STRATEGY for introducing the “International Convergence for Capital Measurement and Capital Standards”

B A S E L II

Banja Luka, February 2009
According to Basel II
Banking sector in Republika Srpska

The main objective of the Banking Agency of Republika Srpska (hereinafter: BARS) is to maintain sound and stable banking system of Republika Srpska, and improve its safe and good quality operation. In order to achieve its objective, given the importance of banking sector, it is necessary for the BARS to efficiently assess adequacy of bank risk and capital management, and improve bank supervision regulation.

The basic standards set by Basel I are regulated by means of applicable laws and by-laws. In 2006, as a part of the FSAP –Financial Sector Assessment Program for BiH, the IMF in cooperation with the World Bank has conducted the assessment of Basel principles application in BiH. From this, certain activities have derived which the BARS should implement in the years to come in order to achieve complete harmonization with the Basel principles.

Following the achievements and experiences of the European Union member states (hereinafter: EU), as well as the countries from the region, the BARS will initiate activities that will enable the application of „International Convergence of Capital Measurement and Capital Standards“ – Basel II.

Purpose and objectives of introducing Basel II in Republika Srpska (BiH)

Basel II, adopted by the Basel Committee on Banking Supervision (hereinafter: Committee) in 2004, and revised in 2006, represents a completely new concept in calculating bank capital adequacy and new comprehensive approach to risk management and bank supervision.

It is implemented or is in the process of being implemented in the EU by means of directives for credit institutions, thus Bosnia and Herzegovina, as a country that pretends to become an EU member, is obliged to conduct preparations for a complete adoption of Basel II, i.e. EU directives by the date of EU accession.

The Committee was founded in 1974 by the central bank governors of the G10 states. Today is comprised of the central bank representatives or supervising institutions of Belgium, Canada,
France, Germany, Italy, Japan, Luxembourg, Netherlands, Spain, Sweden, Switzerland, Great Britain and USA.

The Committee has no supranational authority over supervision and its conclusions have no legal force. It formulates basic supervision standards and provides recommendations based on the best practices, with the aim of improving bank supervision quality worldwide, and with the expectation that authorized supervisors apply the above in a fashion suitable for certain national systems. Accordingly, the Committee ensures equal approach and common standards of supervision in the EU member states, and with the recommendation to be accepted by supervisors of other countries as well.

Events and happenings in the 70s and 80s (debt crisis, deregulation, globalization, innovative instruments) which resulted in the erosion of capital base of large banks worldwide, have motivated the Committee to compile and publish „International Convergence of Capital Measurement and Capital Standards“ better known as Basel I in 1998. The purpose of Basel I standard was the introduction of a unique way of calculating capital adequacy, and with the aim of strengthening financial stability.

Basel I defines the elements of bank capital – basic, supplementary and additional, weights for calculating credit risk on balance sheet assets (risk weights: 0%, 20%, 50% and 100%) and factors of credit conversion for off-balance sheet items (after which appropriate risk weights apply), as well as the relation between capital and total bank exposure (balance and off-balance) weighted by the credit risk with the aim of calculating capital adequacy indicators. Capital adequacy ratio – CAR, calculated in this manner, should amount to at least 8%. Here, the supervisory institutions are given the opportunity of discretionary right when determining CAR (e.g. in Republika Srpska, the minimum CAR amounts to 12%).

Although Basel I had a positive impact on the amount of bank capital, i.e. halted negative downward trend and led to the increase of bank capital, however over time it has been concluded that it failed to fully answer all relevant questions regarding the risk, prudence in operation and bank supervision.
As its main drawbacks, the following is stated:

- emphasis is on accounting rather than market values;
- capital adequacy depends on credit risk, while other risks (e.g. market and operational) are omitted from the analysis;
- in the credit risk assessment there is no difference between the debtors of various quality and rating;
- inadequate understanding of risk and effects of modern financial instruments usage, as well as risk mitigation techniques.

Some of the Basel I drawbacks, especially those influencing market risk, have been eliminated by means of amendments to the recommendations in 1993 and 1996 by means of introducing capital requirements for market risk and new instrument for the assessment of bank’s market risk – VaR (Value at Risk). With the aim of eliminating other drawbacks, the Committee, after years of research and analysis, as well as the number of various proposals and consultative documents (1999, 2001), has finally adopted the Basel II document in 2004, and in 2006 its comprehensive version as well.

