



REPUBLIC OF KAZAKHSTAN

TECHNICAL ASSISTANCE REPORT—RISK-BASED SUPERVISION RECOVERY PLANS AND INTEREST RATE RISK

July 2022

This technical assistance report on Republic of Kazakhstan was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in July 2022.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: <http://www.imf.org>
Price: \$18.00 per printed copy

International Monetary Fund
Washington, D.C.



TECHNICAL ASSISTANCE REPORT

REPUBLIC OF KAZAKHSTAN

Risk-Based Supervision: Recovery Plans and
Interest Rate Risk

July 2022

Prepared By

Alan Ball, Magda Pecena, and Keith Ligon (MCM External Experts)

Authoring Department:

**Monetary and Capital Markets
Department**

Contents	Page
Glossary.....	3
Preface.....	5
Executive Summary.....	6
I. Introduction	9
II. Banking Sector Overview	10
III. Recovery Plans.....	11
A. Regulatory Framework in Kazakhstan Related to Recovery Plans.....	11
B. New Recovery Plan Requirements in Kazakhstan	13
C. Supervisory Assessment Process for Recovery Plans.....	16
IV. Interest Rate Risk in the Banking Book (IRRBB).....	18
A. Regulatory Framework for IRRBB in Kazakhstan.....	18
B. Current approach to assessing IRRBB	20
C. Internal methodology for IRRBB.....	21
V. Update on previous TA recommendations.....	23
Table	
1. Key Recommendations	8
Figure	
1. Recovery Plan Supervisory Review Cycle	17
Appendices	
I. TA Recommendations from Previous Missions	25
II. Structure of the Banking Sector April 1, 2021	28
III. International Standards and Comparative Example Regulatory Approaches on Recovery Planning.....	30
IV. Information to be included in a Recovery Plan.....	31
V. Supervisory Issues for Assessing Recovery Plans.....	33
VI. International Standards and Comparative Example Regulatory Approaches on IRRBB.....	36
VII. BIS and EBA Principles and Assumptions on IRRBB	37
VIII. Supervisory Issues for Assessing IRRBB.....	39

GLOSSARY

Agency	Agency for Regulation and Development of the Financial Market of the Republic of Kazakhstan
AQR	Asset Quality Review
BASTD	Bank Analytics and Stress Testing Department
BRD	Banking Regulation Department
BRRD	EU Bank Recovery and Resolution Directive
D-SIBs	Domestic Systemically Important Banks
EU	European Union
EVE	Economic Value of Equity
FSB	Financial Stability Board
ICAAP	Internal Capital Adequacy Assessment Process
IMF	International Monetary Fund
IRRBB	Interest Rate Risk in the Banking Book
MCM	Monetary and Capital Markets Department
MOU	Memorandum of Understanding
NBK	National Bank of Kazakhstan
NII	Net Interest Income
NPL	Non-performing Loan
RAS	Risk Assessment System
RBS	Risk-Based Supervision
Regulation 188	Regulation No.188: “Rules for formation of risk management and internal control system for second-tier banks”
ROA	Return on Assets
SREP	Supervisory Review and Evaluation Process
TA	Technical Assistance

WG

Working groups on developing methodologies for bank recovery plans and interest rate risk

PREFACE

At the request of the Agency for Regulation and Development of the Financial Market of the Republic of Kazakhstan (the Agency), the Monetary and Capital Markets (MCM) Department conducted a virtual mission from April 19, 2021 to May 20, 2021 to assist the Agency with developing regulations and internal supervisory methodologies in line with international standards and best practices on recovery plans and interest rate risk in banking book.

The mission had virtual meetings with Mr. Oleg Smolyakov, First Deputy Chairperson of the Agency, and with senior and middle management of the Agency. Six training sessions were also held with bank supervisors and other Agency staff. The mission also had virtual meetings with representatives of two large banks and one medium size bank.

The mission team would like to express its gratitude to the Agency and its staff, and in particular to Mr. Smolyakov, Mr. Daniyar Nurmanov, Ms. Anar Sadykova, Mr. Madi Burin and his team, and to the members of the Working Groups established to develop methodologies for assessing bank recovery plans and interest rate risk for their openness, productive discussions, and excellent cooperation.

EXECUTIVE SUMMARY

This virtual technical assistance (TA) mission supported the Agency in strengthening certain elements of its risk-based supervisory framework. The mission provided recommendations and training to the Agency on the assessment of banks' recovery plans and interest rate risk in the banking book (IRRBB). The mission benefited from simultaneous translation. The priorities for the forthcoming TA missions were discussed with the Agency (strengthening cybersecurity in financial institutions, and assessment of banks' liquidity within the SREP framework).

