

Pursuant to Articles 80 and 81 of the Banking Law („Official Gazette of the Federation of BiH“, number 27/17), Articles 5(1)(h) and 19(1)(c) of the Law on the Federation of Bosnia and Herzegovina Banking Agency („Official Gazette of the Federation of BiH“, number 75/17), Articles 7(1)(h) and 12(d) of the Statute of the Federation of Bosnia and Herzegovina Banking Agency („Official Gazette of the Federation of BiH“, number 03/18), the Management Board of the Federation of Bosnia and Herzegovina Banking Agency passed, at its session that was held on May 12th, 2021, the following

DECISION ON LIQUIDITY RISK MANAGEMENT IN BANKS

I. GENERAL PROVISIONS

Article 1

Subject Matter of the Decision

- (1) This Decision sets out the minimum qualitative liquidity risk management requirements for banks, starting from the required risk management standards in banks, quantitative requirements for banks with regard to the liquidity coverage ratio and the net stable funding ratio, and use of additional mechanisms for liquidity risk monitoring and assessment.
- (2) The Federation of Bosnia and Herzegovina Banking Agency (hereinafter: Agency) will set out the requirements with regard to liquidity reporting under this Decision through a separate reporting decision, including prescribing of the reporting templates and instructions on how to complete them, as well as the reporting deadlines.
- (3) The quantitative requirements referred to in Paragraph (1) of this Article entail prior fulfilment of all prescribed requirements for banks with regard to the regulatory reserves under applicable regulations and all other regulations and limits relating to the bank's liquidity and the bank's obligations under the regulations on performance of payment services in the country and abroad.
- (4) In addition to fulfilling the requirements referred to in Paragraph (3) of this Article, the bank shall also fulfil all other regulatory institutions' reference requirements for the bank's liquidity and/or the systemic liquidity.
- (5) This Decision applies to banks having their head office in the Federation of Bosnia and Herzegovina (hereinafter: FBIH) which were issued banking licenses by the Agency.
- (6) This Decision's provisions shall be applied by banks on an individual and on a consolidated basis.
- (7) Any matters relating to liquidity risk management in banks that are not regulated by this Decision, but are governed by a law or other by-laws, shall be subject to application of the provisions of such law or other by-law.

Article 2

Definitions

- (1) Terms used in this Decision shall have the following meanings:
 - a) **Reporting currency** is the official currency in Bosnia and Herzegovina (hereinafter: BiH) and/or Convertible Mark.
 - b) **Material currency** is the currency in which the items amounting to or exceeding 5 % of the total liabilities of a bank (including the reporting currency) are denominated and for

which the bank is required to separately calculate, monitor and report the LCR and the NSFR items.

- c) **Reporting date** is the last calendar day of the reporting period for which a bank shall submit a report to the Agency.
- d) **Business days** are days from Monday to Friday, except if any of these days is a national or religious holiday.
- e) **Professional money market participant** is a financial institution, pension fund, common investment undertaking, insurance undertaking and reinsurance undertaking and other legal entities, other than banks that participate in the money market for the purposes of managing their own funds in the manner and with the frequency, which is comparable to the activities of banks. This is such a legal entity that offers binding quotations daily or often and/or cash offers in the amounts that are material compared to the total volumes realized in the money market, to be determined for each individual market, or such a legal entity that impacts the final pricing of funds (supply/demand), thus changing the price of a similar transaction achieved by the bank in its dealings with other customers.
- f) **Convertible currencies** are the currencies of the G-10 member states, currencies of the European Economic Area (EEA) States which also include Iceland, Lichtenstein, and Norway, in addition to the EU member states.
- g) **Allocation mechanism** refers to a mechanism for allocation of liquidity costs, benefits and risks.
- h) **Stress** – is a sudden or severe deterioration in the solvency or liquidity of a bank due to changes in market conditions or idiosyncratic factors (those that are inherent to the bank in certain specific events, such as for example corporate restructuring, status changes, etc.), as a result of which there may be a significant risk that the bank becomes unable to meet its commitments as they fall due within the next 30 calendar days.
- i) **Liquidity buffer** is the amount of liquid assets that a bank holds, which are recognized as such if they meet the prescribed general requirements, operational requirements and eligibility criteria for the classification of level 1 and 2 assets under the provisions of this Decision.
- j) **Level 1 liquid assets** (Extremely High Quality Liquid Assets - EHQLA) are assets of extremely high liquidity and credit quality, which may include only assets defined in Article 24 of this Decision.
- k) **Level 2 liquid assets** (High Quality Liquid Assets - HQLA) are assets of high liquidity and credit quality. Level 2 liquid assets are further subdivided into level 2A and 2B assets in accordance with Articles 25 and 26 of this Decision.
- l) **Net liquidity outflow** is the amount which results from deducting a bank's liquidity inflows from its liquidity outflows in accordance with Article 29 of this Decision.
- m) **Asset coverage requirement** is the ratio of assets to liabilities as determined for credit enhancement purposes in relation to covered bonds by the regulations in BIH, the national law of a Member State or a third country.
- n) **Retail deposits** – are a bank's obligations to a natural person or to a micro, small and medium sized company, where the micro, small and medium sized company would meet the retail exposure categorization requirements when the bank applies the standardized approach and where the aggregate deposits by such micro, small and medium sized company or company on a group basis do not exceed BAM 250 thousand.
- o) **Margin loans** – means, for the purposes of this Decision, collateralized loans extended to customers (securities-backed loans) for the purpose of taking leveraged trading positions.

- p) **Internal Liquidity Adequacy Assessment Process** (hereinafter: ILAAP) includes strategies, policies, processes and systems for the identification, measurement and monitoring of liquidity risk and management over an appropriate time horizon, including on an intraday basis, so as to ensure that banks maintain adequate levels of liquidity buffers.
- q) **Unencumbered asset** – is a bank’s asset that is not subject to any legal, contractual, regulatory or other restriction preventing it from liquidating, selling, transferring, assigning or, generally, disposing of such asset by means of active outright sale or repurchase agreement within the following 30 calendar days, where it is:
- 1) available for immediate use as collateral to obtain additional funding, which has not yet been realized and which is available to the bank;
 - 2) received as collateral for credit risk mitigation purposes in reverse repo or securities financing transactions and that the bank may dispose of.
- r) **Available stable funding** (hereinafter: ASF) is the portion of a bank's capital and liabilities expected to be reliable over the time horizon considered by the Net Stable Funding Ratio (hereinafter: NSFR), which extends to one year.
- s) **Required stable funding** (hereinafter: RSF) is the result of multiplying a bank’s assets and off-balance sheet exposures with relevant factors that reflect their liquidity characteristics and residual maturities over one-year time horizon considered by the NSFR.
- t) **Securities financing transaction** means a repo transaction, securities or commodities lending/borrowing to other counterparty or from other counterparty transaction or margin loan.
- u) **Non-mandatory overcollateralization** is any amount of assets which the bank is not obliged to attached to a covered bond issuance by virtue of legal or regulatory requirements, contractual commitments or for reasons of market discipline, including in particular where the assets are provided in excess of the minimum legal, statutory or regulatory overcollateralization requirement applicable to the covered bonds under the regulations in BIH, national law of a Member State or a third country.
- v) **Financial customer is:**
- 1) an institution (bank and investment firm);
 - 2) a financial institution (including microcredit organizations, leasing companies, brokerage firms, card companies);
 - 3) an open-ended or non-open ended investment fund;
 - 4) an insurance undertaking;
 - 5) a reinsurance undertaking;
 - 6) a financial holding or mixed financial holding.
- (2) For the purposes of applying the requirements from this Decision, the definition of liquidity risk under the provision of Article 81(3) of the Banking Law and definitions of liquidity funding risk and market liquidity risk under Article 3(f) and (g) of the Decision on the Internal Governance Systems in Banks will apply.
- (3) For the purposes of applying the requirements from this Decision, the definition of covered bonds under the provision of Article 2(1)(cccc) of the Decision on Bank Capital Calculation will apply.
- (4) Other terms that are not defined by this Article, but are used in this Decision, shall have the meanings under the legal provisions and other by-laws.

II. MINIMUM QUALITATIVE LIQUIDITY RISK MANAGEMENT REQUIREMENTS

Article 3

General Requirements

- (1) In addition to the general regulatory standards on risk management process and specific standards on liquidity risk management, banks shall meet the minimum qualitative liquidity risk management requirements that are regulated in greater detail in the provisions of Articles 4 to 16 of this Decision.
- (2) The qualitative requirements referred to in Paragraph (1) of this Article are related to banks' obligation to put in place appropriate strategies, policies, procedures, processes and systems for liquidity risk identification, measurement, monitoring and management over an appropriate time horizon, including management on a daily and/or intraday basis, so as to ensure that the bank maintains the quantitative liquidity coverage ratio (LCR) requirements laid down in Chapter III of this Decision, the net stable funding ratio (NSFR) requirements laid down in Chapter IV of this Decision and the additional ongoing liquidity risk exposure monitoring mechanisms laid down in Chapter VII of this Decision.
- (3) The requirements referred to in Paragraphs (1) and (2) of this Article that the bank is required to set and implement, shall be deemed appropriate if they meet the following conditions:
 - a) they are proportionate to the complexity and volume of the bank's business, risk profile and set risk appetite;
 - b) they ensure ongoing and comprehensive liquidity risk management over an appropriate time horizon, including liquidity management on a daily and/or intraday basis;
 - c) they ensure maintenance of an adequate level of liquidity buffer;
 - d) they are adjusted to the bank's business lines, currencies, branch network, customers, etc.;
 - e) they adequately include an allocation mechanism in the internal pricing of the bank's products and/or services.
- (4) The bank shall set the liquidity risk exposure tolerance in terms of setting the liquidity risk exposure level that it deems acceptable and that must allow the bank to manage its liquidity in normal circumstances, so that it is also able to withstand stress periods. All relevant business lines in the bank need to be notified in a timely fashion of the set liquidity risk exposure tolerance, ensuring availability of this notification to employees involved in the process of liquidity risk taking and/or management in the bank.
- (5) Considering the type, volume and complexity of the business and the objectives set by its business strategy, the bank shall set the liquidity risk profile in order to ensure the bank's stable business operations and/or efficient and effective risk management process, as an integral part of the bank's comprehensive, reliable and efficient internal governance system.

Article 4

Bank's Liquidity Risk Management Strategies, Policies, Processes and Systems

- (1) The liquidity risk management strategy should be consistent with the prescribed regulatory requirements and the overall risk taking and management strategy in the bank and should include, as a minimum, definition of the liquidity risk taking and management objectives and principles.
- (2) In addition to the regulatory requirements for risk management in banks, the bank's liquidity risk management policies, procedures and other internal regulations must also include, as a minimum, the following:
 - a) maintenance of the bank's regulatory liquidity ratios;

- b) the asset and liability composition, as well as the bank's asset liquidity and marketability assumptions;
 - c) identification of the liquidity risk sources, including the liquidity risks that may arise from the bank's new products, financial instruments and/or new business activities;
 - d) liquidity risk reporting system;
 - e) the procedures relating to foreign currency operations, including monitoring of the asset and liability currency composition and individual monitoring of the currencies that have a material impact on the bank's overall liquidity and analysis of the mutual convertibility of foreign currencies;
 - f) measurement and monitoring of the net cash flows, including the intraday bank's liquidity management, as well as projection of the cash inflows and outflows;
 - g) funding diversification and stability and money market access;
 - h) the liquidity plans, including the funding plans;
 - i) stress testing and analysis of different scenarios;
 - j) the bank's liquidity contingency plans;
 - k) IT support for the ongoing and efficient liquidity risk management;
 - l) where applicable, liquidity management within the banking group and
 - m) other elements that are relevant to the liquidity risk management process.
- (3) The bank shall also take into account the limits on international transfers of the excess liquid assets, if any, and the cross-border liquidity management where applicable.
- (4) The bank shall identify and monitor professional money market participants when managing liquidity risk and adequately include them in the liquidity reports.
- (5) According to Paragraph (4) of this Article, the bank shall define in detail through its internal regulations the criteria which will underlie its identification of other legal entities who are professional money market participants.
- (6) In addition to the above regulations, the bank shall meet the liquidity recovery plan requirements in accordance with Article 16 of this Decision.

