysis.

- **In order to assess bank's risks and controls, the supervisor needs to prepare a breakdown of the bank's activities, down to the material business units or processes where risks are actually taken and where to a large extent controls are actually applied.**

Supervisory authorities need to formulate rules for the breakdown process, taking into account the need to identify the various business elements under supervision for planning purposes.

The starting point is a general description of the institution. To facilitate the detection, assessment and aggregation of risks and the quality of the controls, the bank can be broken down into significant business units or processes. This breakdown is especially useful for banking groups and systemically important banks, and it may be simplified for smaller banks.

This process can be structured as follows (the basic process will be the same for large and small banks, but it will be more complex for larger entities):

- Identification of all business units or processes, using the institution's organisational chart as a starting point,
- Identification of centralised group functions to facilitate the assessment of group-wide risks and controls, such as overall strategic risk, quality of the members of the management body, reporting lines and centralised management functions (e.g. risk management, internal audit and internal control),
- Determination of the significance (materiality) of each unit or process using both quantitative (e.g. contribution to earnings, profit or capital requirement) and qualitative criteria,
- Assessment of the relative impact of the business units or processes on the overall assessment of risks and controls.

While this breakdown is important, particularly for the banking groups, an individual-entity approach is also very important for effective communication between home and host competent authorities when a group has cross border subsidiaries. An individual entity approach is also important for the dialogue between supervisors and banks concerning the appropriate distribution of capital within a group. Keeping an individual entity approach in mind will help to ensure that the distribution of capital remains appropriate: i.e. that the allocation of capital remains commensurate with the distribution of risks so that each bank, including the parent, has the appropriate amount of capital relative to its risks in each country, and sufficient leeway for growth.

The supervisor should select the relevant risk categories it would like to include in the assessment, as not all risk categories may be applicable or relevant to each business unit or process.

In the final step of the breakdown process, the supervisor decides whether to perform a full scale expert assessment or a simplified, less detailed assessment. In the latter case, scores or ratings could be assigned directly, at a more aggregated level.

- **Risk assessment system should encompass all relevant risks and internal governance factors, while at the same time making a clear distinction between the two.**

To support the comparability of different risk assessment systems, and given the needs of cross border cooperation and information sharing, all supervisory authorities should take into account the full set of risks and principles elaborated in this paper.

- **In order to make the results of all risk assessments comparable, both between the various banks within a country and between countries, the results of the supervisory authorities' risk assessments should be based on an assessment of both quantitative and qualitative information.**

The core of the RAS is the assessment of the risk profile and the quality of the controls of the bank under supervision. This assessment should cover all significant business units and processes. The rating system should be designed to discourage the tendency to assign average risk scores or controls to groups of banks. Each risk and control category should be subdivided into its underlying determinants (for example, credit risk may consist of three items: default probability, concentration and correlation, and recovery rate, etc.). The rating system may also cover the quality of the loan portfolio and the amount of provisions

These determinants should be rated by means of a qualitative assessment, which may be expressed in a (quantitative) score or rating. Quantitative information, as well as qualitative information, are necessary to provide key insights to certain risks, and should be used to form the overall qualitative and quantitative assessment.

Supervisors may publicly disclose, the criteria underlying each score or rating class.

In addition to the knowledge and professional judgement of the individual supervisors regarding the supervised banks, supervisors can draw upon a broad range of information sources to help them assess the risks and mitigating controls of banks. These include:

- Information available in supervisory examination reports, including information available from on-site inspections.
- Mandatory financial reporting by supervised banks (for example, information on credit risk provided in reports on large exposures,

- Information from reporting by supervised banks in compliance with other regulatory requirements.
- Interviews (and minutes of these interviews) with senior personnel and staff of supervised banks.
- Internal management reports of the supervised bank, which can be made available on request (e.g. profit and loss account, balance sheet, strategy and policy papers).
- Internal minutes of various management and committee meetings (e.g. Board of Directors, ALCO, credit committee).
- The internal and external audit reports of the supervised bank.

Supervisory authorities may develop an IT tool to support the risk assessment method. This may facilitate the assessment of risks and controls and improve its efficiency. It may also help standardise systems and facilitate comparisons and transfers of information between supervisors within the same country, or between countries.

- **Procedures for quality assurance should be in place in order to maintain the quality and consistency of risk assessments.**

Quality assurance is one of the key elements in the overall risk assessment process. It maintains the quality and consistency of assessment results, and may consist of the following elements:

- An adequate challenge process, including a regular review of the global risk assessment process.
- A regular review of individual assessments. Consistency and comparability can be ensured by having a minimum of two supervisors perform the various steps in the risk analysis (the ‘four eyes’ principle).
- The risk assessment process may be supported by a dedicated team, which may support the supervisors during the assessments, communicate with the management body and international authorities, further develop the risk assessment methodology and software tools.
- A traceable rating history or audit trail, so that changes in the assessment can be traced back to the responsible supervisor.

- **The supervisory authority should compare the results of the RAS with the outcome of the ICAAP and analyse their consistency.**

The RAS does not constitute a parallel or secondary ICAAP or a benchmark for a bank’s own processes. However, if a bank’s ICAAP is judged to be inadequate, the RAS should be able to assist the supervisory authority in determining, in general terms, the overall risk profile of the bank, and may provide an indication of the capital needed to cover all the risks.

#### **IV. SREP-ICAAP interaction and prudential measures**

## 4.1. Dialogue

A dialogue between the bank and supervisor represents a key element of the supervisory review process. This document emphasises the inclusion of the supervisor and the bank and their interaction aimed at preparing clear and consistent dialogue. The dialogue should cover all aspects of business risk and internal governance (including compliance and internal audit controls). For the purpose of providing transparency and consistency in a dialogue, and strengthening convergence of supervisory practice, supervision processes should be prescribed in detail.