The Agency continues to make progress on aligning its prudential regulatory and supervisory frameworks with international standards. The legal framework for banking supervision was revised in 2018, enabling the authority to apply risk-based supervision (RBS). The regulatory framework for banks was strengthened in 2019, with new regulations relating to corporate governance, risk management, business models, and the Internal Capital Adequacy Assessment Process (ICAAP). The Agency is rolling out a risk-based approach to supervision through the implementation of its Supervisory Review and Evaluation Process (SREP), which will require fundamental changes to the Agency's supervisory approach, development of internal methodologies, and capacity building.

The two missions in September 2020 and November 2020 focused on strengthening the Agency's institutional set up, and on the implementation of certain elements of the Pillar 2 requirements of the Basel Framework. Recommendations arising from the missions focused on enhancements to the Agency's operational independence, accountability and transparency; the organizational arrangements for banking supervision and inter-agency cooperation; capacity building; and the development of internal supervisory methodologies for the assessment of a bank's ICAAP and setting individual Pillar 2 supervisory capital requirements. An implementation plan for the recommendations from both missions has been approved by the Agency and good progress has been made to date.

Previous TA missions noted the necessity of developing supervisory expectations around banks' recovery plans and an internal supervisory methodology to assess these plans. Recovery planning is an essential component of a bank's risk management and contingency planning framework and is required under long-established international standards. Recovery plans allow for timely intervention to remedy capital shortfalls, liquidity pressures, and other stresses. Recovery plans are intended to address the continuity of critical economic functions at troubled banks through the development of actionable recovery options that can restore long term viability of the institution, thus avoiding a negative impact on financial stability.

This mission recommended the Agency develop comprehensive regulatory requirements for banks' recovery plans. The new framework should provide standards that comply with international standards and reflect proportional application to Kazakhstan banks' systemic risk profile. A short-term follow-up TA can be considered to ensure consistency of the revised regulations with international standards. To support effective interagency cross-border

information-sharing and coordination, existing agreements and relationships should be reviewed and, as necessary, cooperative agreements put in place to support the development and execution of recovery plans.

The Agency should develop supervisory procedures and related processes to support the supervisory assessment of banks' recovery plans consistent with the new regulatory standards. These procedures should ensure that deficiencies in submitted plans are communicated to bank senior management and supervisory boards and that remediation efforts are taken in a timely and effective fashion. To assess the plans, the Agency will need to develop internal criteria and analysis related to the identification of critical functions.

The existing regulations on interest rate risk should be revised to align more closely with international standards and best practice, and an internal supervisory methodology for the assessment of banks' IRRBB should be developed. The existing rules on IRRBB are set out in Regulation 188, but they are not comprehensive and do not fully meet current international standards or best practice. The Regulation should be reviewed and amended, as necessary, to bring into line with the relevant Basel Standard on IRRBB. The Agency should develop an internal supervisory methodology that provides guidance to assist supervisors gain a better understanding of the nature and composition of a bank's interest rate risk profile, the different calculation approaches to IRRBB (earnings-based and economic value measures), and of the relevant interest rate shocks and scenarios. The methodology should also provide guidance on the approach to assessing the robustness of a bank's IRRBB governance and how to challenge the assumptions that determine the quantity of IRRBB that a bank is running. The methodology should set out clearly how the assessment of a bank's management and measurement of IRRBB fits into the wider SREP framework.

The Agency should consider developing a regular IRRBB regulatory reporting framework by banks. The Agency currently collects a limited set of qualitative and quantitative data from banks on IRRBB management and measurement. Onsite visits and the ICAAP, when fully operational, should provide sufficient qualitative information to enable supervisors to assess the effectiveness of a bank's risk management of IRRBB, but additional quantitative reporting should be considered to provide data on the nature, size, and trend of a bank's IRRBB exposures. The Agency should consider conducting a review on banks' current approaches to IRRBB management and measurement prior to introducing a new reporting regime to inform the scope and frequency of the reporting requirement.

The mission included six training sessions for supervisors on IRRBB and recovery plans. The sessions covered the international standards and best practices drawn from other jurisdictions in respect of IRRBB and recovery plans, and provided practical training advice on how to evaluate a bank's IRRBB exposures and the effectiveness of its recovery plans, linking these assessments to the Agency's SREP framework.