Article 5

Liquidity Risk Management System

In accordance with their statutory competences, the bank's supervisory board and management shall establish and implement an appropriate and efficient liquidity risk management system, which shall include the following as a minimum:

- a) ensuring the regulatory liquidity risk management requirements;
- b) compliance with the set liquidity risk exposure tolerance;
- c) ensuring diversification of the funding composition and access to funding;
- d) measuring and monitoring deposit concentrations and other funding concentrations;
- e) monitoring the assumptions on the behavior of assets, liabilities and off-balance sheet items, as well as the assumptions on other relevant factors and circumstances of importance for ensuring their appropriateness to the bank's activities and market conditions;
- f) the procedures for the bank's conduct in cases of adverse stress test results, which include specific measures and activities of the bank's management, senior management, functions and employees in charge of liquidity risk management in the bank;

- g) consideration of the different options and/or liquidity risk mitigation tools, including setting the relevant limits and liquidity buffers, in order for the bank to be able to withstand a large number of stress events;
- h) establishment of an appropriate allocation mechanism;
- i) establishment of an appropriate decision-making process on the bank's liquidity.

Article 6

Supervisory Board's Liquidity Risk Management Competences and Responsibilities

In addition to meeting the regulatory risk management requirements for banks, the bank's supervisory board shall have the duty and responsibility to:

- a) put in place appropriate liquidity risk taking and management strategy and policies and ensure conditions for their efficient implementation in the bank;
- b) ensure an independent review and assessment of the liquidity risk management strategy, policy, procedures, processes and system in the bank by the internal and external audit;
- c) ensure regular analysis of compliance of the liquidity risk management strategy, policy, procedures, processes and system with the regulations and requirements of the Agency and other supervisory authorities, risk taking and management strategy, changes in internal and external environment, and subject to the analysis results, their revision (at least annually and more often if necessary);
- d) ensure conditions for establishing the organizational structure, define the activities and scope of responsibilities of the bank's management and senior management, functions and employees in charge of liquidity risk management in the bank;
- e) ensure conditions for establishing an efficient internal controls system in liquidity risk management;
- f) adopt a decision on the method of liquidity risk management limit setting and revision;
- g) prescribe the contents and frequency of liquidity risk reporting and ensure a comprehensive and reliable liquidity reporting system;
- h) approve the bank's liquidity contingency plans and/or liquidity recovery plans of the bank, which shall be proposed by the bank's management and
- i) oversee performance of the liquidity risk management obligations of the bank's management.

Article 7

Bank's Management's Liquidity Risk Management Competences and Responsibilities

In addition to meeting the regulatory risk management requirements for banks, the bank's management shall have the duty and responsibility to:

- a) propose to the supervisory board appropriate liquidity risk taking and management strategy and policy and adopt liquidity risk management procedures, processes and systems;
- b) implement the adopted liquidity risk management strategy, policy, procedures, processes and systems;
- c) implement the adopted organizational structure, defined activities and scope of responsibilities of the senior management, functions and employees in charge of liquidity risk management in the bank;
- d) prepare regular analysis with revision proposals for the liquidity risk management strategy, policy, procedures, processes and systems (at least annually and more often if necessary);

- e) meet the prescribed liquidity management requirements and the bank's daily and intraday obligations, as well as withstand stress periods in such a way that the adequate additional liquidity reserves are maintained in the form of liquidity buffers;
- f) ensure timeliness, reliability and usability of the liquidity risk reports;
- g) implement adequate and efficient internal controls embedded in the liquidity management and liquidity risk management systems;
- h) comply with the bank's approved liquidity contingency plan and liquidity recovery plan and revise them (at least annually and more often if necessary), and adjust accordingly the bank's liquidity risk management internal policies, procedures and processes;
- i) monitor compliance with the liquidity risk management limits set in accordance with the defined liquidity risk exposure tolerance, as well as the limits for the authorization of cash flows above specified amounts and propose their revision, where necessary;
- j) establish an appropriate reporting system in cases of liquidity limit breaches and processes in cases of breaches, laying down precisely the responsibilities of senior management, functions and employees in this system;
- k) establish and revise an allocation mechanism (at least annually and more often if necessary).

Article 8

Control Functions' Liquidity Risk Management Competences and Responsibilities

- (1) Starting from the control functions' engagement in the risk management process, in accordance with the regulatory risk management requirements, if managers of the organizational units of the control functions in a bank identify a breach of the liquidity risk management regulations or rules or increased risk due to which the bank's liquidity is or may be threatened while performing activities from their competence, they shall without delay (immediately) notify of this the bank's supervisory board, bank's management, Agency and other competent institutions.
- (2) The internal audit work program and plan should include, at least on an annual basis, the calculation and maintenance of the liquidity coverage ratio and the net stable funding ratio in accordance with the provisions of Articles from Chapters III and IV of this Decision.

Article 9

Liquidity Risk Monitoring and Reporting

- (1) Besides the regulatory supervisory liquidity reporting and in addition to the regulatory risk management requirements for banks, banks shall include the following, as a minimum, in their internal reporting system:
 - a) monitoring the liquidity position in the reporting currency, material currencies and other currencies depending on the currency composition of the bank's assets and liabilities;
 - b) monitoring the stress test results;
 - c) measuring/assessing and monitoring the net cash flows.
- (2) Bank shall put in place liquidity risk monitoring and reporting on an intraday, daily, weekly, ten-day, monthly, quarterly, semi-annual and annual basis, which should be consistent with the prescribed regulatory supervisory reporting requirements and, for longer time horizons, consistent with the bank's established internal regulations, depending on the nature, volume and complexity of the bank's business activities, volume of the cash flows and other relevant factors that impact the bank's liquidity risk.

- (3) The bank's supervisory liquidity reporting obligations under the provisions of this Decision shall be regulated through separate instructions.
- (4) In addition to the supervisory liquidity reports referred to in Paragraph (3) of this Article, banks shall also provide all information at the Agency's requests for the purposes of supervision from the competence of the Agency and other institutions, in accordance with the regulations governing the areas of payment system, deposit insurance, monetary policy, systemic risk and other matter that may impact the bank's liquidity.

Article 10

Net Cash Flow Measuring/Assessment and Monitoring

- (1) Banks shall establish an adequate and efficient system for measuring/assessing all current and future cash flows (cash inflows and cash outflows), including assessing required cash for the off-balance sheet items, where they must take into account the following as a minimum:
 - a) the usual clearing and settlement standards and the timeframe to be applied when determining the cash flows for specified dates;
 - b) regular review and understanding of the interaction between liquidity funding risk and market liquidity risk, as well as the effect of the interaction between liquidity risk and other risks that the bank is exposed to, such as: credit risk, interest rate risk, operational, reputational, strategic risks, excessive leverage risk and other risks;
 - c) liquidity risk management over appropriate time horizons, including on an intraday basis, in order to ensure maintenance of an adequate level of the liquidity reserves and/or liquidity buffers.
 - d) changes in the bank's intraday needs for liquid funds and funding methods, short-term and medium-term needs for liquid funds and funding methods, and long-term (structural) needs for liquid funds and funding methods, taking into account also the potential weaknesses relating to the different events, bank's activities and its liquidity risk management strategy;
 - e) regular accuracy check of the inputs used in the liquidity ratio calculations and/or reliability check of the information used in the liquidity risk management system;
 - f) active management of the bank's receivables securities, separating the bank's encumbered (pledged) assets from the unencumbered (unpledged) assets, monitoring the level of the available receivables securities, monitoring the eligibility of such securities for their timely use and/or use in contingencies;
 - g) the legal, regulatory, operational and other restrictions on transfers of liquid and unencumbered assets between entities within and outside of EEA, BIH, etc.
- (2) The liquidity buffers shall include in particular maintenance of enough liquid funds in the form of standby, high-quality, unencumbered liquid assets that are available at all times to the bank and serve as security in cases of different stress events (of different intensity and duration), including a loss of or decrease in unsecured and normally available funding. There must be no legal, regulatory, operational or other impediments to the use of these funds.

Article 11

Funding and Market Accessibility

- (1) Banks shall establish a methodology for identifying, measuring and monitoring their funding positions and managing them, which shall include current and future material cash flows arising from the bank's assets, liabilities and off-balance sheet items, including the contingent liabilities and potential impact of the reputational risk.

- (2) Within the framework of liquidity risk management, banks shall ensure access to funding from different sources in the financial market and manage the available market sources of liquidity, where the liquidity policy shall include the following, as a minimum:
- a) the funding profile and projection, in order to ensure the maturity matching in the long-term frameworks with regard to the business model, risk strategy and tolerance;
 - b) the procedures ensuring active market funding management on an ongoing basis;
 - c) the procedures for establishing and maintaining cooperation with funding providers, including monitoring of the frequency of use of the available funding;
 - d) assessment of the access to financial markets and available funding under both normal and stressed conditions;
 - e) assessment of the funding stability and risks impacting their stability;
 - f) monitoring of the funding concentrations with regard to the liquidity assessment of specific instruments, geographic locations and funding providers and
 - g) identification and procedures for the use of alternative funding.

Article 12

Liquidity Plan and Funding Plan

- (1) In accordance with the liquidity risk management strategy and regulatory minimum requirements referred to in Article 4(2) of this Decision, banks shall adopt and adequately implement a liquidity plan. The liquidity plan shall also include a funding plan.
- (2) In order to adequately manage funding risk, banks shall put in place funding plans consistent with the bank's business strategy and regular business plans, which should include the following core assessment elements:
- a) the appropriateness of funding to the bank's business model, business strategy and risk exposure tolerance;
 - b) the funding stability and/or sustainability in terms of identification of the factors that may impact the funding sustainability (e.g., structural mismatch of the assets and liabilities, funding concentrations, market saturation, etc.);
 - c) market accessibility in terms of the factors that impact or may impact future inaccessibility of funding in the market;
 - d) expected changes in funding risk based on the funding plan;
 - e) the reliance on public funding;
 - f) the impact of the funding plans on real sector lending;
 - g) the sustainability in cases of the emergence of new products or innovative instruments and
 - h) other relevant assessment elements.
- (3) Banks shall ensure regular revisions and, where necessary, adjustments of the liquidity plan, including the funding plan, in terms of checking whether they are:
- a) sustainable and adequate for the bank's risk profile and whether they support the bank's business plans and activities;
 - b) consistent with the liquidity risk taking and management strategy and the liquidity risk exposure tolerance;
 - c) documented and communicated to relevant persons engaged in the plans' implementation;
 - d) adequately monitored, in terms of timely identification of the deviations from the plans and taking of adequate measures to realize the planned values/sizes.
- (4) Reporting on the funding plans referred to in Paragraph (1) of this Article, which constitutes an integral part of the liquidity risk supervisory review and evaluation process shall be

regulated through a separate by-law, starting from the application of the proportionality principle and regulations on consolidated supervision.