The intensity and depth of the dialogue should be proportionate to the nature, scope, complexity and systemic importance of the bank. For example, small and less complex banks are not expected to have sophisticated ICAAP, and supervisory may not have intensive and comprehensive dialogue about that.

Supervisors will explore through the dialogue with bank, how bank sets its risk strategy, how it identifies, measures, monitors and controls the risks it takes, and how it sets its overall risk bearing capacity. The dialogue should be structured to cover elements such as internal governance (including compliance and internal audit controls), the organisation of the bank's business, and how the bank allocates capital against risk.

## 4.2. Guidelines on dialogue

- **Supervisors should have a methodology to structure the dialogue with the bank.**

A key element of the SREP is the dialogue between supervisors and banks. It will inform the supervisor about the way the bank's ICAAP is structured, the assumptions which are used to determine underlying risks across different sectors and risk types, risk sensitivity and confidence levels, and how risks are aggregated.

The supervisory assessment should be based on a review of the bank's ICAAP. The SREP is not intended to perform a parallel recalculation (although some form of independent calculation may be necessary in cases where a bank's ICAAP is so flawed that the supervisor decides it cannot be relied upon to form the basis for the dialogue).

It would be inappropriate for the supervisor to enter into the ICAAP/SREP dialogue with preconceived ideas as to whether the capital held by the bank adequately covers all material risks. It is up to the bank to justify its process for identifying and measuring its risks and then justify how much capital, if any, it allocates against them, taking into account other qualitative mitigants of risk.

The bank should be able to explain any differences between its own assessment of capital needs and targets under the ICAAP and own funds requirements.

- **The structure of the dialogue should comprise four main elements.**

The dialogue should embrace the following four elements:

- Risks captured under the Decision (credit risk, settlement/delivery risk and counterparty credit risk, market and operational risk);
- Risks referring to risks for which the methodology for calculating capital requirement is set forth in the Decision such as residual risk in credit risk mitigation and securitisation risk;
- Materially important risks that are not captured under Capital Adequacy Decision, and to which the bank may be exposed, such as interest rate risk in the banking book, concentration risk, liquidity risk, country risk, reputation risk, strategic risk;
- Risk factors that are external to the bank, and that may arise from regulatory, economic or business environment and are not included in other risks.

It is important to stress that these elements should not be interpreted as resulting in automatic capital add-ons. Supervisors will apply judgement when considering the relationship between qualitative and quantitative components, making due allowance for qualitative measures which may be effective mitigants on their own or in combination with capital. Moreover, it is not a question of simply aggregating risks and the capital which may be attributed to them. There may be good reasons why the total amount of capital allocated may be less than the sum of the individual risk elements; however these would need to be assessed within the context of a holistic approach which would have to be sufficiently robust.

- **Supervisors should use the dialogue to test and challenge the banks' ICAAP and to exchange views, in order to reach a better understanding of the underlying assumptions and processes.**

For this process to be effective, supervisors need to have a sufficiently thorough understanding of how the ICAAP is determined and the differences between it and the Decision. This should also help them evaluate the ICAAP outcome. This process emphasises the importance of analysing the main elements, understanding the differences between ICAAP assumptions and Decision assumptions, and understanding the extent to which the institution has introduced diversification and correlation effects.

In practice, the supervisor may use the results of the RAS and a mix of on-site and off-site inspection to increase its understanding of the bank's ICAAP.

The bank may make changes to the ICAAP in the course of the dialogue, in response to challenge and feedback from the supervisor. Following the dialogue, the supervisor will reach an assessment.

- **The frequency and depth of the dialogue will be determined by the supervisor, according to its assessment of the risk profile and/or systemic importance of each bank.**

It is up to the supervisory authority not the bank to determine when the dialogue should start and how intensive it will be. The supervisory authority will also determine the nature and depth of the dialogue, based on the type of bank and its peer group ranking.

Although the intensity of the dialogue will vary both between and within peer groups of banks (reflecting the nature of the peer group and the levels of concern, based on risk assessment), supervisors will establish basic benchmarks for the intensity of supervisory resources that will be needed for each peer group. Supervisors will then be expected to scale up from these benchmarks for those institutions which are assessed as posing greater risk.

#### **4.2. Guidelines on prudential measures**

- **Prudential measures to address issues identified either through the SREP or as part of ongoing supervision should be applied promptly.**

If the supervisor considers that a bank's ICAAP does not adequately reflect its overall risk profile, or does not result in the bank having adequate capital, then consideration should be given to applying prudential measures.

Under the set of measures set forth in the Banking Law, the supervisor shall be primarily focused on the measures requiring the banks to:

- hold own funds and/or other capital adequacy indicators above the minimum level and/or impose stricter limitations on its business;
- improve its internal control and risk management frameworks;
- temporarily restrict or limit performance of a part or all activities, opening of new organisational parts or introduction of new product;
- reduce the risk inherent in its activities, products and systems.

The range of envisaged supervisory measures should be identified as one output of the SREP. The final decision on which measures to implement will be taken by the supervisor, taking into account the outcome of the dialogue with the bank.

The choice of prudential measures should be determined according to the severity and underlying causes of the situation and the range of measures and sanctions available to the supervisor. A specific own funds requirement should, however, be imposed on any bank which exhibits an imbalance between its business risks and its internal control and risk frameworks, if that

imbalance cannot be remedied by other prudential measures or supervisory actions within an appropriate timeframe.