Table 1. Kazakhstan: Key Recommendations

Key Recommendations	Priority	Timeline¹
<p>1. Agency to amend the current legal framework to set clear and comprehensive recovery plan requirements that reference international standards and are proportional to banks' systemic profile; for example, by revising Regulation 188 to incorporate and integrate recovery planning requirements into the existing supervisory framework.</p> <p>Agency, as a precondition to the development and issuance of recovery plan standards, should conduct a gap analysis of its existing legal and regulatory structure to ensure that the inter-relationships between its existing standards and new recovery plan requirements are clarified and that the Agency possesses supervisory powers and tools appropriate and necessary to support the development, implementation, and assessment of credible banks' recovery plans.</p>	High	ST
2. Agency to develop an internal methodology including supervisory procedures, internal documentation requirements and other processes to support the supervisory assessment of recovery plans consistent with the new regulatory requirements.	High	ST
3. Agency to integrate the supervisory assessment of recovery plans into its supervisory review and evaluation process.	High	MT
4. Agency to review its information-sharing powers and processes to identify and address gaps and obstacles to information-sharing and coordination necessary for the effective development and implementation of recovery plans.	High	MT
5. Agency to revise Regulation 188 in respect of IRRBB to align it more closely to international standards, taking into account the principle of proportionality.	High	ST
6. Agency to develop an internal supervisory methodology for assessing banks' measurement and management of IRRBB exposures for use by both onsite and offsite supervisors.	High	ST
7. Agency to consider introducing a requirement for banks to submit a regular supervisory report on IRRBB to enable supervisors to assess the amount and trend of a bank's IRRBB exposure.	Medium	MT
8. Agency to enhance its review and assessment of IRRBB in banks' ICAAP reports to inform its SREP assessment and calculation of Pillar 2 capital add-ons.	Medium	MT

¹ **ST**, *short-term*, with results in less than 12 months; **MT**, *medium term*, with results from 12 to 24 months.

I. INTRODUCTION

- 1. The MCM Department conducted a remote mission from April 19, 2021 to May 20, 2021 providing recommendations and training to the Agency on the assessment of banks' recovery plans and IRRBB.** The mission held a number of virtual meetings with members of two Working Groups set up by the Agency to develop the regulations and internal methodologies for IRRBB and recovery plans, and delivered training to bank supervisors and other Agency staff on both topics. The mission also held meetings with representatives of two domestic systemically important banks (D-SIBs), and a medium size bank (the subsidiary of an overseas bank).
- 2. There have been significant developments in the Kazakhstan regulatory and supervisory landscape in the past few years.** In 2019, the Kazakh authorities split the monetary policy and financial sector supervisory responsibilities of the National Bank of Kazakhstan (NBK), and the new regulatory Agency was established in Almaty in early 2020. As part of the continued strengthening of the Kazakh banking sector, the NBK completed an asset quality review (AQR) of 14 banks in 2019, which helped to boost confidence in the sector by addressing long-standing concerns around the asset quality of banks' portfolios. The legal and regulatory framework for banks has also been strengthened. In 2018, the supervisory authorities were given legal authority to adopt a risk-based supervisory approach, and a regulation² was issued in 2019 setting new requirements on banks relating to their corporate governance, risk management, internal controls, business models, ICAAP, and recovery planning.
- 3. In September 2020, a remote TA mission assisted the Agency with the strengthening of its institutional set up and banking supervisory capacity.** The mission provided a number of recommendations to enhance the Agency's operational independence, accountability, transparency, organizational arrangements for banking supervision, and inter-agency cooperation.
- 4. A subsequent mission in November 2020 provided assistance and training on the development and implementation of certain elements of Pillar 2 to enhance the Agency's risk-based supervisory approach.** The Agency has developed a SREP methodology, but has yet to complete a full SREP assessment of a bank. The focus of the mission was to provide TA to the Agency to undertake supervisory assessments of a bank's ICAAP, and to set individual Pillar 2 supervisory capital requirements. The recommendations arising from the two missions are set out in Appendix I, and the progress made by the Agency in implementing the recommendations are described in Section V below.
- 5. This report is divided into five sections.** After this introductory section, Section II provides an overview of the Kazakh banking sector. Sections III and IV discuss the issues the Agency should consider when introducing new regulations on IRRBB and recovery plans, and for the development of internal methodologies that provide supervisory guidance on these two topics.

