On the basis of the relevant articles of the Memorandum on the Principles of Banking Supervision Coordination and Cooperation and Exchange of Data and Information, signed by the Central Bank of Bosnia and Herzegovina, ref. 01-897/08 dated 16 June 2008, the Banking Agency of the Federation of Bosnia and Herzegovina, ref. 01-2-1170/08 dated 16 June 2008, and the Banking Agency of Republika Srpska, ref. 01-691/08 dated 13 June 2008, and related to the conclusion ad 4. from the second meeting of Banking Supervision Coordination, held on 29 June 2023, Banking Supervision Coordination hereby adopts:

Methodology for calculating the reference rate for average weighted funding costs of banks operating in Bosnia and Herzegovina

**Article 1**

**(Introduction)**

The Methodology for calculating the reference rate for average weighted funding costs of banks operating in Bosnia and Herzegovina, was developed by Banking Supervision Coordination. Due to a strong growth of reference interest rates of leading central banks which has started in 2022, it was necessary to observe the dynamics of interest rates on bank loans in the local market in the context of real funding costs. It has been estimated that a strong growth of interest rates on new loans, as well as previously contracted loans with variable interest rates, linked mainly to EURIBOR – the reference rate in European money market, could bring about a strong growth of idiosyncratic credit risk and other risks related to the interest rate growth in local banking sector. At the same time, banks in BH are currently almost entirely relying on local funding sources, not dependant on reference interest rates in foreign markets. Adjustment of lending rates with foreign market funding costs, in current circumstances, could lead to disruptions in the local bank market. Therefore, it is necessary to identify reference values at the entire banking system level, in order to reduce financial stability risks, improve the conditions of internal market functioning and ensure a higher level of protection of financial service users and investors.

**Article 2**

**(Subject)**

The elements for calculating the reference rate for average weighted funding costs (RRFC) of banks operating in Bosnia and Herzegovina are defined by this Methodology.

The methodology has been adjusted to the availability of statistical and regulatory data sent by banks to the competent Banking Agencies, and specific features of bank operations in BH.

The reference rate for average weighted banks' funding costs (RRFC) is a rate of average weighted costs of funding sources of banks in Bosnia and Herzegovina, taking into account the period (3, 6 or 12 months), the type of source and the relevant currency (convertible mark and euro). RRFC is calculated for purpose of supporting banks when adjusting variable price components of funding sources in financial contracts. The aim is to make several reference rates available to banks, among which they will be able to choose the relevant one for the selected business model, ensuring at the same time, a higher level of protection of financial service users and investors from arbitrary changes of the level of interest rates in the existing contracts with banks.

**Article 3**

**(Abbreviations)**

**BARS** ‒ The Banking Agency of Republika Srpska

**BH** ‒ Bosnia and Herzegovina

**CBBH** ‒ the Central Bank of Bosnia and Herzegovina

**FBA** ‒ Banking Agency of the Federation of Bosnia and Herzegovina

**Methodology** ‒ Methodology for calculating the reference rate of average weighted banks' funding cost

**RRFC** ‒ Reference rate of average weighted banks' funding cost

**Article 4**

**(Type and coverage of RRFC)**

According to the coverage of funding sources, the following three types of RRFC are distinguished:

* RRFC 1 ‒ for funding sources received from households (calculated for the currencies convertible mark and euro)
* RRFC 2 ‒ for funding sources received from households and non-financial companies (calculated for the currencies convertible mark and euro)
* RRFC 3 ‒ for all funding sources received from households, non-financial companies and financial institutions (calculated for the currencies convertible mark and euro).

All the banks operating in Bosnia and Herzegovina are included in the calculation of RRFC. In order to decrease the risk of asymmetric solutions applicable to banks from the jurisdiction of the Entity Banking Agencies, particularly having in mind the cases of registered headquarters of banks from the same group in both Entities, the single RRFC is calculated for all the banks, similarly to the practice of publishing weighted average interest rate on new loans, or new deposits, by the CBBH.

Each of the three RRFCs is calculated for the reference periods of 3, 6 and 12 months. The name of each RRFC includes a clear indication of funding coverage (coverage 1, 2 or 3), an indication of the duration of the reference period of the source data on which RRFC is calculated (3 M, 6 M or 12 M), and the designation of the currency of funding (KM and EUR), the total of 18 RRFCs. Funds in KM with currency indexation to euro are included in KM currency.

RRFC indices are calculated only for banking sector. On the basis of the data on all individual banks, the average rate of funding costs of banks in BH is calculated.

**Article 5**

**(Structure, sources and coverage of data)**

For the purpose of RRFC calculation, the data on interest expenses of banks operating in BH is compiled for each quarter, on the main funding sources during the previous quarter (hereinafter: the reference quarter), along with the data on the month-end balances of the funding sources within the reference quarter which the interest expenses refer to, and reported to the CBBH by the FBA and BARS.

The main funding sources include financial liabilities allocated to the portfolio valued at amortized cost (gross principal of unsubordinated deposits and liabilities based on loans). Funding sources include resident and non-resident sectors. Subordinated debt, margin, hybrid and subordinated instruments, and any other capital instruments are not included in the coverage of instruments for the RRFC calculation.