A specific own funds requirement may also be set where the supervisor judges the level of own funds held by a bank to be inherently inadequate for its overall risk profile. It must be acknowledged that there is no 'scientific' method for determining the amount, and that capital is not a long run substitute for remedying deficiencies in systems and controls. In practice, the process relies heavily on subjective judgement and peer group consistency to ensure a level playing field and a defence to challenge by banks.

- **Prudential measures should be communicated promptly and in sufficient detail.**

In communicating its decision on prudential measures, the supervisory authority should:

- Explain in sufficient detail the factors which have led to the risk assessment conclusions;
- Indicate areas of weakness and the timeframe for remedial action;
- Explain the reasons for any adjustment to the bank's capital requirements;
- Indicate what improvements could be made to systems and controls to make them adequate for the risks and activities of the bank, and for this improvement to be reflected in the bank's capital requirements.

## **ICAAP Implementation**

### **Introduction**

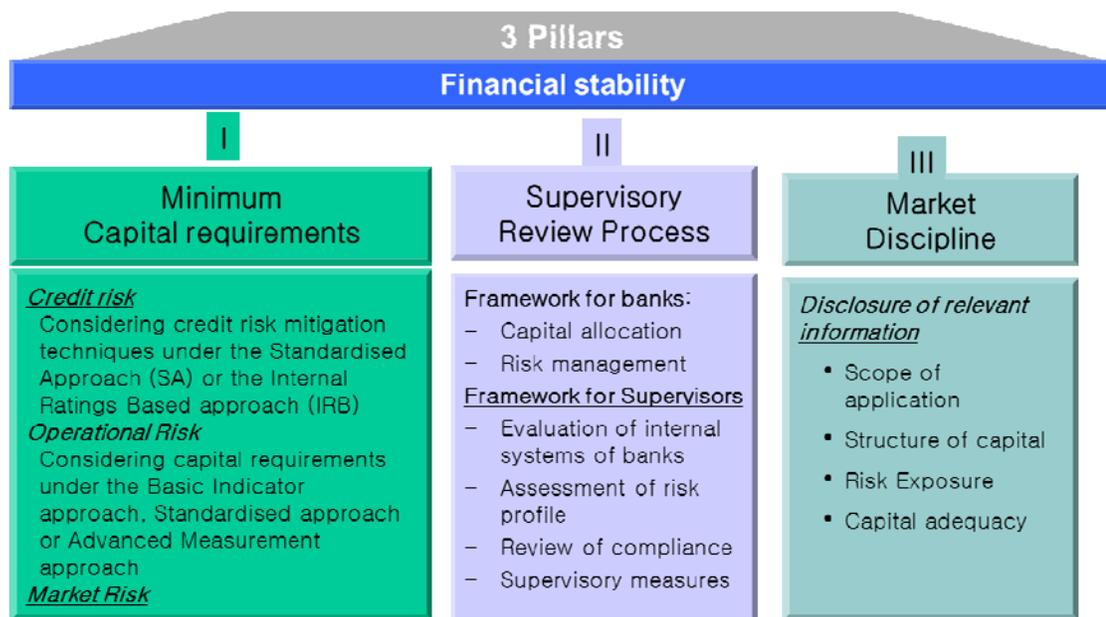
This document is based on the revised framework of the Basel II and the EU Directives 2006/48/EC and 2006/49/EC, which requirements in Montenegro are reflected in the Banking Law and the Capital Adequacy Decision.

In addition to the methods for calculating regulatory capital requirements, the Basel II framework places also emphasis on the bank-wide risk management. The Pillar II framework (supervisory review process) aims to enhance the link between an institution's risk profile, its risk management and its capital. Banks are required to employ appropriate procedures and systems in order to ensure their capital adequacy while covering all material risks. Banks are facing the challenge of developing internal procedures and systems in order to ensure that they possess adequate capital resources in the long term. In developing its ICAAP, the bank is required to consider quantitative as well as qualitative criteria such as the establishment of suitable processes. Banks should be able to demonstrate that they have covered all material risks and have implemented the methods and systems necessary to ensure their capital adequacy. For their part, the competent supervisory authorities are required to assess these procedures and to impose supervisory measures as necessary. The dialogue between a bank and its supervisor is a key part of the supervisory review process.

### **1. Basel II**

While the Basel I framework was focused on the minimum capital requirements for banks in order to ensure the stability of the financial system, the Basel II accord expands this approach to include two additional areas, namely the supervisory review process (SRP) and additional disclosure requirements for banks. According to Basel II, the stability of the financial market therefore rests on the following three pillars, which are designed to reinforce each other:

- Pillar I: Minimum Capital Requirements - risk-based calculation of capital requirements which includes market, credit and operational risk.
- Pillar II: Supervisory Review Process (SRP) - the establishment of suitable risk management systems in banks and their review by the supervisory authority.
- Pillar III: Market Discipline - increased transparency due to expanded disclosure requirements for banks.



Pillar II requires banks to implement a process for assessing their capital adequacy in relation to their risk profiles as well as a strategy for maintaining their capital levels - the Internal Capital Adequacy Assessment Process (ICAAP). Pillar II also requires the supervisory authorities to put all banks to an evaluation process and to impose any necessary supervisory measures on this basis.

Supervisory Review Process (SRP) refers to the process which covers all of the processes and measures defined in the principles listed below. Essentially, these include the review and evaluation of the institution's ICAAP, the performance of an independent assessment of the institution's risk profile, and if necessary taking prudential measures and other supervisory actions.