Article 13 **Stress Testing**

- (1) Starting from the regulatory risk management requirements for banks, banks shall define in their liquidity risk management policies the performance of stress testing in the following manner as a minimum:
 - a) regulate and establish processes for performing and analyzing different stress tests and frequency of their performance (at least annually for the ICAAP and ILAAP purposes), taking into account bank-specific scenarios and/or factors (internal), market scenarios and/or factors (external) and combined alternative scenarios;
 - b) regulate performance of liquidity testing, depending on the circumstances and their intensity where they are adverse, from the usual (predictable or normal) to the unusual (extreme) ones;
 - c) regulate performance of testing for shorter and longer time horizons of stressed circumstances;
 - d) establish lines of reporting on the stress testing results, specifying the obligations of the function or employee in charge of performing and analyzing the stress test results and their forwarding for consideration to the senior management, bank's management and supervisory board to take relevant decisions on the taking of the measures in accordance with the results of the performed stress tests;
 - e) regulate procedures and processes to be undertaken in cases of specified adverse stress test results;
 - f) set the stress testing schedule when planning for the next year and ensure reporting on an annual basis to the bank's management and supervisory board on the results of the planned tests and
 - g) provide for alternative scenarios for liquidity positions and liquidity risk mitigation instruments and, at least annually, review assumptions underlying funding decisions. The alternative scenarios from this point especially refer to the off-balance sheet items and other contingent liabilities.
- (2) When performing stress testing, banks shall take into account the following:
 - a) funding with a contractual early withdrawal option;
 - b) all positions with an option of additional margin calls, calculating also their impact on the liquidity;
 - c) mutual substitutability and liquidity of different convertible currencies and their availability in the foreign exchange markets and
 - d) other relevant factors impacting the bank's liquidity.
- (3) The stress testing results shall form the basis for the taking of corrective measures or actions by the bank's management to mitigate the bank's liquidity risk exposure, ensure liquidity buffers and adjust the bank's liquidity risk profile to its risk tolerance.
- (4) The bank shall use the stress testing results, especially the alternative scenarios referred to in Paragraph (1)(g) of this Article in adjustment of the liquidity risk management strategy, adoption of the policies, setting of the limits, taking of the positions and when adopting the bank's efficient liquidity contingency plans and liquidity recovery plans.

Article 14

Liquidity Contingency Plan

- (1) Banks shall prepare a liquidity contingency plan, which shall form an integral part of the liquidity risk management policy.
- (2) The plan referred to in Paragraph (1) of this Article shall include the following elements as a minimum:
 - a) the early warning indicators of potential onset of a crisis and the employees who are responsible for monitoring and reporting on these indicators (e.g., breach of the internal limits, decrease in the deposits, drop in the share prices, higher funding cost compared to other banks, change in the bank's rating, money market fundraising difficulties, deterioration in the bank's asset quality or profitability, etc.);
 - b) the duties and responsibilities of specific persons in cases of the bank's liquidity gap (who are responsible for relations with customers, public, key market participants, shareholders, Agency, Central Bank of Bosnia and Herzegovina – hereinafter: CBBIH, etc.);
 - c) procedures for providing timely and relevant information to the bank's supervisory board, management and senior management for the purposes of decision-making on liquidity contingencies;
 - d) the procedures and processes for raising current missing funds and timeframe within which specific activities are to be undertaken (e.g., sale of assets, putting in place new funding facilities, etc.) during both normal and stressed circumstances;
 - e) identification, size and reliability of all funding sources, indicating the sequence of use in different stressed circumstances and
 - f) the circumstances that trigger application of the measures from this plan and their implementation and data on the bank's employees who are responsible for implementation of the measures from this plan.
- (3) Banks' obligations with regard to the plan referred to in Paragraph (1) of this Article shall also include the obligation to prepare special reports for the purposes of internal reporting, as well as to notify the Agency, CBBIH and other competent institutions of the triggers of the onset of contingencies and the activities that have been planned to address them, as well as to test this plan annually, at a minimum, and to have the bank's competent body amend it, where necessary, in accordance with the results of the performed stress testing.

Article 15

Allocation Mechanism

- (1) Banks shall align their allocation mechanism with their established liquidity risk management system and their defined liquidity risk exposure tolerance.
- (2) Banks shall use the allocation mechanism in the decision-making process and/or in the internal pricing of products.
- (3) The allocation mechanism shall include the following as a minimum:
 - a) the impact of the current market conditions and/or direct funding costs (e.g., market fundraising cost, baseline yield curve), including other direct funding costs (e.g., difference between buying and selling prices of transactions, physical cash transfer cost, etc.);
 - b) the situation that the bank itself is in (e.g., credit quality, funding availability, etc.);
 - c) different behavioral characteristics of specific products from the liquidity perspective (e.g., cost of early redemption option, products available by means of internet banking or products with irregular cash flow);

- d) indirect funding costs (e.g., liquidity mismatch cost, liquidity reserve cost, additional collateral cost, etc.) and
 - e) correlation between the internal transfer pricing methodology (ITP) and liquidity transfer pricing (LTP).
- (4) The bank's management shall ensure that the allocation mechanism is:
- a) updated on a regular basis, considering the impact of the factors referred to in Paragraph (3) of this Article;
 - b) controlled and monitored on a regular basis, which is the duty of an independent organizational unit in the bank (e.g., the organizational unit in charge of risk management, etc.);
 - c) made available to all relevant organizational units, which should get fully acquainted with the allocation mechanism and use it actively and appropriately.

Article 16

Liquidity Recovery Plan

- (1) Banks shall have liquidity recovery plans in place, specifying relevant strategies and adequate implementing measures for improving liquidity in cases of its significant deterioration and/or addressing potential liquidity shortfall, which they shall prepare, maintain, test at least annually and update in accordance with the proportionality principle (in accordance with the size, business model, relationship with other banks and financial institutions and/or financial system as a whole, potential impact on financial markets, funding conditions, etc.).
- (2) The liquidity recovery plan referred to in Paragraph (1) of this Article shall form an integral part of the bank's overall recovery plan, which shall be prepared by it in accordance with legal regulations and by-laws regulating the recovery plans' contents, delivery method and deadlines.
- (3) The liquidity recovery plan referred to in Paragraph (1) of this Article shall mandatorily include indicators of potential vulnerability, weakness or threat to the bank's business in the liquidity segment, as an integral part of measures for improving the bank's financial position for the situations of severe financial disturbance.

III. LIQUIDITY COVERAGE RATIO MINIMUM QUANTITATIVE REQUIREMENTS

Article 17

Liquidity Coverage Ratio (LCR)

- (1) For the purpose of ensuring their short-term resilience to liquidity risk, banks shall ensure an adequate level of liquidity buffer, in order to meet the liquidity needs for a 30 calendar day liquidity stress scenario.
- (2) For the purpose of complying with Paragraph (1) of this Article, banks shall ensure the minimum liquidity coverage ratio (hereinafter: LCR), which shall be equal to the ratio of the liquidity buffer level to total net liquidity outflows over a 30 calendar day stress period.
- (3) Banks shall maintain a LCR of at least 100 %, which shall be calculated in accordance with the following formula:

Liquidity buffer	$\geq 100 \%$
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total 30-day net liquidity outflows
(next 30 calendar days)

Article 18

Application of the LCR

- (1) In its liquidity risk monitoring and control, banks shall maintain on an ongoing basis the LCR referred to in Article 17(3) of this Decision in the reporting currency, irrespective of the actual currency denomination, and shall calculate and monitor the LCR for each material currency.
- (2) Banks shall report the LCR items to the Agency in the uniform reporting template, which shall include all currencies denominated in the reporting currency and separately for each individually material currency.
- (3) If the LCR falls below 100 % or its fall below 100 % is expected, including during the stress period, the bank must immediately notify the Agency of this in writing, specifying the reasons for its inability to meet the regulatory LCR, and provide the Agency without delay with a plan for restoring compliance with the regulatory requirements in a timely fashion.
- (4) The Agency may set specific liquidity requirements for the bank in accordance with Article 41 of this Decision, including restricting the currency mismatch in accordance with Article 22(1)(f) of this Decision.
- (5) The LCR reporting methodology and method shall be regulated through a related instruction.

Article 19

LCR Components

- (1) The LCR calculation referred to in Article 17 of this Decision is based on the identification of two components:
 - a) liquidity buffer and
 - b) total net liquidity outflows, which shall be calculated in accordance with the set scenario parameters over the next 30 calendar days.
- (2) Banks shall establish and maintain an adequate system for the identification of the LCR components referred to in Paragraph (1) of this Article.

III.1. LIQUIDITY BUFFER

Article 20

Composition of the Liquidity Buffer

- (1) The liquidity buffer shall be comprised of the liquid assets that shall comply with each of the following requirements:
 - a) the general requirements laid down in Article 21 of this Decision;
 - b) the operational requirements laid down in Article 22 of this Decision;
 - c) the respective eligibility criteria for their classification as a level 1 or level 2 asset in accordance with Articles 24 to 27 of this Decision.
- (2) The liquidity buffer shall consist of:
 - a) level 1 assets (EHQLA), which shall comprise minimum 60 % of the liquidity buffer, where at least 30 % of the liquidity buffer should be comprised of level 1 assets, without extremely high quality covered bonds;

- b) level 2 assets (HQLA), which shall comprise maximum 40 % of the liquidity buffer and which shall be subdivided into level 2A liquid assets and level 2B liquid assets, where level 2B liquid assets may be maximum 15 % of the liquidity buffer.
- (3) The requirements set out in Paragraph (2) of this Article shall be calculated in accordance with the formula from Annex 1 which forms an integral part of this Decision and after adjustments for collateralized transactions (where such assets are collateral), where such transactions mature within 30 calendar days and for haircuts and provided that the bank meets the operational requirements referred to in Article 22 of this Decision.

Article 21

General Requirements

- (1) In order for liquid assets to be eligible as liquidity buffer, they must meet the following general requirements:
 - a) the assets shall be a property, right or interest held by a bank and free from any encumbrance;
 - b) the assets shall not have been issued by the bank itself, its parent undertaking (other than a public sector entity that is not a bank), its subsidiary or another subsidiary of its parent undertaking;
 - c) the assets shall not have been issued by a financial customer;
 - d) the value of the assets shall be capable of being determined on the basis of widely disseminated and easily available market prices (market value or in the absence of market-based prices, the value must be capable of being determined on the basis of an easy-to-calculate formula that uses publicly available inputs);
 - e) the assets shall be listed on a recognized stock exchange or tradable via active outright sale or via simple repurchase transaction on generally accepted repurchase markets, where these criteria shall be assessed separately for each market. An asset admitted to trading in an organized venue which is not a recognized exchange, either in a Member State or in BIH or in a third country, shall be deemed liquid only where the trading venue provides for an active and sizable market for outright sales of assets.
- (2) Within the meaning of Paragraph (1)(e) of this Article, the bank shall take into account the following as minimum criteria to assess whether a trading venue provides for an active and sizeable market:
 - a) historical evidence of market breadth and depth as proven by low bid-ask spreads, high trading volume and a large and diverse number of market participants;
 - b) the presence of a robust market infrastructure.
- (3) The requirements laid down in Paragraph (1)(d) and (e) and Paragraph (2) of this Article shall not apply to:
 - a) banknotes and coins, comprising level 1 assets, in accordance with Article 24 of this Decision;
 - b) the exposures to central banks, comprising level 1 and level 2A assets, in accordance with Articles 24 and 25 of this Decision.

Article 22

Operational Requirements

In addition to the above general requirements, the liquid assets comprising the liquidity buffer referred to in Article 20 of this Decision must also meet the following operational requirements:

- a) banks shall have policies and limits in place to ensure that the liquid asset positions included in their liquidity buffer by them remain adequately diversified at all times. For that purpose, banks shall take into account the extent of diversification between the various categories of liquid assets and within the same category of level 1 and level 2 liquid assets and other relevant diversification factors, such as types of issuers, counterparties or the geographical location of those issuers and counterparties.

In so doing, the Agency may impose specific restrictions or requirements on a bank's holdings of liquid assets to ensure compliance with the requirements from this Paragraph.