Basel II standards are organized into three interrelated parts – three pillars:

**Pillar 1:** introduces novelties in capital framework aligning minimum bank capital requirements with the scope and nature of its operation and nature of risk derived from it. Encompasses minimum capital requirements for three types of risk: credit, market and operational risk. The most important novelties of the pillar 1 as compared to Basel I and its amendments are related to the treatment of credit risk and introduction of capital requirement for operational risk, while the treatment of market risk remained unchanged. Basel II offers banks more sophisticated approaches for calculating capital requirements for credit and operational risk. The choice of a particular approach will depend on the scope and nature of bank operation, as well as on quality and sophistication of its risk management system.

**Pillar 2:** introduces new approach to risk management and bank capital adequacy assessment and indicates the necessity of efficient supervision implementation whose emphasis is on the analysis of processes of internal bank capital adequacy assessment. Banks are obliged to conduct
the assessment of capital adequacy for covering all risks to which they are exposed in their operation, including the risks which are not (fully) covered by the Pillar 1. The supervisor is expected to request from the bank to maintain capital adequacy at the level higher than the minimum capital according to the Pillar 1, i.e. at the level appropriate to the risks a particular bank is exposed to. The purpose of this pillar is to ensure a basis for preventive intervention of supervisors.

Pillar 3: accelerates the strengthening of market discipline by means of requirements for disclosing relevant information on risks and bank capital. The aim is to enable other participants to access key information about participants at financial market such as information related to: implementation framework, capital, risk exposure, risk management process and finally, the capital adequacy itself of a certain bank or other institution in the financial sector.

Approach to Basel II

For all the above mentioned reasons, the BARS issues this document in which the basic guidelines for implementation of these international standards for risk management and bank capital are defined. This Strategy is conceptually based on the recommendations of the Basel Committee on Banking Supervision – Basel II. Given the importance and need for a unique multi-disciplinary approach to this strategy at the BiH level, all relevant institutions shall be included in the realization.

In order to define and realize all activities, the USAID has provided technical assistance with the project of providing technical support to the BiH financial sector and sectors of banking, insurance and capital markets, “Partnership for Advancing Reforms in Economy – PARE”. The project aim is, among other things, the standardization of regulation for these sectors in order to comply with the EU principles. Within this project, a Technical group composed of representatives of the Central Bank of BiH, BARS and Banking Agency of the Federation of Bosnia and Herzegovina was formed in November 2008. The plan was for the Technical group to expand during the process of Basel II implementation with the representatives of Deposit Insurance Agency of Bosnia and Herzegovina, Ministry of Finance of Republika Srpska and other relevant institutions. Technical group will cooperate with the Banks Association of Bosnia
and Herzegovina during the process. Based on this Strategy, the technical group will prepare action plans, which will be elaborated in detail, meaningful and in time, all activities envisaged by this document.

Successful realization of the activities defined by this Strategy will ensure timely and successful implementation of the Basel II in the banking system operation, by which the obligations deriving from the FSAP in 2006 will be fulfilled, and which must be fulfilled by both of the entity Banking Agencies in BiH in order to completely ensure the harmonization with international principles. This framework envisages strengthening of the cooperation mechanism with the Central Bank of BiH and other institutions significant for financial stability and efficiency, as well as deposit security in RS and BiH. Bearing in mind the reality of environment, insisted on by the Basel Committee as well, envisaged activities are defined in accordance with what is practically plausible and realistic to be implemented in BiH, given the strength of institutions and other relevant and limiting factors. In terms of the expected level of risk-taking, as well as the level of complexity of the RS financial sector, these activities are considered to be reasonable and realistically feasible within the envisaged time frame.

The BARS has performed certain harmonization in accordance with the recommendations of the FSAP in 2006. A planned time-deadline for the harmonization of remainder is 2009-2010. After the Management Board of the BARS adopts this Strategy, the BARS together with other institutions during the first quarter of 2009 will start the process of action plan preparing and drafting by individual segments, defining and forming required work groups and the process of implementation adapted to the conditions in RS and BiH.

Although the transition to the Basel II frameworks is expected to have a significant impact on the RS (BiH) banking, the transition itself must be gradually performed. In the course of this process the following must be ensured:

1. banks to gradually develop their capacities for application of new capital frameworks and at the same time to adapt and align with the requirements set by the Basel II Pillars 1 and

Basel II Introduction Strategy
2. the BARS develops its capacities for implementing supervisory procedure defined by the Basel II Pillar 2. In the implementation of the pillar 2, the coordination with all relevant domestic and foreign regulatory and supervisory institutions will be of fundamental importance.

Taking into account the RS banking sector specifications, gradual process of transition and conservative approach to the strengthening of bank capital will be more efficient than “rushing” into the implementation of complex systems for measuring required bank capital.