The Basel Committee has defined the following four basic principles for the supervisory review process:

- **Principle 1:** Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.
- **Principle 2:** Supervisors should review and evaluate banks internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.
- **Principle 3:** Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.
- **Principle 4:** Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the

The main requirements for the banks under the Pillar II are:

- sound corporate management with a clear organizational structure and responsibilities;
- effective procedures for determining, controlling, monitoring and reporting current and future risks as well as appropriate internal control mechanisms;
- adequate processes, procedures and mechanisms with regard to the nature, scale and complexity of the bank's business activities;
- comprehensive strategies and procedures for continuous evaluation and regular review of the amount, composition and distribution of internal capital which is considered adequate to cover current risks and any future risks in both quantitative and qualitative terms.

The supervisory authorities are evaluating the banks internal processes and strategies as well as their risk profiles. Supervisory measures could be applied as corrective measures under the Banking Law and the Capital Adequacy Decision.

## **2. General information about the ICAAP**

### **2.1. Necessity for implementing ICAAP**

Implementing and performing the ICAAP should not be a bank's duty because of supervisory requirements for the sake of financial stability, but in its own interest. The essential objective of the ICAAP is establishment of the bank's risk profile and early identification of internal and external factors that can affect its performance.

Banks shall have in place sound, effective and complete strategies and processes to assess and maintain on an ongoing basis the amounts, types, and distribution of internal capital that they consider adequate to cover the nature and level of the risks to which they are or might be exposed. The requirements for effectively managing the entire spectrum of risks to which banks are or could be exposed include establishment of high-quality internal procedures, methodologies and systems to provide adequate own funds to cover materially significant risks.

Therefore, the ICAAP includes all the bank's procedures, methodologies and systems designed to ensure the following:

- an adequate identification, measurement and monitoring of risks;
- an adequate level of internal capital in relation to the bank's risk profile;
- usage of sound risk management systems and its further development;

The main objective of the ICAAP is to secure the institution's risk-bearing capacity. Thus the ICAAP constitutes a comprehensive package which delivers significant benefits from a business perspective. When calculating the bank's risk-bearing capacity, it is necessary to determine the extent to which a bank can afford to take certain risks at all. For this purpose, the bank needs to ensure that the available risk

coverage capital is sufficient at all times. The bank must also review the extent to which risks are worth taking, and it is necessary to analyze the costs and benefits arising from risk taking.

Having in mind the above mentioned, the bank must take two steps. First it has to define the level of the risk it is able to bear and it has to secure sufficient capital to cover risks. As a second step, bank should carefully analyse the reasonable amount of risk it is ready to take up compared to the corresponding opportunities and threats.

## **2.2. Basic principles of the implementation of the ICAAP**

The bank must consistently apply the following basic principles of the implementation of the ICAAP:

- a) Principle of responsibility.** The overall responsibility for the ICAAP is assigned to the bank's management, which must ensure that the bank's risk-bearing capacity is secured and that all material risks are measured and limited. Due to the central importance of the ICAAP for bank management, the responsibility for its definition, design and ongoing development is assigned to senior management.

In this context, the ICAAP should not be treated as an isolated process but incorporated into the bank's strategic and operation management as a component of corporate management.

The parameters essential to the ICAAP are determined in the strategic management process. Bank has to define the basis of its ICAAP, including the risk strategy and risk policy principles.

In this process, it is also important to establish clear and transparent reporting lines and to define the corresponding responsibilities.

Within the framework of operations management, the ICAAP forms part of ongoing risk management. The general conditions set out in the bank's risk strategy become operational in risk management. The results and reports generated by the ICAAP should serve as a basis for management decisions and bank control. The management must make its decisions independently and on the basis of the information necessary for evaluating all relevant factors.

Specifically, managers must perform the following tasks in the ICAAP in accordance with the defined obligations and responsibilities:

- definition of corporate objectives and risk strategies, definition of the bank's risk profile, and establishment of the corresponding procedures and processes, including documentation;
- definition of strategies and procedures for adherence to capital requirements and for risk-based capital allocation;

- dissemination of information on these strategies and procedures to the employees concerned;
- establishment of a suitable internal control system, especially with regard to the ICAAP;
- functional and organizational segregation of responsibilities, and management of conflicts of interest;
- ensuring that employees have the necessary qualifications;
- regular (at least annual) review of systems, procedures and processes, and adaptation as necessary.

**b) Principle of proportionality.** Banks are required to apply the ICAAP regardless of their size and complexity. However, the ICAAP must be proportional to the nature, scope and complexity of its business, risk management system and approaches used for calculation of minimum capital requirements. Smaller banks which mainly engage in low-risk transactions might be able to fulfil the requirements in an appropriate manner using simple methods based on ICAAP principles. For banks which conduct highly complex business activities or handle high transaction volumes, it may be necessary to employ more complex systems in order to meet the ICAAP requirements. The decision as to which systems are appropriate should be made on the basis of the bank's specific risk structure. It is important to remember that the size of a bank is not the only decisive factor in ICAAP requirements. Small institutions can also demonstrate a relatively large risk appetite due to the structure of their business activities, and this will require them to deploy more advanced risk management systems. However, it is equally possible that a larger bank in which a certain risk type is not significant (or only of limited significance) will only use the standard procedures for calculating minimum capital requirements for that specific risk type in the ICAAP.

**c) Principle of materiality.** The ICAAP focuses on ensuring bank's internal capital adequacy from a business perspective. For this purpose, all of the material risks must be assessed. Therefore, the focus is laid on those risks which are significant for the individual bank.

CEBS (Committee of European Banking Supervisors/now EBA) identifies ten Guiding Principles for ICAAP in its "Guidelines on the Application of the Supervisory Review Process", which are incorporated into the Capital Adequacy Decision. These are the following:

- 1) Every institution must have a process for assessing its capital adequacy relative to its risk profile (an ICAAP).
- 2) The ICAAP is the responsibility of the institution.
- 3) The ICAAP's design should be fully specified, the institution's capital policy should be fully documented, and the management body (both supervisory and management functions) should take responsibility for the ICAAP.
- 4) The ICAAP should form an integral part of the management process and decision making culture of the institution.
- 5) The ICAAP should be reviewed regularly.