² Resolution of the Board of the NBK No.188 (November 12, 2019). <http://adilet.zan.kz/eng/docs/V1900019632>.

Section V summarizes the progress the Agency has made in implementing the recommendations arising from the previous two TA missions.

II. BANKING SECTOR OVERVIEW

6. **The banking sector of Kazakhstan consists of 25 commercial banks, of which 15 are affiliated to foreign banks, including 12 subsidiaries.** As of March 1, 2021, total assets of the banking sector stood at US\$ 76.5 billion³ (KZT 32.0 trillion), representing 41 percent of GDP. The total loan portfolio of the banking sector stood at US\$ 37 billion (KZT 15.4 trillion), an increase of 6 percent in 12 months, but a decrease from the beginning of the year of 2.7 percent. The total volume of loans to corporates stood at US\$ 8.9 billion (KZT 3.7 trillion), a decrease of 2.3 percent in 2021, and loans to individuals at US\$ 17 billion (KZT 7.1 trillion), a small increase of 0.2 percent in 2021. Retail loans stood at US\$ 11 billion (KZT 4.6 trillion), no change from March 2020, but an increase of 1.2 percent in 2021.

7. **The reported average total capital ratio for the banking sector was 27.4 percent at March 1, 2021, but COVID-19 relief measures may hinder the timely recognition of loan losses.** In such a situation, prudential returns' data on banks' non-performing loans (NPLs), profitability, and capital ratios may temporarily not accurately reflect a bank's current financial situation. NPL levels have fallen on the year from an average of 8.1 percent to 6.9 percent for loans over 90 days past due, but the figures may be understated due to the relaxations in the authorities' loan classification and provisioning rules introduced in response to the COVID-19 pandemic. Profitability of the sector has suffered during the pandemic with average return on assets (ROA) falling to 2.6 percent from 4.1 percent in March 2020, and return on equity falling to 20.2 percent from 31.9 percent over the year. Appendix II provides further details of the banking sector.

8. **In response to the COVID-19 crisis, the Agency introduced a number of exceptional regulatory measures to support the Kazakh economy aimed at increasing liquidity and reducing pressure on the capital of banks.** The Agency relaxed certain capital, liquidity, loan classification, and provisioning requirements. The Agency noted that these exceptionally measures released more than 10 percent of regulatory capital, more than 16 percent of liquid assets, and helped banks re-focus their lending to the economy. In September 2020, the Agency decided to extend majority of these measures until July 1, 2021. The Agency is taking measures now to further extend certain prudential measures (e.g., a lower risk weighting for loans and guarantees issued to SMEs and for syndicated loans; not to make additional provisions for loans that have been granted a deferral of payments due to the introduction of restrictive lockdown measures, etc.) until the end of 2021 to provide additional support to business entities. The Agency is encouraged to monitor the impact of these exceptional measures. Where relevant, banks should produce credible medium-term plans to restore their capital and liquidity buffers and address the

³ Exchange rate at as of March 1, 2021: US\$1:417 Kazakhstani Tenge.

recapitalization needs identified as part of the AQR. Intensified supervisory monitoring should remain critically important to ensure that any adverse developments are detected on a timely basis.

III. RECOVERY PLANS

A. Regulatory Framework in Kazakhstan Related to Recovery Plans

9. **Recovery plans are an essential component of banks’ risk management and contingency planning, operate to enhance bank resilience and protect financial stability, and should be incorporated into Kazakhstan’s supervisory framework to align with international standards.** Recovery plans support the establishment of quantitative and qualitative indicators that provide an early warning of emerging risks and allow for timely intervention to remedy capital shortfalls, liquidity pressures, and other stresses. Recovery plans are intended to address the continuity of critical economic functions at troubled banks through the development of actionable recovery options that can restore long term viability of the institution, thus avoiding a negative impact on financial stability. Recovery plans are a vital component of a comprehensive bank regulatory framework and should be regularly and comprehensively assessed by bank supervisors for their credibility and effectiveness. International standards adopted by the Financial Stability Board (FSB) have led to the widespread adoption of recovery planning requirements by global regulatory authorities.

10. **The responsibility for the development and implementation of recovery plan requirements has been given to the Agency, whose mission includes, inter alia, ensuring that supervised banks maintain resilience and can demonstrate the capacity to recover during periods of stress, and mitigate threats to financial stability.** The Regulation on the Agency of the Republic of Kazakhstan for the Regulation and Development of the Financial Market (Decree No. 203; November 11, 2019) establishes that the mission of the Agency includes promoting financial stability of banking institutions. Establishing requirements for supervised banks to develop recovery plans should fall within this remit.