The restrictions or requirements from this point shall not apply to:

- 1) the following categories of level 1 liquid assets: banknotes and coins, the exposures to central banks as referred to in Article 24(1)(b) and (d), assets representing claims on or guaranteed by the multilateral development banks and international organizations referred to in Article 24(1)(g);
 - 2) the categories of level 1 liquid assets representing claims on or guaranteed by the central government of BIH, the Federation Government, the Republika Srpska Government and the Brcko District Government, regional government units or local authorities in BIH and public sector entities from BIH referred to in Article 24(1)(c)(1), (4), (5) and (6);
 - 3) the categories of level 1 liquid assets representing claims on or guaranteed by the central government, regional governments and local authorities and public sector entities from Member States or third countries referred to in Article 24(1)(c)(2), (3), (5) and (6) and point (d) of the same Paragraph, provided that the bank holds the relevant asset to cover stressed net liquidity outflows incurred in the currency of the Member State or third country.
- b) banks shall have ready access to their liquid assets and be able to monetize them at any time during the 30 calendar day stress period by means of outright sale or repurchase agreement on generally accepted repurchase markets. A liquid asset shall be deemed readily accessible to a bank where there are no legal or practical impediments to the bank's ability to monetize such an asset in a timely fashion. Assets used to provide credit enhancement in structured transactions or to cover operational costs of the banks shall not be deemed readily accessible to the bank.

Assets held in any country where there are restrictions to their free transferability shall be deemed readily accessible only insofar as the bank uses those assets to meet liquidity outflows in that country.

Assets held in a non-convertible currency shall be deemed readily accessible only insofar as the bank uses those assets to meet liquidity outflows in that currency.

- c) banks shall ensure that their liquid assets are under the control of an organizational unit in charge of liquidity management and compliance with this requirement shall be demonstrated to the Agency either by:
 - 1) placing the liquid assets in a separate pool under the direct management of this organizational unit and with the sole intent of using them as a source of contingent funds, including during stress periods;
 - 2) putting in place internal systems and controls to give this organizational unit efficient operational control to monetize liquid assets at any point in the 30 calendar day stress period and to access the contingent funds without directly conflicting with any existing business or risk management strategies. In particular,

an asset shall not be included in the liquidity buffer where its sale without replacement throughout the 30 calendar day stress period would remove a hedge that would create an open risk position in excess of the internal limits of the bank;

- 3) a combination of options referred to under (1) and (2) of this point, provided that the Agency has deemed such combination acceptable.
- d) Banks shall regularly, and at least once a year, monetize a sufficiently representative sample of their liquid assets by means of outright sale or simple repurchase agreement on a generally accepted repurchase market. In this connection, banks shall develop strategies for disposing of samples of liquid assets which are adequate to:
- 1) test the access to the market for those assets and their usability;
 - 2) check that the bank's processes for the timely monetization of assets are efficient;
 - 3) minimize the risk of sending a negative signal to the market as a result of the bank's monetizing its assets during stress periods.

The requirements with regard to the market access testing and usability shall not apply to level 1 liquid assets referred to in Article 24 of this Decision, other than extremely high quality covered bonds;

- e) the requirements with regard to ready access to their liquid assets shall not prevent banks from hedging the market risk associated with their liquid assets provided that the following conditions are met:
- 1) the bank puts in place appropriate internal arrangements in accordance with points (b) and (c) of this Paragraph to ensure that those assets continue to be readily available and under the control of the bank's liquidity management organizational unit;
 - 2) the net liquidity outflows and inflows that would result in the event of an early close-out of the hedge are taken into account in the valuation of the relevant asset in accordance with Article 23 of this Decision.
- f) banks shall ensure the currency matching of their liquid assets with the currency composition of their net liquidity outflows. The Agency may, where appropriate, require banks to restrict currency mismatch by setting limits on the proportion of net liquidity outflows in a currency that can be met during a stress period by holding liquid assets not denominated in that currency. The restriction may only be applied for the reporting currency or a currency that may be subject to separate reporting requirement for material currencies. When determining the level of any restriction on currency mismatch that may be applied, the Agency shall at least have regard to:
- 1) whether the bank has the ability to do any of the following:
 - i. use the liquid assets to generate liquidity in the currency and jurisdiction in which the net liquidity outflows arise;
 - ii. swap currencies and raise funds in foreign currency markets during stressed conditions consistent with the 30 calendar day stress period;
 - iii. transfer a liquidity surplus from one currency to another and across jurisdictions and legal entities within its group during stressed conditions consistent with the 30 calendar day stress period;
 - 2) the impact of sudden, adverse exchange rate movements on existing mismatched positions and on the efficiency of any foreign exchange hedges in place. In so doing, any restriction on currency mismatch imposed in accordance with this point shall be deemed to constitute a specific liquidity requirement as referred to in Article 41 of this Decision.

Article 23
Valuation of Liquid Assets

- (1) For the purposes of calculating its LCR, a bank shall use the market value of its assets to determine its liquidity buffer.
- (2) Within the meaning of Paragraph (1) of this Article, the market value of liquid assets shall be reduced in accordance with applicable haircuts under the Instruction on the Method of Application of the Provisions of the Decision on Liquidity Risk Management in Banks on Calculating and Maintaining the LCR (hereinafter: the LCR Instruction), where applicable.

Article 24
Level 1 Liquid Assets (EHQLA)

- (1) Level 1 assets shall only include assets falling under one or more of the following categories and meeting in each case the eligibility criteria laid down here:
 - a) cash (coins and banknotes);
 - b) the following exposures to central banks:
 - 1) assets representing claims on or guaranteed by the European Central Bank (hereinafter: ECB) or a Member State's central bank and claim on the CBBIH;
 - 2) assets representing claims on or guaranteed by central banks of third countries, provided that exposures to the central bank or its central government are assigned a credit assessment by a nominated external credit assessment institution (hereinafter: ECAI) which is at least credit quality step 1 in accordance with the provisions of the Decision on Bank Capital Calculation;
 - 3) excess reserves held by the bank in the CBBIH, which may be withdrawn at any time during stress periods.
 - c) assets representing claims on or guaranteed by:
 - 1) the central government of BIH;
 - 2) the central government of a Member State;
 - 3) the central government of a third country, provided that it is assigned a credit assessment by a nominated ECAI which is at least credit quality step 1;
 - 4) the Federation of BIH Government, the Republika Srpska Government and the Brcko District Government;
 - 5) regional government units or local authorities in Member States and/or in BIH and in third countries, provided that they are treated as exposures to a central government;
 - 6) public sector entities, provided that they are treated as exposures to the central government of a Member State or to one of the regional government or local authority units in Member States and/or the central government of BIH or to the regional governments and local authorities in BIH.
 - d) assets representing claims on or guaranteed by the central government or the central bank of a third country which is not assigned a credit quality step 1 credit assessment by a nominated ECAI, only up to the level of net liquidity outflows in the currency of that third country.
 - e) assets issued by banks which meet at least one of the following two requirements:
 - 1) the bank was established by the central government of BIH, the central government of a Member State or the regional government or local authority unit in a Member State and/or by the regional government and local authority unit in BIH, and it is under the legal obligation to protect the economic basis of the bank and ensure its business continuity and any exposure to that regional government or local authority unit in a

- Member State and/or to the regional government or local authority unit in BIH, as applicable, is treated as an exposure to the central government of the Member State or the central government of BIH and
- 2) the bank's primary purpose is to provide promotional loans following a public policy objective of the founder, where such loans are provided on the terms that are not primarily competitive in the market and profit-oriented and at least 90 % of the loans that it grants are directly or indirectly guaranteed by the founder,
- f) exposures in the form of extremely high quality covered bonds, which shall comply with all of the following requirements:
- 1) they are bonds which meet the regulatory requirements under the provisions of the Decision on Bank Capital Calculation;
 - 2) the exposures to institutions in the cover pool meet the regulatory conditions under the provisions of the Decision on Bank Capital Calculation;
 - 3) the bank investing in the covered bonds and the issuer meet the regulatory transparency requirements;
 - 4) their issue size is at least EUR 500 million (or the equivalent amount in domestic currency) for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities;
 - 5) the covered bonds are assigned a credit assessment by a nominated ECAI which is at least credit quality step 1, the equivalent credit quality step in the event of a short term credit assessment or, in the absence of a credit assessment, they are assigned a 10 % risk weight;
 - 6) the cover pool meets at all times an asset coverage requirement of at least 2 % in excess of the amount required to meet the claims attaching to the covered bonds.
- g) claims on or guaranteed by the multilateral development banks and the international organizations;
- h) exposures in the form of shares or units in common investment undertakings, which shall be included in level 1 liquid assets only if the conditions defined by Article 27 of this Decision are met.
- (2) Haircuts shall not be applied for level 1 liquid assets referred to in Paragraph (1)(a) to (e) and (g) of this Article, while the application of haircuts for other liquid asset items is regulated by the LCR Instruction.

Article 25

Level 2A Liquid Assets

- (1) Level 2A liquid assets shall only include assets falling under one or more of the following categories and meeting in each case the eligibility criteria laid down herein:
- a) claims on or guaranteed by regional government or local authority units or public sector entities in a Member State, in BIH, where exposures to them are assigned a risk weight of 20 % in accordance with the Decision on Bank Capital Calculation;
 - b) claims on or guaranteed by the central government or the central bank of a third country or by a regional government or local authority unit or public sector entity in a third country, provided that they are assigned a 20 % risk weight in accordance with the Decision on Bank Capital Calculation;
 - c) exposures in form of high quality covered bonds, which shall comply with all of the following requirements:

- 1) they are bonds which meet the regulatory definition and the regulatory requirements under the Decision on Bank Capital Calculation;
 - 2) the exposures to institutions in the cover pool meet the regulatory conditions under the Decision on Bank Capital Calculation;
 - 3) the bank investing in the covered bonds and the issuer meet the regulatory transparency requirements;
 - 4) their issue size is at least EUR 250 million (or the equivalent amount in domestic currency), for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities;
 - 5) the covered bonds are assigned a credit assessment by a nominated ECAI which is at least credit quality step 2 in accordance with applicable regulatory conditions pursuant to the Decision on Bank Capital Calculation, the equivalent credit quality step in the event of a short term credit assessment or, in the absence of a credit assessment, they are assigned a 20 % risk weight in accordance with the Decision on Bank Capital Calculation;
 - 6) the cover pool meets at all times an asset coverage requirement of at least 7 % in excess of the amount required to meet the claims attaching to the covered bonds. However, where covered bonds with a credit quality step 1 credit assessment do not meet the minimum issue size of extremely high quality covered bonds in accordance with Article 24(1)(f)(4) of this Decision, but meet the requirements for high quality covered bonds under (1), (2), (3) and (4) of this point, they shall instead be subject to a minimum asset coverage requirement of 2 %.
- d) exposures in the form of covered bonds issued by banks in third countries, which shall comply with all of the following requirements:
- 1) they are covered bonds in accordance with the national law of the third country which must define them as debt securities issued by banks, or by a wholly owned subsidiary of a bank which guarantees the issue, and secured by a cover pool of assets, in respect of which bondholders shall have direct recourse for the repayment of principal and interest on a priority basis in the event of the issuer's default;
 - 2) the issuer of the covered bonds is subject by the national law in the third country to special public supervision designed to protect bondholders and the supervisory and legal frameworks applied in the third country must be equivalent to those applied in the EU;
 - 3) the covered bonds are backed by a pool of assets of one or more of the types in accordance with applicable regulatory conditions pursuant to the Decision on Bank Capital Calculation. Where the pool comprises loans secured by immovable property, applicable regulatory conditions under the Decision on Bank Capital Calculation must be met;
 - 4) the exposures to institutions in the cover pool meet applicable regulatory conditions under the Decision on Bank Capital Calculation;
 - 5) the bank investing in the covered bonds and the issuer meet the regulatory transparency requirements;
 - 6) the covered bonds are assigned a credit assessment by a nominated ECAI which is at least credit quality step 1 in accordance with applicable regulatory conditions for calculation of the capital requirements, the equivalent credit quality step in the event of a short term credit assessment or, in the absence of a credit assessment, they are

- assigned a 10 % risk weight in accordance with the Decision on Bank Capital Calculation;
- 7) the asset cover pool meets at all times an asset coverage requirement of at least 7 % in excess of the amount required to meet the claims attaching to the covered bonds. However, where the issue size of the covered bonds is EUR 500 million (or the equivalent amount in domestic currency) or higher, for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities, they shall instead be subject to a minimum asset coverage requirement of 2 %;
- e) corporate debt securities which meet all of the following requirements:
 - 1) they are assigned a credit assessment by a nominated ECAI which is at least credit quality step 1 in accordance with the Decision on Bank Capital Calculation or the equivalent credit quality step in the event of a short term credit assessment;
 - 2) the securities issue size is at least EUR 250 million (or the equivalent in domestic currency) for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities;
 - 3) the maximum time to maturity of the securities at the time of issuance is 10 years;
 - f) exposures in the form of shares or units in common investment undertakings, which shall be included in level 2A liquid assets only if the conditions defined by Article 27 of this Decision are met.
- (2) The market value of level 2A assets referred to in Paragraph (1)(a) to (e) of this Article shall be subject to a haircut of at least 15 %.
 - (3) The application of haircuts for assets referred to in Paragraph (1)(f) of this Article is regulated by the LCR Instruction.