- 6) The ICAAP should be risk based.
- 7) The ICAAP should be comprehensive.
- 8) The ICAAP should be forward looking.
- 9) The ICAAP should be based on adequate measurement and assessment processes.
- 10) The ICAAP should produce a reasonable outcome.

Supervisory authority will assess ICAAP against these principles in carrying out supervisory review and evaluation process (SREP).

### **2.3. Level of ICAAP implementation**

In general, three different levels of application can be distinguished for ICAAP requirements:

- individual institution level;
- consolidated level;
- sub-group level.

**Implementation of the ICAAP on an individual institution level** - Banks which are treated as individual institutions are required to implement ICAAP on an individual basis. The ICAAP on individual basis is implemented by:

- actual individual banks;
- banks excluded from the scope of consolidation;
- banks which are neither subordinate nor superordinate to another bank established in Montenegro even if the bank is superordinated or subordinated to another bank established abroad (including the EU).

**Implementation of the ICAAP on a consolidated level** - Bank established in Montenegro that has subordinate or superordinate banks established in Montenegro, is exempted from the implementation of the ICAAP on an individual basis. In such cases, the parent bank alone is responsible for fulfilling the requirements on the basis of its consolidated financial situation.

Even if the subsidiary is incorporated abroad, the bank is still required to fulfil ICAAP requirements on the basis of its consolidated financial situation.

**Implementation of the ICAAP on consolidated basis at sub-group level** - Bank that is subordinated to a bank established in Montenegro and is itself or via its parent bank superordinated to another credit institution established in a third country, must implement the ICAAP on a consolidated basis at sub-group level.

### **2.4. ICAAP Documentation requirements**

The ICAAP has to be designed in a transparent and comprehensible manner. This will facilitate employees in understanding, accepting and applying the defined procedures, and it will make it easier for the bank to review the adequacy of its methods and rules regularly and to enhance them on an ongoing basis. For this reason, it is advisable to draw up formal written documentation (allowing for already

existing forms of documentation and definitions that comply with the requirements) on all essential elements of the ICAAP.

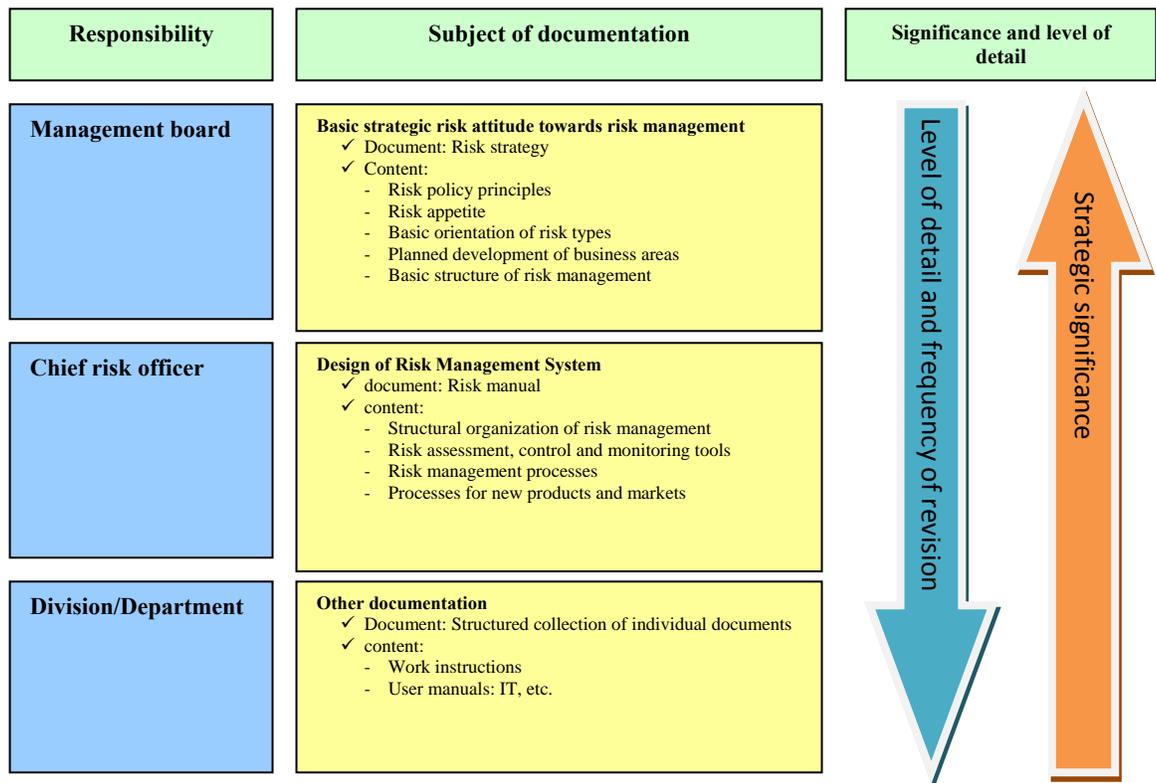
In creating the required documentation, the bank should ensure that the depth and scope of its explanations are tailored to the relevant target group. It is therefore sensible to use various levels of detail in the actual implementation of documentation requirements.

At the top level, it is advisable to articulate the bank's fundamental strategic attitude toward risk management. This will reflect the bank's basic orientation and guide all ICAAP-related decisions. The bank's basic strategic attitude can be documented in the form of a risk strategy. The essential components of such a strategy include risk policy principles, statements as to the bank's risk appetite, a description of the bank's fundamental orientation with regard to individual risk types, and comments on the future development of the bank's business divisions. The risk strategy should be approved by the board of directors of the bank.