11. **The Agency has been granted broad supervisory authority over the financial sector and has the power to issue regulatory requirements related to the development of recovery plans by its supervised banks.** Under Decree No. 203, the Agency has been given the power to enforce the Law on Banks and Banking Activities in the Republic of Kazakhstan (Banking Law)⁴ including powers to set standards for banks and monitor their condition to maintain financial stability. These authorities should support the issuance of new or amended regulations that establish recovery planning requirements in Kazakhstan.

⁴ Under Chapter 2, Par. 15 (5) the Agency has been given authority to conduct “other tasks in accordance with the Law of the Republic of Kazakhstan “On state regulation, control over and supervision of the financial market and financial institutions” [Decree 203] as well as “other laws” of the Republic of Kazakhstan and acts of the President of the Republic of Kazakhstan.

12. **The Agency has been given a broad grant of enforcement authority over supervised banks and has the power to develop and apply tools to enforce remediation of identified weaknesses in recovery plans.** The Agency should look to apply its existing supervisory authorities and tools to support its review and assessment of bank recovery plans and order that banks take actions to address obstacles and remediate deficiencies in the plans. Under Decree No. 203, the function of the Agency is granted powers to take “limited enforcement actions” and apply supervisory measures. This broad grant of enforcement authority should support the Agency’s enforcement powers, which are further delineated in the Banking Law. These authorities have recently been used to conduct a financial stability analysis of certain banks and impose certain recovery-type actions on higher risk banks.

13. **The regulatory framework in Kazakhstan has been enhanced to require banks to improve risk management, governance, capital and liquidity adequacy management, and other processes that relate to and can strengthen recovery planning at supervised banks; the Agency will need to ensure consistency with new recovery planning requirements to be developed.** Regulation 188 approved certain rules for formation of risk management and internal control system for second-tier banks. The development of new recovery planning requirements will intersect with the existing requirements under Regulation 188. The Agency will need to ensure consistency in the application of the related requirements and communicate effectively with supervised banks regarding the intersection of the related standards.

14. **The Banking Law sets forth enforcement tools and powers that are necessary to address deficiencies in recovery plans - such as early response measures and enforcement actions based upon determination of threats to financial stability.** Supervisory response measures under the Banking Law provide powers to address deficiencies in risk management, and the “non-elimination by the bank” of “deficiencies that affect financial state of the bank” (Article 45). An escalating set of supervisory response measures (from recommendatory measures, to measure on improving financial status, to compulsory measures) are set forth. Measures that can be imposed include addressing capital and liquidity shortfalls, suspending banking and other operations, restructuring assets or liabilities, reducing costs, among other powers. (Articles 45-47). As a bank approaches resolution, under the Banking Law, the Agency can classify the institution as being in an “unstable financial condition” due to it posing a “threat to the stability of the financial system.” (Article 61).

15. **The Agency has been given authority to share information with domestic and foreign regulators for purposes of developing and implementing recovery plans.** Under Decree No. 203, the functions of the Agency include carrying out interactions and exchanging information with domestic and international counterparts. This broad grant of authority appears adequate to support information sharing and coordination with home and host authorities. Various bilateral Memorandum of Understanding (MoU) have been put in place with key regulatory counterparts. For recovery and resolution planning, it is beneficial to extend traditional, bilateral MOUs to reflect firm-specific information-sharing and cooperation agreements that bring together all necessary parties, which may include multiple jurisdictions (see below).

B. New Recovery Plan Requirements for Kazakhstan

16. **The Agency has yet to establish legal requirements for recovery plans; the Agency should amend the current legal framework to set clear and comprehensive recovery plan requirements following a review of existing laws and regulations to identify and address any identified gaps in authorities.** Building upon the recent enhancements to Kazakhstan’s bank supervisory and regulatory framework, the Agency should develop and issue necessary legal or regulatory amendments to provide clear and comprehensive requirements for recovery planning. The elements of a recovery plan regulation are provided in this report (see discussion below) and were the focus of discussions with Agency senior management. The development of the new legal framework should include a review and gap assessment of current powers and authorities to ensure the Agency has adequate ability to enforce recovery planning requirements. These powers appear well-established, but gaps should be considered and addressed. See discussion below.