**Implementation timeframe**

Foreseen activities and time-deadlines for efficient Basel II implementation are divided into the following phases:

**Phase 1: Period 2009-2013**

This phase represents the initial framework for transition from existing situation to the implementation of fundamental approaches for Basel II (simplified but standardized or standardized approach for credit risk; standardized approach for market risk and basic indicator approach for operational risk).

Activities that must be conducted in this phase include:

- define, form required work groups and design action plans for the Strategy realization (2009);
- invest in required training of staff and technologies for the implementation of new framework (2009 – onwards);
- strengthen the monitoring of bank exposure toward related persons, especially to parent banks (2009 – onwards);
- strengthen the monitoring of bank exposure to the risk of third parties within off-balance sheet items (2009 – onwards);
- adjustment of existing legal and regulatory framework according to the Basel II requirements, as well as the adoption of new laws and regulations for efficient
According to Basel II implementation, where the BARS discretionary regulative rights should be used, especially when assessing the suitability of specific risk weights (2009 – 2011);

- adopt reforms for strengthening institutional capacities in order to ensure more qualitative information for risk weights determination (2010 – onwards);

- development, strengthening and coordination of cooperation mechanism within RS and BiH, as well as the cooperation mechanism with regulatory and supervisory institutions of the EU countries, especially the countries of parent bank origin, taking into account the total amount of risk which may influence the bank capital (2009 – onwards);

- the development of criteria and plans for the assessment of Basel II application on the basis “bank by bank” in a sense whether the new framework will be applied to all or only to certain banks (2010 – onwards);

- developing the BARS capacities for the assessment of condition fulfillment and decision making whether the bank may be approved the usage of more complex Basel II systems, based on close cooperation and coordination with the regulators from the EU countries and international organizations (2010 – onwards);

- gradual preparation for the use of external credit agency ratings for all risk exposures determined by Basel II, related to calculating required bank capital (2011 – onwards);


Phase 2: Period 2014-2016

This phase is based on the assumption that the BARS and banks, both within the framework of their authorities and obligations, have efficiently implemented the majority of fundamental approaches from Basel II envisaged by the previous phase 1. Accordingly, the assumption is that a successful coordination with the CBBH and other relevant institutions has been established, as well as international cooperation. The continuity of cooperation should be also strengthened during this phase.

Activities that must be conducted in this phase include:
According to Basel II, the following measures are recommended:

- adjust the methods of risk weights determination given in Basel I to the methods and implementation of weights set by Basel II (this may happen in Phase 1, depending on the scope and quality of all resources and progress achieved in designing and implementing activities to be carried out beforehand);
- continuous investments in professional training and necessary technologies;
- adjust the requirements for calculation of required capital on the basis “bank by bank” depending on the level of bank’s capacity for credit, market and operational risk management;
- classification of individual banks into a group eligible for application of measurement systems for mid-level capital, such as Foundation Internal Ratings Based Approach (FIRB) for credit risk, Standardized Approach for market risk and Standardized Measurement Approach (SMA) for operational risk (SMA might be implemented during the Phase 1);
- continuous development of the BARS capacity to approve a bank’s usage of more complex approaches, where a close cooperation and coordination with the EU countries regulators and international organizations has an important role;
- adopt new laws and regulations for efficient implementation when necessary
- efficient monitoring of bank exposure to related persons;
- efficient monitoring of bank exposure to third parties within the off-balance sheet items;
- gradual introduction of the bank risk management based on securities market exposure in BiH and abroad, where the exposure to this kind of risk is higher than 10% of the total assets;
- increase the implementation of external credit agency ratings for all risk exposures determined by the Basel II, related to the calculation of required bank capital;
- initiate the implementation of external credit agency rating for corporative bonds and bank shares at the BiH market;
- alignment with the IOSCO (International Organizations of Securities Commissions) standards with respect to all activities and exposures related to securities.
Phase 3: Period 2017 – 2018

The final phase of framework is based on the assumption that the BARS and RS banking sector have successfully implemented steps from the previous two phases, function in a safe and stable manner and have significantly approached to the EU standards. In this moment, the system should be prepared for the implementation of more advanced Basel II approaches. It is expected that the implementation of this phase activities will take up to two years maximum and that the Basel II implementation will be successfully completed by the end of 2018.