At the next level down, the bank should provide a more detailed explanation of the methods and instruments employed for risk control and management. In practice, such a document is frequently referred to as the bank's risk manual. Essentially, the risk manual contains a description of the risk management process, definitions of all relevant risk types, explanations of evaluation, control and monitoring procedures for risk positions (separate for each risk type), and a discussion of the process of launching new products or entering new markets.

At the third level, the bank should provide a summary of other documentation on risk management. This might include specific work instructions or manuals for certain IT applications. Accordingly, the documents at the bottom level will tend to contain the highest level of detail and undergo revisions most frequently.

Ensuring that documentation is complete and up to date is a crucial task in the creation and maintenance process. Not all of a bank's documentation will have to be rewritten in the course of implementing the ICAAP requirements. Instead, the documentation can be based on existing guidelines and regulations. However, documentation should be updated in line with any adaptations or extensions of internal risk management resulting from ICAAP implementation and systematically reorganized as necessary.



The scope and level of detail of documentation should be proportionate to the size, complexity and risk levels of the specific bank. If, for example, a bank's self-assessment shows that it is consistently exposed to low risk, this will be reflected in fairly lean documentation requirements.

Structured documentation contributes to the transparency of the bank's ICAAP and thus allows the board of directors to assess the design of the bank's internal ICAAP more effectively. Furthermore, documentation also supports the internal audit unit in reviewing the bank's ICAAP. Finally, complete documentation of all significant processes and rules is also invaluable for the purpose of demonstrating the adequacy of the ICAAP in front of the supervisors.

The bank must ensure that the documentation in question is stored in paper and/or electronic form orderly in terms of security and accessibility.

### 3. The ICAAP

#### 3.1. Identification of risks

The classification of risks used by the bank should correspond to the bank's size, nature, scale and complexity of activities and should be used consistently in all the bank's business, activities, processes and systems. The bank should be able to

identify all material risks and to include them in the ICAAP according at minimum to this risk classification:

- 1) **Pillar 1 risks** (credit, market and operational), including the main differences in the approach of calculating capital requirements under the first pillar and the treatment of these risks in the ICAAP;
- 2) **Risks not fully captured under Pillar 1** (in particular residual risk and securitization risk, underestimation of credit risk in using the standardized approach, underestimation of operational risk in using the basic indicator approach and the standardised approach);
- 3) **Pillar 2 risks**, which include all material risks to which the bank might be exposed, particularly interest rate risk in the banking book, concentration risk, liquidity risk, reputation risk and strategic risk;
- 4) **Risks resulting from external factors**, in particular from the economic and business environment that were not included in the preceding categories

The above mentioned classification of risks should help bank in preparing an ICAAP and will, at the same time, be used by the supervisor for assessing the ICAAP. However, every bank should itself consider its classification of risks for the ICAAP.

Identification of all risks to which the bank is exposed and determining their materiality is based on comprehensive assessment of existing and potential risk areas (products, activities, processes and systems), financial state of the bank and assessment of the external environment in which the bank pursues its activity. The Bank should include in its ICAAP identification of risk factors resulting from new types of business and activities.

### **3.2. Measurement of risks**

The measurement of risk represents the process of quantifying the possible loss resulting from the bank's business, activities, processes and systems. The Central Bank of Montenegro developed a legal basis in its regulations with regard to the minimum standards for management of credit risk, liquidity risk, market risk and operational risk. For all other risks, for which Central Bank did not prescribe methodologies, bank may use variety of approaches for quantifying the possible loss. However, the method selected should be proportionate to the scale and complexity of the bank's activities.

### **3.3. Methodologies for assessing the internal capital requirements**

After identifying all risks and quantifying the risk exposure resulting from them, bank should assess the manner of covering the risks identified. A bank should be able to formulate and determine the current and future amount of internal capital necessary for covering the quantified level of risk, including the results from stress testing.

There are three alternatives for the purpose of calculating minimum capital requirements:

- 1) Using approach which derives from the Central Bank of Montenegro regulation (e.g. Capital Adequacy Decision - methodology for calculating minimum capital requirements);
- 2) Using its own methodology.
- 3) Using combination of these two above mentioned.

In case of using its own methodology, the bank has to provide valid argumentation for its adequacy. The supervisor will judge upon the adequacy of the approach that the bank uses within the framework of its own methodology in accordance with the principles of prudence and conservativeness.

**Assessing internal capital requirements for Pillar I risks** - The bank can choose between two alternatives in the assessment of internal capital requirements for credit risk, market risk and operational risk:

- Using approach which derives from the Central Bank of Montenegro regulation (standardised approach for credit risk, methods for calculating capital requirement for market risk, basic indicator approach and standardised approach for operations risk). When using this alternative, bank must provide detailed analysis of all its exposures to credit, market and operational risk that are not covered (e.g. residual risk in capital requirements for credit risk) by the capital requirement for credit risk, market risk and operational risk. For example, bank has to analyse whether it is exposed to risks that are not adequately covered by the capital requirement for credit risk from the use of the credit protection (residual risk) and the potential increase in exposure to credit risk as a result of securitisation.
- Adjustment of the approach to its needs. Bank has to submit detailed argumentation for the adjustment. The larger are the differences between capital requirement in the approach and capital requirements in the adjustment, the more detailed argumentation has to be submitted.