Article 26

Level 2B Liquid Assets

- (1) Level 2B assets shall only include assets falling under one or more of the following categories and meeting in each case the eligibility criteria laid down herein:
 - a) corporate debt securities which meet all of the following requirements:
 - 1) they have received a credit assessment by a nominated ECAI which is at least credit quality step 3, in accordance with the Decision on Bank Capital Calculation or the equivalent credit quality step in the event of a short term credit assessment;
 - 2) the securities issue size is at least EUR 250 million (or the equivalent in domestic currency), for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities;
 - 3) the maximum time to maturity of the securities at the time of issuance is 10 years.
 - b) shares, provided that they meet all of the following requirements:
 - 1) they form part of a major stock index in BIH (on the SASE and the BLSE), in a Member State or in a third country, according to the list of recognized stock exchanges under the Decision on Bank Capital Calculation, and identified as such for the purposes of this point by the competent authority of BIH, of a Member State or the relevant public authority in a third country;

- 2) they are denominated in the BAM currency or, where denominated in a different currency, they count as level 2B assets only up to the amount required to cover stressed net liquidity outflows in that currency or in the jurisdiction where there is credit risk exposure;
 - 3) they have a proven record as a reliable source of liquidity at all times, including during stress periods. This requirement shall be deemed met where the level of decline in the share's stock price or increase in its haircut during a 30 calendar day market stress period did not exceed 40 % or 40 percentage points, respectively.
- c) exposures in the form of high quality covered bonds which shall comply with all of the following requirements:
- 1) they are bonds in accordance with applicable regulatory conditions pursuant to the Decision on Bank Capital Calculation or meet the regulatory requirements to be eligible for the treatment when calculating the capital requirements;
 - 2) the bank investing in the covered bonds meets the regulatory transparency requirements;
 - 3) the issuer of the covered bonds makes the information available to investors on at least a quarterly basis in accordance with applicable regulatory requirements under the Decision on Bank Capital Calculation;
 - 4) their issue size is at least EUR 250 million (or the equivalent amount in domestic currency), for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities;
 - 5) the covered bonds are collateralized exclusively by the assets that meet applicable regulatory conditions under the Decision on Bank Capital Calculation;
 - 6) the cover pool meets at all times an asset coverage requirement of at least 10 % in excess of the amount required to meet the claims attaching to the covered bonds;
 - 7) the issuing bank must publicly disclose on a monthly basis that the exposure pool meets the 10 % asset coverage requirement.
- d) exposures in the form of shares or units in common investment undertakings, which shall be included in level 2B liquid assets only if the conditions defined by Article 27 of this Decision are met
- e) for banks which in accordance with their statutes of incorporation are unable for reasons of specific way of doing business to hold interest bearing assets, non-interest bearing assets constituting a claim on or guaranteed by the central bank or by the central government or the central bank of a third country or by a regional government or local authority unit or public sector entity in a third country, provided that those assets have a credit assessment by a nominated ECAI of at least credit quality step 5 in accordance with the Decision on Bank Capital Calculation or the equivalent credit-quality step in the event of a short-term credit assessment.
- (2) The market value of each of the level 2B assets shall be subject to haircuts provided for by the LCR Instruction.
 - (3) For banks which in accordance with their statutes of incorporation are unable for reasons of specific way of doing business to hold interest bearing assets, the Agency may allow to derogate referred to in Paragraph (1)(a)(2) and (3) of this Article, provided there is evidence of insufficient availability of non-interest bearing assets meeting these requirements and the non-interest bearing assets in question are adequately liquid in other organized markets.

- (4) When determining whether the non-interest bearing assets are adequately liquid for the purposes of Paragraph (3) of this Article, the Agency shall consider the following factors:
- a) the available data in respect of their market liquidity, including trading volumes, observed bid-offer spreads, price volatility and price impact; and
 - b) other factors relevant to their liquidity, including the historical evidence of the breadth and depth of the market for those non-interest bearing assets, the number and diversity of market participants and the presence of a robust market infrastructure.

Article 27

Shares or Units in Common Investment Undertaking (CIU)

- (1) Shares or units in common investment undertaking (CIU) shall qualify as liquid assets of the same level as the liquid assets underlying the relevant undertaking up to a maximum amount of EUR 250 million (or equivalent amount in domestic currency) for issuers from Member States, whereas for the issues of issuers from BIH and third countries, the minimum issue size shall be set on the basis of the issuer's market conditions, in terms of normal issues for identical or similar securities, for each bank on an individual basis, provided that the following conditions are met:
- a) the CIU is managed by a company which is under the supervision of a competent authority in BIH or in the EU, and where the CIU is from a third country, it is under the supervision of a competent authority which performs its supervision in accordance with the regulations that correspond to the EU regulations and the Agency must have in place relevant cooperation with that authority;
 - b) the CIU invests only in liquid assets, whereas it invests in financial derivatives in accordance with the regulatory conditions pursuant to the Decision on Bank Capital Calculation, only to the extent necessary to mitigate interest rate, currency or credit risk in the portfolio;
 - c) the CIU's investment policy and prospectus and/or other relevant regulation includes data about the categories of assets in which the CIU is authorized to invest funds and about individual investment limits of that fund, as well as how those limits are calculated;
 - d) the CIU discloses at least once a year its management reports which allow assessment of its assets and its liabilities, income and activities during the reporting period.
- (2) The conditions, approaches and haircuts that banks are required to apply to their shares or units in the CIU shall be regulated by the LCR Instruction, depending on the category of the underlying liquidity asset.
- (3) In accordance with Paragraph (2) of this Article, if the exposures referred to in Paragraph (1) of this Article are material (they exceed 10 % of the bank's eligible capital), banks shall develop efficient methodologies and processes to calculate and report the market value and haircuts for shares or units in the CIU.
- (4) Where the exposures referred to in Paragraph (1) of this Article are not material for a bank to develop its own methodologies referred to in Paragraph (3) of this Article and provided that the competent authority is satisfied that this condition has been met, a bank shall be allowed to rely on the third parties to calculate and report the market value and haircuts for shares or units in the CIU, namely:
- a) the depository institution of the CIU, provided that the CIU invests exclusively in securities and deposits all such securities at this depository institution, in accordance with applicable regulations;

- b) other CIUs, the CIU management companies, provided that the CIU management company meets the supervision criteria in the Member State or, in case of a third country, is under the supervision that is regulated in the same way as the supervision under the EU regulations and that relevant cooperation has been ensured between the competent supervisory authorities.
- (5) With regard to the application of Paragraph (4) of this Article, verification by an external auditor of the accuracy of the calculations of the depository institution of the CIU or the CIU management company needs to be ensured, in accordance with applicable regulations.
- (6) Where a bank fails to comply with the requirements laid down in Paragraphs (3) and (4) of this Article in relation to shares or units in a CIU, it shall cease to recognize them as liquid assets for the purposes of this Decision.

Article 28

Breach of Requirements to Recognize Assets as Liquidity Buffers

- (1) Where a liquid asset ceases to comply with any applicable general requirements laid down in Article 21, the operational requirements laid down in Article 22 of this Decision or any applicable eligibility criteria for level 1, 2A and 2B assets, the bank shall cease to recognize it as a liquid asset no later than 30 calendar days from the date when the breach of requirements occurred.
- (2) Paragraph (1) of this Article shall apply to shares or units in a CIU ceasing to meet eligibility requirements only where they do not exceed 10 % of the CIU's overall assets.

III.2. NET LIQUIDITY OUTFLOWS

Article 29

Definition of Net Liquidity Outflows

- (1) The net liquidity outflows as defined in Article 2(1) of this Decision shall be the sum of liquidity outflows in Article 30 of this Decision reduced by the sum of liquidity inflows in Article 31 of this Decision, but shall not be less than zero.
- (2) The calculation method for the net liquidity outflow referred to in Paragraph (1) of this Article is set out in Annex 2 which forms an integral part of this Decision.
- (3) The basic principle that applies when determining net liquidity outflows is that, when calculating the LCR, the bank may not include the same item both to determine the liquidity buffer (numerator) and in relation to liquidity inflows (denominator).

Article 30

Liquidity Outflows

- (1) For the purposes of calculating the net liquidity outflows in accordance with Article 29 of this Decision, liquidity outflows shall be calculated by multiplying the outstanding balances of various categories or types of liabilities and off-balance sheet commitments by the rates at which they are expected to run off or be drawn down.
- (2) Liquidity outflows referred to in Paragraph (1) of this Article shall include, in each case multiplied by the applicable outflow rate:
 - a) the current outstanding amount for stable retail deposits and other retail deposits;
 - b) the current outstanding amounts of other liabilities that become due, can be called for pay-out by the issuer or by the provider of the funding or entail an expectation by the provider

- of the funding that the bank would repay the liability during the next 30 calendar days, as determined;
- c) the additional outflows under financial derivative agreements in accordance with the Decision on Bank Capital Calculation;
 - d) the maximum amount that can be drawn down during the next 30 calendar days from undrawn committed credit and liquidity facilities;
 - e) the additional outflows identified in the assessment in accordance with Paragraph (3) of this Article.
- (3) With regard to Paragraph (2)(e) of this Article, banks shall regularly assess the likelihood and potential volume of liquidity outflows during 30 calendar days for products and services which are not included in the outflows under operational deposits, other liabilities, additional outflows and outflows from credit and liquidity facilities and which they offer or which potential purchasers would consider associated with those banks. Those products or services shall include, but not be limited to, the liquidity outflows resulting from any of the contractual arrangements in accordance with the Decision on Bank Capital Calculation, such as:
- a) other off-balance sheet and contingent funding obligations, including, inter alia, funding facility agreements;
 - b) undrawn loans and advances to wholesale customers;
 - c) loans that have been agreed but not yet drawn down;
 - d) credit cards;
 - e) overdrafts;
 - f) planned outflows related to renewal or extension of new retail or wholesale loans;
 - g) planned financial derivatives payables;
 - h) trade finance off-balance sheet related products.
- (4) For the purposes of this part of the Decision, wholesale customer shall be deemed to be any customers who do not meet the conditions to be classified in the retail category pursuant to the provisions of the Decision on Bank Capital Calculation.
- (5) The outflows referred to Paragraph (1) of this Article shall be assessed under the assumption of a combined idiosyncratic and market-wise stress scenario as referred to in Article 32 of this Decision. For that assessment, banks shall particularly take into account material reputational damage that could result from not providing liquidity support to such products or services.
- (6) The criteria for including in the outflows from the stable retail deposits (deposits covered by a deposit guarantee scheme, treatment of part of an established relationship making withdrawal highly unlikely, criteria for classifying deposits as stable and less stable deposits starting from law and other regulations on deposit insurance in banks in BIH, depositing in a transactional account) and the application of higher outflow rates are regulated in greater detail by the LCR Instruction, as well as the criteria for inclusion in other outflow categories with related outflow rates.
- (7) Where there is a possibility for an item to end up in several categories of cash outflows, the bank shall consider the maximum contractual outflow for that product
- (8) The method for including and calculating the amount of the outflows referred to in this Article is regulated by the LCR Instruction.