Activities that must be conducted in this phase include:

- final adjustments of risk weights in order to be completely aligned with the EU directives and Basel II requirements;
- continuous investment in training, practice and new technologies;
- classification of individual banks into a group eligible for application of measurement system for advanced level capital, such as Internal Rating Based Approach (IRB) for credit risk, Internal Model Approach for market risk and Advanced Measurement Approach for operational risk (AMA);
- continuous development of the BARS capacity to approve a bank’s usage of the most complex approaches, by which the banks state the least requirement for capital, where a close cooperation and coordination with the EU countries regulators and international organizations has an important role;
- further adjustment of regulation, where necessary, for the purpose of efficient implementation;
- establishment of system for the assessment of bank exposure to securities market in BiH and abroad, where the bank exposure to securities represents 25% of the total assets;
- wider application of external credit agency ratings on calculating required bank capital;
- wider application of external credit agency ratings on corporative bonds and bank shares at the BiH market;
- alignment with the IOSCO standards with respect to all activities and exposures related to securities.
According to Basel II

During the implementation of new bank capital framework – Basel II, continuous cooperation and consultation with all banks in RS, as well as the education of bank staff is foreseen.

The Strategy, as well as the information on all activities related to the Basel II implementation will be available on the BARS web site to all interested parties.

It is expected that by the end of 2018 the BARS and banks in RS will successfully complete the Basel II implementation. Taking into account the importance and complexity of the process itself, the need for engagement of significant human and financial factors, as well as the announced changes of the Basel II framework, the possibility of amendments to this Strategy is realistic.

DIRECTOR

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Slavica Injac
### APPENDIX 1: Implementation timeline

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<tr>
<th>ACTIVITY</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td>Define, establish necessary working groups and design action plans for the Strategy implementation</td>
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<tr>
<td>Investments in necessary staff training and technology for the new framework implementation</td>
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<td>Efficient monitoring of banks’ exposure to related persons, especially to mother banks</td>
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<td>Efficient monitoring of banks’ exposure to the third party risk within the off-balance sheet items</td>
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<td>Adjustment of current legal and regulatory framework with the Basel II requirements, adoption of new laws and regulations for efficient implementation; to that end, discretionary regulatory rights of the BARS should be used, particularly in assessing suitability of specific risk weights</td>
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<td>Adoption of reforms to strengthen institutional capacity in order to provide valuable information for risk weights determining</td>
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<td>Development, strengthening and coordination of cooperation mechanism within RS and BiH, as well as cooperation mechanism with regulatory and supervisory institutions of the EU countries, particularly of mother banks home countries, bearing in mind the scope of risk that might have impact on bank’s capital</td>
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<td>Development of criteria and plans for assessment of the Basel II implementation based on “bank by bank” system to determine whether the new framework shall be applied on all or individual banks</td>
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<td>Adjustments to the calculation of required capital based on “bank by bank” system, depending on bank capacity to manage credit, market and operational risk</td>
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<td>Develop the BARS capacity to assess eligibility and make decisions whether a bank may be approved to apply more complex system from Basel II, using in such process close cooperation and coordination with the EU countries regulators and international organizations</td>
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<td>Classification of individual banks into a group eligible for application of measurement systems for mid-level capital, such as the Fundamental Internal Rating Based Approach (FIRB) for credit risk, and the Standard Approach for market risk and Standard Measurement Approach (SMA) for operational risk</td>
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<tr>
<td>Usage of ratings by external credit rating agencies for all risk exposures defined by the Basel II, that are correlated to the calculation of bank required capital</td>
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<td>Usage of ratings by external credit rating agencies of corporate bonds and shares of banks at the BiH market</td>
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<td>Adjustment of risk weights in order to reach full harmonization with the requirements from the EU directives and Basel II</td>
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<tr>
<td>Establishment of risk management system in banks based on exposure towards securities markets in BiH and abroad</td>
<td>2009</td>
<td>2010</td>
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<tr>
<td>Adjustments with the IOSCO (International Organization of Securities Commission) standards with respect to all activities and exposures related to securities</td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
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**Phase 1:** This phase represents an initial framework for transition from the current status to the implementation of fundamental approaches according to Basel II (standardized but simplified or standardized approach for credit risk, standardized approach for market risk and basic indicator approach for operational risk).

**Phase 2:** This phase is based on a presumption that the BARS and banks, each within their own competences and responsibilities, have successfully implemented most of the fundamental approaches according to Basel II as predicted by the previous Phase 1. To that end, a successful cooperation with the CBBH and other relevant institutions, and international cooperation likewise, is assumed to be established. The continuity of cooperation should be strengthened during this phase as well.

**Phase 3:** The final framework phase is based on a presumption that the BARS and the RS banking system have successfully implemented the steps under the two previous steps, that they function in a safe and stable manner and that they have aligned to the EU standards to a great extent. During this period, the system should be prepared for the implementation of more advanced approaches based on Basel II. The activities under this phase are expected to last no more than two years and the Basel II implementation is expected to be successfully completed by the end of 2018.

*Basel II Introduction Strategy*