**Assessing internal capital requirements for concentration risk and interest rate risk in the banking book** – Until methodology is developed by Central Bank as an alternative, banks should use its own methodologies. For interest rate risk from banking book, bank may use prescribed methodology or its own methodology. When using its own methodology bank must explain in detail arguments for its use, all assumptions and reasons. The level of details must be in accordance with the principle of proportionality.

**Assessing internal capital requirements for other risks (reputation risk, strategic risk, etc.)** - The bank can choose between two alternatives in the assessment of internal capital requirements for other risks:

- Simplified alternative. Bank can choose to raise minimum capital requirements by certain percentage (5%, 10%, 15% of the minimum capital requirements) instead assessing internal capital requirements for other significant risks. Bank has to provide arguments for its choice.
- Own methodology. Bank can use its own methodology for assessing internal capital requirements for other risks providing proper evidence.

**Assessing internal capital requirements for specific risks arising from external environmental factors based on various stress tests** - The bank calculates assessment of the internal capital requirements on the basis of the aggregation of the assessments of internal capital requirements for individual risks. A bank may calculate the assessment of internal capital requirements by summing the assessments of internal capital requirements for individual risks (so called building-block approach). When using more sophisticated approaches, in order to sum, the bank must base assessment of internal capital requirements on time series of adequate length, same statistical confidence levels and the same time horizon.

Besides the amount of internal capital determined, it is appropriate to determine also a further amount of capital necessary for covering uncertainty resulting from the calculation, putting a certain capital buffer for covering the risk of the ICAAP calculation model used.

### **3.4. Stress tests**

For the purpose of the implementation of the ICAAP, the bank must conduct stress tests. Stress testing is an essential instrument for the assessment of a bank's future capital adequacy and is therefore incorporated in the ICAAP. The management body has ultimate responsibility for the overall stress testing programme. Banks should evaluate the reliability of their capital planning based on stress test results. Bank will be able to show which capital consequences would arise under exceptional but plausible circumstances, and it will have a contingency plan by which to maintain capital adequacy in these circumstances.

Stress tests under ICAAP should be consistent with bank's risk appetite and strategy and contain credible mitigating management actions. The bank should regularly review its stress testing programme and assess its effectiveness and fitness for purpose. Stress testing is an integral part of the bank's operational management, and the outcome of stress tests is used in formulating strategic objectives. This does not alter the fact that stress testing can also be usefully applied for other purposes, for instance in the context of estimation of specific parameters of operations.

Banks whose business is smaller in scope and complexity can conduct simple stress tests (also known as sensitivity analysis). Banks whose business is larger in scope and complexity conduct complex stress tests (also known as scenario tests).

A bank conducts stress tests for the purpose of internal capital requirements at least once a year. These tests can be based on the different scenarios (e.g. liquidity crises, significant losses from operational risk other situations including risks to which the bank is or could be exposed (e.g. interest rate risk in the banking book, etc)).

The bank must also conduct stress tests deriving from changes in market conditions for the purpose of calculating the internal capital requirements at least once a year.

## 4. Assessment of the ICAAP

### 4.1. Review and evaluation of the ICAAP

Supervisory authority reviews and evaluates ICAAP in order to ensure that bank has an adequate own funds to cover all material risks that a bank is exposed to. The supervisory authority reviews and evaluates ICAAP as part of the SREP. The ICAAP is evaluated on the basis of the ICAAP report and dialogue regarding its adequacy.

The bank shall undertake internal capital adequacy assessment process at least once a year and more frequently in the case of any significant changes in bank's risk profile.

The bank shall submit to the Central Bank reports on capital adequacy assessment for the previous year not later than by 30 April of the current year in accordance with the Capital Adequacy Decision.

### 4.2. ICAAP report

The ICAAP report covers the qualitative and quantitative aspects of the bank's ICAAP. The ICAAP report is submitted to the supervisory authority using the following template:

#### 1. BASIC DATA

<b>The name of the bank</b>								
<b>Date of the ICAAP report</b>	d	d	m	m	y	y	y	y
<b>Date of the last ICAAP report</b>	d	d	m	m	y	y	y	y

<b>Contact 1</b>								
<b>Full name</b> (Person responsible for communicating with the Central bank)								
<b>Organisational unit</b>								
<b>Position</b>								
<b>Address</b>								
<b>Phone</b>								
<b>E-mail</b>								

<b>Review by the Board of Directors</b>	d	d	m	m	y	y	y	y
<b>Contact 2</b>								
<b>Full name</b>								
<b>Position</b>								
<b>Address</b>								
<b>Phone</b>								
<b>E-mail</b>								
<b>Reference to the document confirming review of the ICAAP report by the board of directors</b>								

<b>Level of implementation of the ICAAP at the bank</b> (A bank that is implementing the ICAAP on a consolidated basis or on consolidated basis at sub-group level must submit a list of subsidiaries included in the ICAAP in the annex to the ICAAP report)	
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## **2. BANK INTERNAL GOVERNANCE**

**2.1. Organisational structure** (Scheme of bank's organisational structure: Submit in an annex to the ICAAP report)

**2.2. Description of the responsibilities of individual organisational units at the bank and the bank's board of directors in the process of developing, approving and using the ICAAP**

**2.3. Description of the role and activities of the board of directors and management in forming, approving and reviewing the ICAAP**

**2.4. Definitions of all risks to which the bank is exposed and that it has identified as material**

**2.5. Methods and procedure by which the bank evaluates the materiality of risks**

**2.6. Internal regulations of the bank for managing, monitoring and mitigating material risks** (Submit in an annex to the ICAAP report).

**2.7. The bank's strategy for managing risks including the business objectives of the bank (risk appetite) in accordance with Article 50 of the Banking Law** (Submit in an annex to the ICAAP report).

**2.8. The bank's strategy for managing the amount of the internal capital in accordance with Article 250 of the Capital Adequacy Decision** (Submit in an annex to the ICAAP report).