Article 31

Liquidity Inflows

- (1) A bank shall assess liquidity inflows over a period of 30 calendar days, comprising only contractual inflows from exposures that are not past due and for which the bank has no reason to expect non-performance within 30 calendar days.
- (2) Liquidity inflows shall receive inflow rates, depending on the asset class, including off-balance sheet items and/or financial derivatives, in accordance with applicable regulatory conditions pursuant to the Decision on Bank Capital Calculation, and depending on whether the regulatory requirements for specific asset classes are met, which is regulated in detail by the LCR Instruction.
- (3) In complying with Paragraphs (1) and (2) of this Article, the bank shall not take into account the following:
 - a) any inflows from any of the liquid assets included in the liquidity buffer, other than payments due on the assets that are not reflected in the market value of the asset;
 - b) inflows from any new borrowings by the bank, where a new borrowing shall mean a claim under an agreement which has not been entered into on the reporting date, but its execution is expected in the next 30 calendar days.
- (4) The bank shall take into account liquidity inflows originating in third countries where there are transfer restrictions or which are denominated in non-convertible currencies only to the extent that they correspond to outflows respectively in the third country or currency in question.
- (5) Banks shall limit the recognition of liquidity inflows to 75 % of total liquidity outflows unless a specific inflow is exempted under the Agency's prior approval.
- (6) In accordance with Paragraph (5) of this Article and with the Agency's prior approval, the bank may fully or partially exempt from the above cap the following liquidity inflows:
 - a) inflows where the provider is a parent bank or its subsidiary or another subsidiary of the same parent bank or is closely related to those banks, in accordance with the regulations governing supervision on a consolidated basis;
 - b) inflows from deposits placed with another bank who is a member of the same banking group, provided that the following conditions are fulfilled:
 - 1) the bank and the counterparty are subject to a consolidation on a full basis;
 - 2) the bank and the counterparty are subject to the same risk evaluation, measurement and control procedures;
 - 3) the bank and the counterparty are established in BIH;
 - 4) there are no restrictions on drawing down the bank's deposited funds.
- (7) The exemptions approved by the Agency may be applied at both the individual and consolidated levels, in accordance with the regulations governing the supervision on an individual and on a consolidated basis.
- (8) Banks shall determine the amount of the net liquidity inflows under the application of the inflow cap in accordance with the formula laid down in Annex 2 to this Decision.
- (9) Inflows under undrawn credit or liquidity facilities granted to the bank shall not be included in the liquidity inflows for the purposes of calculating the LCR.
- (10) By way of derogation referred to in Paragraph (9) of this Article, the Agency may authorize the application of a higher inflow rate on a case by case basis for undrawn credit and liquidity facilities within the banking group when all regulatory conditions and additional criteria defined by the LCR Instruction are fulfilled.

III.3. STRESS SCENARIOS

Article 32

Stress Scenarios for the Purposes of the LCR

For the purpose of applying the provisions of Article 40(1) of this Decision, the following circumstances may be regarded as stress scenarios:

- a) the run-off of a significant proportion of retail deposits;
- b) a partial or total loss of unsecured wholesale funding capacity, including wholesale deposits and other sources of contingent funding such as received liquidity or credit lines;
- c) a partial or total loss of secured, short-term funding;
- d) additional liquidity outflows as a result of a credit rating downgrade of up to three notches;
- e) increased market volatility affecting the value of collateral or its quality or creating additional collateral needs;
- f) unscheduled draws on liquidity and credit facilities;
- g) potential obligation to buy-back debt or to honor non-contractual obligations.

IV. NET STABLE FUNDING RATIO MINIMUM QUANTITATIVE REQUIREMENTS

Article 33

The Net Stable Funding Ratio

- (1) For the purpose of reducing funding risk over a longer time horizon, banks shall ensure that long term obligations are adequately met with a diversity of stable funding instruments under both normal and stressed conditions.
- (2) Within the meaning of Paragraph (1) of this Article, the bank shall ensure the minimum NSFR, which shall be equal to the ratio of the ASF as referred to in Article 2(1)(s) to the RSF as referred to in Article 2(1)(t) of this Decision, and shall be expressed as a percentage.
- (3) In accordance with Paragraph (2) of this Article, banks shall maintain on an ongoing basis a NSFR of at least 100 % in the reporting currency, irrespective of the actual currency denomination.
- (4) Banks shall calculate and monitor their NSFR in the reporting currency for all their transactions, irrespective of their actual currency denomination, and shall separately calculate and monitor NSFR for their transactions in each material currency.
- (5) Banks shall calculate their NSFR in accordance with the following formula:

$$\frac{\text{ASF}}{\text{RSF}} \geq 100\%$$

- (6) The terms defined in Chapter III of this Decision relating to the LCR calculation shall also apply to Chapter IV of this Decision relating to the NSFR calculation, unless otherwise specified.

- (7) The implementation method for the general NSFR calculation rules, the calculation method for the ASF and RSF amounts and the application of the respective conversion factors for specific classes of assets, liabilities, regulatory capital and off-balance sheet items included in the ASF and RSF calculation shall be regulated by the Instruction on the Method of Application of the Decision on Liquidity Risk Management in Banks on Calculating and Maintaining the NSFR (hereinafter: the Instruction on the NSFR Components).

Article 34

Application of the NSFR

- (1) By way of derogation referred to in Article 33 of this Decision, where, at any time, the NSFR of a bank has fallen below 100 % or the bank expects it to fall below 100 %, it shall immediately notify the Agency of this, and shall, without delay, in accordance with Article 40 of this Decision, submit a plan for restoring compliance with the requirements laid down in Article 33(2) and (3) of this Decision.
- (2) Banks shall ensure that the distribution of their funding profile by currency denomination is generally consistent with the distribution of their assets by currency denomination.
- (3) With regard to the application of Paragraph (2) of this Article, the Agency may require banks to restrict currency mismatches by setting limits on the proportion of RSF in a particular currency that can be met by ASF that is not denominated in that currency.
- (4) The restriction referred to in Paragraph (3) of this Article may only be applied for a currency that is subject to separate reporting.
- (5) When determining the level of any restriction on currency mismatches, the Agency shall at least consider:
 - a) whether the bank has the ability to transfer ASF from one currency to another and across countries and legal entities within its group and the ability to swap currencies and raise funds in foreign currency markets over the one-year horizon of the NSFR;
 - b) the impact of adverse exchange rate movements on existing mismatched positions and on the efficiency of any foreign currency exchange hedges that are in place;
 - c) any restriction on currency mismatches imposed in accordance with this Article shall constitute a specific liquidity requirement as referred to in Article 41 of this Decision.
- (6) In accordance with the provisions of Article 1(6) of this Decision, in the application on a consolidated basis, the bank shall apply the following provisions:
 - a) the assets and off-balance-sheet items of a subsidiary having its head office in a third country which are subject to RSF factors under the NSFR requirement set out in the national law of that third country that are higher than those specified in this Decision shall be subject to consolidation in accordance with the higher factors specified in the national law of that third country;
 - b) the liabilities and own funds of a subsidiary having its head office in a third country which are subject to ASF factors under the NSFR requirement set out in the national law of that third country that are lower than those specified in this Decision shall be subject to consolidation in accordance with the lower factors specified in the national law of that third country;
 - c) third-country assets which meet the requirements laid down in Articles 21 and 22 of this Decision and which are held by a subsidiary having its head office in a third country shall not be recognized as liquid assets for consolidation purposes where they do not qualify as liquid assets under the national law of that third country which sets out the LCR requirement.

Article 35

Components of the NSFR and General Rules for the Calculation of the NSFR

- (1) When calculating the NSFR, banks shall take into account assets, liabilities, equity and off-balance-sheet items on a gross basis, subject to the exceptions when it is calculated on a net basis, provided that the conditions set out in Article 4 of the Instruction on the NSFR Components are fulfilled.
- (2) The exceptions referred to in Paragraph (1) of this Article are related to financial derivatives, securities financing transactions and interdependent assets and liabilities.
- (3) For the purpose of calculating their NSFR, banks shall apply the appropriate stable funding factors set out in Articles 36 and 37 of this Decision to the accounting value of their assets, liabilities, equity and off-balance-sheet items, unless otherwise specified.
- (4) Banks shall not double count RSF and ASF when calculating their NSFR.
- (5) Where an item can be allocated to more than one RSF category, it shall be allocated to the RSF category that produces the greatest contractual RSF for that item, unless otherwise specified in this Decision.
- (6) For the treatment of financial derivative agreements, the general rule is that the fair value of the positions shall be taken into account when calculating the amount of RSF.

IV.1. ASF

Article 36

Calculation of the Amount of ASF

- (1) The amount of ASF shall be calculated by multiplying the accounting value of various categories or types of liabilities and own funds by the ASF factors to be applied under the provisions of Paragraph (8) of this Article, unless otherwise specified.
- (2) The total amount of ASF shall be the sum of the weighted amounts of liabilities and own funds.
- (3) Bonds and other debt securities that are issued by the bank, sold exclusively in the retail market, and held in a retail account, may be treated as belonging to the appropriate retail deposit category. The Agency may put in place limitations, such that those instruments cannot be bought and held by customers who are not deemed to be retail category customers.
- (4) Banks shall take into account the residual contractual maturity of their liabilities and own funds to determine the ASF factors, unless otherwise specified in the provisions of this Decision and the Instruction on the NSFR Components. When determining the ASF factors, banks shall take into account existing options in determining the residual maturity of a liability or of own funds, including the assumption that the counterparty will redeem call options at the earliest possible date. For options exercisable at the discretion of the bank, the bank and the competent authorities shall take into account reputational factors that may limit a bank's ability not to exercise the option, in particular market expectations that banks should redeem certain liabilities before their maturity.
- (5) Banks shall treat deposits with fixed notice periods in accordance with their contractual notice period, and shall treat term deposits in accordance with their residual maturity.
- (6) Where banks' liabilities mature in the period that is longer than one year, and for the purpose of determining the ASF factors to be applied under the provisions of this Decision, the bank shall break down each portion of that liability into related periods of up to six months and/or of six months to one year, of one year and more, with the application of specific regulatory ASF reporting provisions, in accordance with the NSFR reporting instructions and with the use of related „Decision Tree“.

- (7) For the purpose of determining the ASF factors to be applied under the provisions of this Decision, banks shall treat any portion of liabilities having a residual maturity of one year or more and payable in instalments that matures in less than six months and any portion of such liabilities that matures between six months and less than one year as having a residual maturity of less than six months and between six months and less than one year, respectively.
- (8) When calculating their NSFR, banks shall apply to liabilities referred to in Paragraph (7) of this Article and to capital items and instruments the respective ASF factors of 0, 50, 90, 95 and 100 % which are regulated in detail by the Instruction on the NSFR Components.