The scope of financial instruments depends on the coverage of individual RRFC. The funding coverage in Coverage 1 (Household deposits) and Coverage 2 (Deposits of households and non-financial companies) are limited to deposits. Household deposits include all deposits of natural persons/households and small business owners, whereas deposits of non-financial companies include deposits of government institutions, public companies, private companies and associations and non-profit organisations. Coverage 3 (all interest-bearing sources from households, non-financial companies and financial institutions) include all household deposits, deposits of non-financial companies, deposits of financial institutions, taken loans and issued debt securities. Deposits of financial institutions include deposits of banking and non-banking financial institutions. Capital instruments are not included in the calculation of RRFC.

RRFCs are calculated for three types of coverage (Households, Households and non-financial companies and Households, non-financial companies and financial institutions) and two currencies (convertible mark and euro). Indicators for KM currency also apply to KM sources of bank funding contracted with currency indexation to EUR.

RRFCs are calculated on the basis of monthly and quarterly historical data which banks report quarterly to the FBA and BARS. For interest expenses, quarterly indicators for each individual bank are first calculated (by deducting the amount from the previous quarter of calculation from the amount at the end of the reporting period, except for the first quarter in the calendar year), and then, those quarterly indicators are summed up (aggregated). For funding source balances, the data are summed up (aggregated) for all the banks in one month.

All the data are shown in absolute amounts, rounded off to two decimal places.

For the purposes of calculating RRCF, the data are used of all the banks licenced for operations by the competent Banking Agency, having operated during the entire reference quarter (from the first to the last day of the quarter), i.e. the calculation does not include the data of the banks which ceased or started their operations during the reference quarter (due to bankruptcy, liquidation, merger, acquisition etc.).

Technical note on the calculation of indicators:



**Article 6**

**(Calculation of the RRFC)**

The RRFC for a particular currency, a certain coverage of sources of funds and the reference period to which the data refer, is calculated as follows:

a) the total interest expense of all banks in the entire period is calculated with regard to that currency and coverage of sources of funds;

b) the average balance of the main sources of funding is calculated in the entire period with regard to that currency and coverage of sources of funds;

c) the ratio of the previously calculated total interest expense and the average balance of the source of funds is calculated, and this ratio is divided by the total number of days in the entire period and multiplied by 365 (or 366 if the reference period includes February of the leap year), in order to obtain the RRFC expressed on an annual basis.

The rate expressed as a percentage is obtained when the calculated RRFC under c) is multiplied by 100.

RRFC is calculated according to the following generic formula:



With the letters representing:

N ‒ number of months for which the RRFC is calculated (3, 6 or 12),

C ‒ coverage of funds sources and costs (1, 2 or 3),

C ‒ currency of funds sources and costs (KM or EUR),

Average balance of funds sources ‒ artimethic mean of relevant data (the last N months),

Total funds ‒ sum of relavant data (the last N/3 quarter) from profit and loss account,

Number of days (N) ‒ real number of days in the last N months.

Calcualtion of RRFC is done by implementing the real number of days convention, and in each step of the calculation, all numbers are rounded to two decimals. In order to obtain the rate in percentage this amount is multiplied with 100.

**Article 7**

**(Publishing)**

The CBBH will publish this Methodology and all later adopted amendments to the Methodology on its website.

Based on the data that, in the agreed format and according to the agreed dynamics, are submitted by FBA and RSBA, the CBBH publishes aggregated data for the calculation of RRFC 3 (aggregated data on the costs of funding sources and aggregated data on the related funding sources), and the calculated RRFC 3 for the reference quarter on its website.

Given that the RRFC is a statistical indicator, for the analytical purposes of the CBBH, FBA and RSBA, all three RRFCs are calculated, while for the purposes of use by banks, only RRFC 3 is published for two currencies (KM and EUR) according to defined periods of 3, 6 and 12 months. Data and reference rates are published quarterly, no later than 45 days after the end of the quarter.

The Methodology is suitable for application at the Entity level and FBA and RSBA have the possibility to calculate the RRFC at the Entity level, based on data for banks from the respective Entity.

**Article 8**

**(****Cooperation of the Banking Agencies and the CBBH)**

Cooperation takes place on the basis of the Memorandum on the principles of coordination of banking supervision and cooperation and exchange of data and information, concluded between the CBBH, FBA and RSBA, number: 01-897/08, number: 01-2-1170/08 and number: 01-691.

The CBBH will regularly, quarterly, calculate the selected RRFCs, in accordance with the Methodology, after receiving the data for the end of the reporting period. FBA and RSBA will timely submit to the CBBH all the necessary data for individual banks for the calculation of RRFC on the form defined and agreed upon by the Entities' Banking Agencies.

Banks are responsible for the control and accuracy of input data. In order to ensure the reliability of the input data used to calculate the RRFC, the Entities' Banking Agencies will establish a process of logical data verification. If, at the time of calculation, the data is missing, does not satisfy logical controls, or the reliability of the data is otherwise questionable, the corresponding data from the quarter preceding the quarter of calculation will be used.

The cooperation between the Banking Agencies and the CBBH must take place in such a way that care is taken to protect the confidentiality of data, and all signatories undertake to keep them as a professional secret.

**Article 9**

**(Final provisions)**

This Methodology was supported at the second meeting of the Coordination of Banking Supervision held on June 29, 2023 and can be changed with the full consent of the CBBH, FBA and RSBA. The termination of validity of the Methodology must be clearly and visibly communicated on the website of the CBBH.

This Methodology enters into force on the day of its adoption.

Chairman of the Coordination of the Banking Supervision

Senad Softić, Ph.D.

Governor

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No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/23

Sarajevo, \_\_\_\_\_\_ 2023