### **1) CAPITAL PLANNING**

**3.1. Annual Capital Plan in accordance with Article 250 of the Capital Adequacy Decision** (Submit in an annex to the ICAAP report).

**3.2. The bank own funds target**

**3.3. The analysis of the differences between the own funds target in the period in question and the own funds realised in the previous period**

**3.4. Stress tests and results where appropriate**

## **4. ASSESSMENT OF INTERNAL CAPITAL REQUIREMENTS**

### **4.1. Measurement and assessment of credit risk**

<b>Assessment of internal capital requirements</b>	
1. Analysis of exposure to individual risks not adequately covered by the minimum	

capital requirement for credit risk (adequacy of the use of the credit protection and the corresponding residual risk, analysis of risks deriving from securitisation programmes) <b>OR</b>
2. Explanation and argumentation for the methodology used (if so) and its assumptions
If the bank uses the methodology for the assessment of credit risk it should submit:
1) Analysis of any differences between the capital requirement for credit risk and the assessment of internal capital requirements for credit risk
2) Reference to internal documents on which the methodology used is based
Explanation of the stress tests and results

#### 4.2. Measurement and assessment of concentration risk

<b>Assessment of internal capital requirements</b> (If there is no need for the bank to make an assessment of internal capital requirements it should provide an argumentation)	
Explanations and argumentation for the methodology used and its assumptions	
Reference to internal documents on which the methodology used is based	
Explanation of the stress tests and results	

#### 4.3. Measurement and assessment of market risks

<b>Assessment of internal capital requirements</b>	
1. Analysis of significant exposures to market risk not adequately covered by the minimum capital requirement for market risk <b>OR</b>	
2. Explanation and argumentation for the methodology used (if so) and its assumptions	
If the bank uses the methodology for the assessment of market risk it should submit:	
1) Analysis of any differences between the capital requirement for market risk and the assessment of internal capital requirements for market risk	
2) Reference to internal documents on which the methodology used is based	
Explanation of the stress tests and results	

#### 4.4. Measurement and assessment of operational risk

<b>Assessment of internal capital requirements</b>	
1. Analysis of significant exposures to operational risk not adequately covered by the minimum capital requirement for operational risk <b>OR</b>	
2. Explanation and argumentation for the methodology used (if so) and its assumptions	
If the bank uses the methodology for the assessment of operational risk it should submit:	
1) Analysis of any differences between the capital requirement for operational risk and the assessment of internal capital requirements for operational risk	
2) Reference to internal documents on which the methodology used is based	
Explanation of the stress tests and results	

#### 4.5. Measurement and assessment of interest rate risk in the banking book

<b>Assessment of internal capital requirements</b>	
1. Analysis of exposure to interest rate risk in the banking book not adequately covered by the minimum capital requirement, <b>OR</b>	

2. Explanation and argumentation for the methodology used (if so) and its assumptions
If the bank uses the methodology for the assessment of interest rate risk in the banking book, it should submit:
1) Analysis of any differences between the capital requirement for credit risk and the assessment of internal capital requirements for credit risk
2) Reference to internal documents on which the methodology used is based
Explanation of the stress tests and results

#### 4.6. Stress tests

<b>Assessment of internal capital requirements</b>	
Explanations of stress tests and corresponding results	
Reference to corresponding internal documents in regard to the stress tests	

#### 4.7. Measurement and assessment of liquidity risk

<b>Assessment of internal capital requirements</b>	
Explanations and argumentation for the policy of taking up and managing liquidity risk, including crisis plans	
Reference to the corresponding internal documents	
Explanation of the stress tests and results	

#### 4.8. Measurement and assessment of other significant risks

<b>Assessment of internal capital requirements</b>	
1. Increase of the assessment of internal capital requirements by certain percentage of the minimum capital requirements and explain the argumentation for the percentage used <b>OR</b>	
2. Explanation and argumentation for the methodology used (if so) and its assumptions	
Reference to internal documents on which the methodology used is based	
Explanation of the stress tests and results	

#### 4.8. ICAAP Improvements

Major weaknesses identified by the bank in the ICAAP
Reference to the internal documentation in regard to the future improvements of ICAAP
Further explanations on other relevant elements of the ICAAP not covered by this ICAAP report

#### Assessment of internal capital requirements

Risk profile	Regulatory capital requirements	Additional capital according to ICAAP	Total Capital
<b>PILLAR I</b>			
Credit risk			
Operational risk			
Market risk			
<b>PILLAR II</b>			
<b>Risks not fully covered</b>			

<b><i>under Pillar I</i></b>			
Residual risk (CRM)			
Securitization risk			
<b><i>Pillar II risks</i></b>			
Interest rate risk in banking book			
Concentration risk			
<b><i>Other significant risks</i></b>			
Settlement risk			
Liquidity risk			
Reputational risk			
Strategic risk			
External factors			
<b>TOTAL</b>			

**Signature of the person responsible for compiling the ICAAP report**

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#### **4.3. Dialogue with the bank**

The ICAAP report is a starting point for supervisory review and evaluation, which includes a dialogue between the bank and supervisory authority. The sequence of steps for assessing an ICAAP will include the requesting of documents, meetings with the bank's representatives, evaluation of documents and information from meetings, as well as the use of other information obtained in the on-site inspection.

#### **4.4. Feedback from the CBM**

The final evaluation of the ICAAP is given under Capital section in the Report on Examination by rating for the capital adequacy and the quality of capital management. Feedback to the bank will be also given in the form of a letter containing only the final conclusion plus recommendations and/or measures. The internal analysis of the Central Bank of Montenegro will not be enclosed.