IV.2. RSF

Article 37

Calculation of the Amount of RSF

- (1) The amount of RSF shall be calculated by multiplying the accounting value of various categories or types of assets and off-balance-sheet items by the RSF factors to be applied in accordance with the provisions of Paragraph (15) of this Article, unless otherwise specified.
- (2) The total amount of RSF shall be the sum of the weighted amounts of assets and off-balance-sheet items.
- (3) Assets that banks have borrowed, including in securities financing transactions, shall be excluded from the calculation of the amount of RSF where those assets are accounted for on the balance sheet of the bank and where the bank does not have beneficial ownership of the assets. Assets that banks have borrowed, including in securities financing transactions, shall be subject to the respective RSF factors where those assets are not accounted for on the balance sheet of the bank but the bank does have beneficial ownership of the assets.
- (4) Assets that banks have lent, including in securities financing transactions over which the bank retains beneficial ownership, shall be considered as encumbered for the purposes of this Decision and shall be subject to the RSF factors to be applied under the provisions of Paragraph (15) of this Article, even where the assets do not remain on the balance sheet of the bank. Otherwise, such assets shall be excluded from the calculation of the amount of RSF.
- (5) Assets that are encumbered for a residual maturity of six months or longer shall be assigned either the RSF factor that would be applied under the provisions of Paragraph (15) of this Article to those assets if they were held unencumbered or the RSF factor that is otherwise applicable to those encumbered assets, whichever factor is higher. The same shall apply where the residual maturity of the encumbered assets is shorter than the residual maturity of the transaction that is the source of encumbrance.
- (6) Assets that have less than six months remaining in the encumbrance period shall be subject to the RSF factors to be applied under the provisions of this Decision to the same assets if they were held unencumbered.
- (7) Where a bank reuses or repledges an asset that was borrowed, including in securities financing transactions, and that asset is accounted for off-balance-sheet, the transaction in relation to which that asset has been borrowed shall be treated as encumbered, provided that the transaction cannot mature without the bank returning the asset borrowed.
- (8) For the purpose of applying the provisions of this Article, the following assets of the bank shall be considered to be unencumbered, if any of the following conditions is fulfilled:
 - a) assets included in a pool which are available for immediate use as collateral to obtain additional funding under committed or, where the pool is operated by a central bank, uncommitted but not yet funded, credit lines that are available to the bank. Banks shall assume that assets in the pool are encumbered in order of increasing liquidity on the basis

- of the liquidity classification pursuant to the provisions of Articles 24, 25 and 26 of this Decision, starting with assets ineligible for the liquidity buffer;
- b) assets that the bank has received as collateral for credit risk mitigation purposes in secured lending, secured funding or collateral exchange transactions and that the bank may dispose of;
 - c) assets attached as non-mandatory overcollateralization to a covered bond issuance.
- (9) In the case of non-standard, temporary operations conducted by the CBBIH, the ECB, the competent central bank of a Member State and the competent central bank of a third country, in accordance with the regulations, in order to fulfil its mandate in a period of market-wide financial stress or in exceptional macroeconomic circumstances, certain assets may receive a reduced RSF factor due to this under Article 6(22) of the Instruction on the NSFR Components.
 - (10) Banks shall include financial instruments, foreign currencies and commodities for which a purchase order has been executed in the calculation of the amount of RSF, whereas they shall exclude financial instruments, foreign currencies and commodities for which a sale order has been executed from the calculation of the amount of RSF, provided that those transactions are not reflected as derivatives or secured funding transactions on the banks' balance sheet and that those transactions are to be reflected on the banks' balance sheet when settled.
 - (11) The Agency may determine the RSF factors to be applied to off-balance-sheet items that are not referred to in this Decision to ensure that banks hold an appropriate amount of ASF for the portion of those items that are expected to require funding over the one-year horizon of the NSFR. To determine those factors, the Agency shall, in particular, take into account the material reputational damage to the bank that could result from not providing that funding.
 - (12) Banks shall take into account the residual contractual maturity of their assets and off-balance-sheet transactions when determining the RSF factors to be applied to their assets and off-balance-sheet items under the provisions of this Decision.
 - (13) When determining the residual maturity of an asset, banks shall take options into account, based on the assumption that the issuer or counterparty will exercise any option to extend the maturity of an asset. For options that are exercisable at the discretion of the bank, the bank and the Agency shall take into account reputational factors that may limit the bank's ability not to exercise the option, in particular markets' and clients' expectations that the bank should extend the maturity of certain assets at their maturity date.
 - (14) In order to determine the RSF factors to be applied in accordance with the provisions of this Decision, for amortizing loans with a residual contractual maturity of one year or more, any portion that matures in less than six months and any portion that matures between six months and less than one year shall be treated as having a residual maturity of less than six months and between six months and less than one year, respectively.
 - (15) When calculating their NSFR, banks shall apply to assets and off-balance-sheet items under the provisions of this Article the respective RSF factors of 0, 5, 7, 7.5, 10, 12, 15, 20, 30, 35, 40, 50, 55, 65, 85 and 100 %, which are regulated in detail by the Instruction on the NSFR Components.

V. LCR AND NSFR CALCULATION, MONITORING AND REPORTING TO THE AGENCY

Article 38

Calculation, Monitoring and Reporting on the LCR and the NSFR

- (1) Banks shall ensure that their LCR and NSFR are adequately calculated, monitored and reported.

- (2) Banks shall calculate, monitor and report on the LCR and NSFR to the Agency in the reporting currency for all items irrespective of the actual currency denomination and separately for the items denominated in each material currency, in order to ensure adequate monitoring of potential currency mismatches.
- (3) Banks shall provide reports on LCR on a monthly basis at a minimum, where the Agency may also require more frequent reporting, on a ten-day, weekly or daily basis if necessary or in case of crisis situations.
- (4) The frequency of reporting on the NSFR to the Agency is at least on a quarterly basis. The Agency may also require more frequent reporting if necessary or in case of crisis situations.
- (5) Reporting to the Agency referred to in Paragraphs (3) and (4) of this Article shall be in the uniform reporting formats and within the deadlines that banks shall adhere to in accordance with the provisions of the Instruction on Completing Banks' Liquidity Coverage Reports and the Instruction on the NSFR Reporting, which detail instructions for completing the reporting templates on the LCR and the NSFR.
- (6) Adequacy assessment of the established system referred to in Paragraphs (1) and (2) of this Article shall be performed by the internal and external audit.

Article 39

Monitoring the LCR and the NSFR by Each Material Currency

- (1) The banks' LCR and NSFR reporting obligation shall be performed in accordance with the provisions of Article 38 of this Decision, in order to pre-empt potential issues that may arise in connection with currency mismatches during stress periods, where for the LCR monitoring the amount of the total net liquid outflows shall be reported without the effects of any hedge against risk of exchange rate change (currency risk).
- (2) Within the meaning of Paragraph (1) of this Article, the LCR and the NSFR by each material currency shall constitute one of the additional liquidity risk monitoring mechanisms referred to in Article 42 of this Decision that banks must use consistently, in order to monitor on an ongoing basis potential issues with currency mismatches that may arise during stress periods.
- (3) Although the fulfillment of the LCR and the NSFR in each material currency shall not constitute the regulatory minimum standard, the Agency may set the minimum thresholds for the LCR and the NSFR in a material currency, starting from the specificities of the local market and the bank's business and/or the bank's ability to raise funds in foreign currency markets or to transfer the liquidity surplus from one currency to another, in accordance with the legal regulations governing the matter in question.

Article 40

Measures to Restore Compliance

- (1) In addition to the obligations and responsibilities referred to in Article 7(1) of this Decision, the bank's management shall notify without delay, in writing, the bank's supervisory board and the Agency if it does not fulfil or expects that it will not fulfill the regulatory liquidity coverage requirements, the net stable funding requirements or other liquidity requirements referred to in Articles 17(3) and 33(3) of this Decision, including during stress periods, and shall provide a plan of measures to restore compliance with the regulatory requirements.
- (2) In accordance with Paragraph (1) of this Article and until such time as when compliance with the regulatory liquidity coverage requirement has been restored, the bank shall report on the fulfillment of the regulatory liquidity coverage requirements or other bank's liquidity requirements to the Agency on a daily basis and by the close of business, whereas in case of nonfulfillment of the regulatory net stable funding requirements, it shall report to the Agency within five (5) business days upon the expiry of that month, unless the Agency authorizes less frequent reporting and a longer deadline for the delivery of reports on those requirements.

- (3) The authorization referred to in Paragraph (2) of this Article may be granted by the Agency only on the basis of an assessment of the bank's liquidity risk profile and financial position, where it shall take into account the volume and complexity of its business.
- (4) The Agency shall oversee the implementation of the bank's plan for restoring compliance and where appropriate, it shall require faster restoration of compliance.
- (5) The Agency shall assess the reasons for the bank's noncompliance with the regulatory liquidity coverage requirement, the net stable funding requirement or other bank's liquidity requirements and the implementation of the plan for restoring compliance, before undertaking supervisory measures in accordance with legal regulations and provisions of the Decision on Banking Supervision and Procedures of the Federation of Bosnia and Herzegovina Banking Agency.

VI. SPECIFIC LCR AND NSFR REQUIREMENTS

Article 41

Specific LCR and NSFR Requirement Setting

- (1) For the purposes of setting an adequate level of the bank's liquidity requirement based on the supervisory review and evaluation process performed for liquidity risk that the bank is or may be exposed to, the Agency may set specific liquidity requirements, taking into account:
 - a) the bank's risk profile and its business model;
 - b) the bank's systems, processes and mechanisms for liquidity risk identification, measurement, monitoring and reporting and liquidity risk management over an appropriate time horizon, including intraday liquidity management, in order to ensure maintenance of an adequate level of liquidity buffers and stable funding;
 - c) the results of the supervisory review and evaluation of the bank's liquidity risk, the risks posed by the bank to the stability of the FBiH banking system, the bank's risks detected by performing stress testing, in accordance with the type, volume and complexity of the bank's business.
- (2) With regard to Paragraph (1) of this Article, the Agency shall determine through the ILAAP verification process whether the systems, processes and mechanisms implemented by the bank in liquidity risk management ensure an adequate level of the bank's liquidity, and may accordingly require specific liquidity requirements with regard to the LCR and the NSFR from the bank.

VII. ADDITIONAL ONGOING LIQUIDITY RISK EXPOSURE MONITORING MECHANISMS

Article 42

Additional Ongoing Liquidity Risk Exposure Monitoring Mechanism

- (1) For the measurement of the liquidity risk profile, in addition to the regulatory minimum LCR and NSFR, banks shall consistently and coherently use additional tools and metrics in the liquidity risk assessment.
- (2) The additional tools and metrics referred to in Paragraph (1) of this Article shall include the following as a minimum:
 - a) identification of the maturity mismatches between contractual inflows and outflows over the defined time horizons by all on-balance-sheet and off-balance-sheet items;

- b) identification of the funding concentrations;
- c) availability of the unencumbered assets that are marketable as collateral in secondary markets and/or eligible for placements by central banks or other competent institutions and
- d) the market tools for liquidity monitoring in terms of early warning indicators of the bank's potential liquidity problems.

Article 43

Identifying Maturity Mismatch between the Contractual Inflows and Contractual Outflows

- (1) Banks shall identify mismatches between the contractual inflows and contractual outflows for the defined time horizons, in accordance with the provisions of Article 42(2)(a) of this Decision.
- (2) Instruments that have no specified maturity (undefined or open maturity) shall be reported separately, with detailed data on those instruments and without assumptions about the maturity date.
- (3) Information about the potential cash flows arising from financial derivatives also need to be included to the extent that their contractual maturities are relevant for understanding the cash flows.
- (4) In addition to the regulatory monitoring of the contractual inflows and contractual outflows by contractual residual maturity, banks shall perform their own analyses of the maturity mismatches based on behavioral assumptions about the cash inflows and outflows in both normal and stressed situations.
- (5) The analyses referred to in Paragraph (4) of this Article shall be based on the bank's strategic and business plans.
- (6) If the bank plans a material change in its business model, it must include the impact of such changes in the projections of the mismatches.
- (7) The bank shall adequately document explanations of how it plans to bridge possibly identified internal mismatches, as well as explanations of why the assumptions other than the contractual terms were used.
- (8) In its liquidity risk management, the bank shall fulfill the conditions concerning the maturity matching of the residual contractual maturities of the financial asset and financial liability instruments, in such a way that it:
 - a) engages a minimum of 65% of funding sources with the maturity of up to 30 days in placements (asset instruments) with the maturity of up to 30 days;
 - b) engages a minimum of 60% of funding sources with the maturity of up to 90 days in placements (asset instruments) with the maturity of up to 90 days;
 - c) engages a minimum of 55% of funding sources with the maturity of up to 180 days in placements (asset instruments) with the maturity of up to 180 days.

Article 44

Funding Concentration

- (1) Banks shall put in place adequate mechanisms for identifying funding that is so significant that its retraction may cause liquidity problems for the bank and shall diversify their funding in that sense.
- (2) For the purpose of complying with Paragraph (1) of this Article, banks shall identify and monitor funding originating from each material counterparty, defined as a percentage (%) of the total liabilities (funding) and shall monitor on an ongoing basis both absolute and relative

proportions of the exposures to material counterparties, as well as material increases in funding concentrations.

- (3) In so doing, a material counterparty is defined as an individual counterparty or a group of related counterparties individually or collectively accounting for more than 1% of the total liabilities. In addition to this quantitative criterion, other descriptive (qualitative) characteristics may be used for their identification, based on the bank's funding profile.
- (4) In the context of the provisions of this Article, a group of related counterparties shall be identified in the same way as large risk exposures. In case of identifying intra-banking-group deposits and deposits of the bank's related parties, the bank shall apply the same principles as for reporting purposes on a consolidated basis, in accordance with legal and other regulations governing supervision on a consolidated basis, taking into account potential restrictions with regard to intragroup and/or cross-border transactions during stress periods.
- (5) Funding concentration identification and monitoring shall be performed for each individual material financial instrument and/or product, as well as for a group of similar instruments and/or products of the bank.
- (6) For the purposes of Paragraph (5) of this Article, a material instrument/product is defined as a single instrument/product or a group of similar instruments/products that collectively account for more than 1% of the bank's total liabilities.
- (7) Funding concentration identification and monitoring shall be performed for all material currencies.
- (8) The above funding concentration identification and monitoring shall entail their reporting in the time intervals of 1 month, 1-3 months, 3-6 months, 6-12 months and for the intervals longer than 12 months.
- (9) The bank shall ensure a prudential and consistent approach with regard to regularly revising the list of material counterparties, taking into account the existence of bilateral funding transactions between counterparties and their impact on the net cash outflows, including off-balance-sheet items, particularly during crisis periods and/or stress in the market or stress specific to a particular bank, which may result in adverse pressures on the bank's liquidity or difficulties in financing.
- (10) In addition to the mechanisms set out in Paragraphs (1) to (9) of this Article, the bank shall report to the Agency on the composition of its largest sources of funding in accordance with the provisions of the Decision on the Reports to Be Provided by Banks to the Federation of Bosnia and Herzegovina Banking Agency for the Supervisory and Statistical Purposes.

Article 45

Availability of Unencumbered Assets that Are Marketable as Collateral in Secondary Markets

- (1) Banks shall put in place adequate and efficient procedures and processes to manage available unencumbered assets that are marketable as collateral in secondary markets, which shall include:
 - a) regular reporting on the amount, type, composition and location of available unencumbered assets that may serve as collateral for secured borrowing in the secondary market, along with related haircuts and at a reasonable price, including operational procedures for collateral monetization, where banks shall report separately on the collaterals received from customers that may be repledged, as well as on the total available amounts categorized by material currencies;

- b) regular monitoring and reporting on the estimated haircuts that the secondary market would request for each asset, for the relevant funding currency, as well as the expected value at which the collateral would be realized;
 - c) reporting on the locations where such assets are kept/stored and/or the location of assets and the business lines that have access to such assets, etc.
- (2) Application of the procedures and processes referred to in Paragraph (1) of this Article shall be used to understand the bank's potential to create an additional source of a liquidity buffer or secured funding, constituting in that sense standardized measure of the extent to which the LCR may be quickly replenished after a liquidity shock, but for the purpose of liquidity risk management it shall be complemented with additional tools for monitoring maturity mismatches referred to in Article 43 of this Decision and other relevant data from the bank's balance sheet.
- (3) The procedures and processes referred to in Paragraphs (1) and (2) of this Article shall also apply to collaterals that are eligible for the placements of central banks or other competent institutions, in accordance with the regulations governing this area.

Article 46

Market Tools for Liquidity Monitoring in Terms of Early Warning Indicators

- (1) High frequency market data updated on a daily basis or in shorter time intervals may be used as early warning indicators of the bank's potential liquidity problems.
- (2) The data referred to in Paragraph (1) of this Article may be monitored at the following levels:
- a) market-wide data (looking at the information at a general level and at the directions in the key markets and understanding their potential impact on the financial sector and a particular bank), which shall include: equity prices (e.g., indices from recognized stock exchanges, sub-indices at specific markets that are relevant to the bank's activities, etc.), prices at debt securities markets, foreign currency markets, financial derivatives markets, commodity markets, indices related to specific structured instruments, etc.
 - b) financial sector-wide data (monitoring wider trends relevant to the financial sector in general, as well as to specific groups of financial market participants and understanding their impact on a particular bank);
 - c) data on a particular bank or a group of similar banks (monitoring prices of the shares and instruments issued by a particular bank or a group of similar banks, prices at which trading takes place in the money market, situation regarding renegotiation and prices of different funding tenors, bank's subordinated debts, loan prices, etc., and consideration of the impact of these same changes on the bank's liquidity, including the responses of other market participants).

VIII. TRANSITIONAL AND FINAL PROVISIONS

Article 47

Issuance and Application of the Instructions

- (1) The Agency's Director will issue the following within 30 (thirty) days from the date of the entry into force of this Decision:
- a) the Instruction on the Method of Application of the Provisions of the Decision on Liquidity Risk Management in Banks on Calculating and Maintaining the NSFR and

- b) the Instruction on the Method of Application of the Provisions of the Decision on Liquidity Risk Management in Banks on Calculating and Maintaining the LCR.
- (2) Until the start date of the application of the Instruction referred to in Paragraph (1)(b) of this Article, banks shall apply the provisions of the Instruction on the Method of Application of the Provisions of the Decision on Banks' Liquidity Risk Management Relating to the LCR Components number: 01-4918/17 of December 22nd, 2017.
- (3) By September 30th, 2021, the Agency's Director will issue the Instruction on the NSFR Reporting, with related templates.

Article 48

Application and Expiry of the Decision

- (1) The Decision on Banks' Risk Liquidity Management („Official Gazette of the Federation of BiH“, numbers 81/17 and 37/20) shall cease to be in force on the start date of the application of this Decision.
- (2) The provisions relating to the fulfilment of the NSFR requirements shall apply from December 31st, 2022.
- (3) The requirements for fulfilling the maturity matching of the residual contractual maturities of the financial asset and financial liability instruments referred to in Article 43(8) of this Decision shall cease to apply on the start date of the application of the requirements referred to in Paragraph (2) of this Article.
- (4) Banks shall report to the Agency on the NSFR starting from the 31.12.2021 reporting date.

Article 49

Entry into Force

This Decision shall enter into force on the eighth day from the date of its gazetting in the „Official Gazette of the Federation of BiH“.

Number: U.O.-60-04/21
Sarajevo, May 12th, 2021

CHAIRWOMAN OF
THE MANAGEMENT BOARD

Ljerka Maric, MS, BSc (Econ.), sgd

Formulae for the determination of the liquidity buffer composition

1. Banks shall use the formulae laid down in this Annex to determine the composition of their liquidity buffer in accordance with Articles 17 and 20 of the Decision on Liquidity Risk Management in Banks.
2. Calculation of the liquidity buffer: as of the calculation date, the liquidity buffer of the bank shall be equal to:
 - (a) the level 1 asset amount; plus
 - (b) the level 2A asset amount; plus
 - (c) the level 2B asset amount;minus the lesser of:
 - (d) the sum of (a), (b), and (c); or
 - (e) the „excess liquid assets amount” as calculated in accordance with paragraphs 3 and 4 of this Annex.
3. „Excess liquid assets” amount: this amount shall be comprised of the components defined herein:
 - (a) an adjusted non-covered bond level 1 assets amount, which shall be equal to the value of all level 1 liquid assets, excluding level 1 covered bonds, that would be held by the bank upon the unwind of any secured funding transaction, secured lending transaction, asset exchange or collateralized derivatives transaction that matures within 30 calendar days from the calculation date and where the bank and the counterparty exchange liquid assets on at least one leg of the transaction;
 - (b) an adjusted level 1 covered bonds amount, which shall be equal to the value post-haircuts of all level 1 covered bonds that would be held by the bank upon the unwind of any secured funding transaction, secured lending transaction, asset exchange or collateralized derivatives transaction that matures within 30 calendar days from the calculation date and where the bank and the counterparty exchange liquid assets on at least one leg of the transaction;
 - (c) adjusted level 2A asset amount, which shall be equal to the value post-haircuts of all level 2A assets that would be held by the bank upon the unwind of any secured funding transaction, secured lending transaction, asset exchange or collateralized derivatives transaction that matures within 30 calendar days from the calculation date and where the bank and the counterparty exchange liquid assets on at least one leg of the transaction; and
 - (d) adjusted level 2B asset amount, which shall be equal to the value post-haircuts of all level 2B assets that would be held by the bank upon the unwind of any secured funding transaction, secured lending transaction, asset exchange or collateralized derivatives transaction that matures within 30 calendar

days from the calculation date and where the bank and the counterparty exchange liquid assets on at least one leg of the transaction.

4. Calculation of the „excess liquid assets amount”: this amount shall be equal to:

- (a) the adjusted non-covered bond level 1 asset amount; plus
- (b) the adjusted level 1 covered bond amount; plus
- (c) the adjusted level 2A asset amount; plus
- (d) the adjusted level 2B asset amount;

minus the lesser of:

- (e) the sum of (a), (b), (c) and (d);
- (f) 100/30 times (a);
- (g) 100/60 times the sum of (a) and (b);
- (h) 100/85 times the sum of (a), (b) and (c).

5. The composition of the liquidity buffer after taking into account the unwind of any secured funding transaction, secured lending transaction, asset exchange or collateralized derivatives transaction and the application of the above caps in accordance with Articles 17 and 20 shall be determined as follows:

a" (the adjusted non-covered bond level 1 asset amount after cap application)

= a (the adjusted non-covered bond level 1 asset amount before cap application)

b" (the adjusted covered bond level 1 asset amount after cap application)

= $\text{MIN}(b, a70/30)$

where b = the adjusted covered bond level 1 asset amount before cap application

c" (the adjusted level 2A asset amount after cap application)

= $\text{MIN}(c, (a + b")40/60, \text{MAX}(a70/30 - b", 0))$

where c = the adjusted level 2A asset amount before cap application

d" (the adjusted level 2B asset amount after cap application)

= $\text{MIN}(d, (a + b" + c")15/85, \text{MAX}((a + b")40/60 - c", 0), \text{MAX}(70/30a - b" - c", 0))$

where d = the adjusted level 2B asset amount before cap application.

Formula for the calculation of the net liquidity outflow

NLO = net liquidity outflow

TO = total outflows

TI = total inflows

FEI = fully exempted inflows

IC = inflows subject to cap of 75%

Net liquidity outflows equals total outflows less the reduction for fully exempt inflows less the reduction for inflows subject to the 75 % cap.

$$NLO = TO - \text{MIN}(FEI, TO) - \text{MIN}(IC, 0.75 * \text{MAX}(TO - FEI, 0))$$