17. **The new framework should provide standalone, comprehensive regulatory requirements for recovery plans.** The regulation should set forth supervisory expectations for the structure and content of the recovery plans; it should set forth filing, updating, review and remediation requirements. The regulation should clearly provide that it is the responsibility of the bank, its senior management, and supervisory board, to develop a credible recovery plan. Recovery options and actions should be required, and banks must demonstrate plans that are actionable, credible, and adequate for the bank to remain a going concern during periods of considerable financial or operational stress. The level of severity should extend to a period where the bank has approached the point of non-viability but has not deteriorated to the point where liquidation or resolution is imminent. The plans should provide a wide range of concrete and material options that would enable a firm to respond to a range of internal and external stresses to maintain and restore viability without extraordinary governmental support. Recovery plans should be integrated into a bank’s existing risk management and corporate governance functions and coordinated with its strategic, operations, contingency, capital, liquidity, and resolution planning, and aligned with resolution planning efforts. Clear governance structures and escalation requirements for the execution of the plan and communication strategies and actions plans should be required.

18. **The Agency should incorporate principles of RBS and proportionality into its development of recovery plan regulatory requirements.** At a minimum, recovery plans should be required for designated, domestic systemically important institutions. Recovery planning for all banks subject to the financial safety net is recommended, however a tiered or staged development of standards over a reasonable period is not inappropriate. Recovery plan requirements should allow banks to tailor their plans to reflect the firm’s size, complexity, risk profile, business lines, critical functions, and operations. Standards allowing less-complex firms to submit tailored plans that are less demanding and burdensome are appropriate and should be considered.

19. **The Agency should reference international standards and regulations adopted in comparable jurisdictions to guide its development of recovery plan regulations.** During the mission, international standards and relevant regulations from comparable jurisdictions were reviewed and discussed with senior management. The approach taken by the various jurisdictions range from less to more prescriptive; but are generally similar. The Agency will need to consider the extent to which it prefers to establish more ‘top-down’ prescriptive requirements, or not; but the regulation should acknowledge that the application of supervisory judgment will be necessary to assess the credibility of the banks’ recovery plans. The various standards and examples referenced are set forth in Appendix IV.

20. **The Agency, as a precondition to the development and issuance of a recovery plan standards by law or regulation, should conduct a gap analysis of its existing legal and regulatory structure to ensure that the inter-relationships between its existing standards and new recovery plan requirements are clarified and that the Agency possesses supervisory powers and tools appropriate and necessary to support development, implementation, and assessment of credible recovery plans.** The analysis would confirm whether additional powers or tools should be established to support the assessment of the plans, empower the supervisor to require remediation of deficiencies, and set forth any recovery plan specific standards or requirements (e.g., setting a fixed requirement for remediating deficiencies, and specifying supervisory actions that could, or shall, be taken in the event deficiencies are not cured in a timely fashion; or clarifying the power to compel divestitures to address obstacles to recovery). The gap analysis should confirm the Agency’s enforcement powers extend to the following powers:

- Impose higher capital or liquidity requirements to reflect banks’ lack of resilience;
- Require de-risking actions, reducing the order and magnitude of risk exposures by asset sales, divestiture or wind-down;
- Review and require changes to a bank’s permissible activities;
- Require the bank to review and change its business strategy(ies);
- Require the bank to review and change its governance process over recovery plans and their execution;
- Compel effective engagement by senior management and supervisory boards;
- Require banks to review their operating structure to reduce complexity and remove obstacles to recovery plan implementation;
- Compel organization change, change in business operations; rationalize legal entity structure;
- Require improvements in management information systems;
- Require testing/fire drills;
- Require detailed action plans with timelines to remediate deficiencies; and,

- Allow for the application of supervisory discretion to require banks to conform with supervisory requirements; and the supervisory flexibility to waive or extend fixed requirements or deadlines.

Given the inter-relationship among existing Banking Law provisions and extant Decrees, there is a need to ensure consistency and clarity regarding recovery plans and ensure that any gaps are addressed.

21. **Similarly, the Agency’s implementation of its broad information-sharing power should be reviewed to identify gaps and obstacles to information-sharing and coordination necessary for the effective development and implementation of recovery plans.** It is important to ensure that the Agency has adequate information-sharing and cooperation agreements in place between relevant home and host regulatory authorities to support recovery plan development and execution. Kazakhstan is both home and host authority to systemically important institutions that are to be subject to recovery planning. Individual subsidiary recovery plans need to be coordinated with group recovery plans; scenarios, triggers and recovery options need to be consistent, and any internal or cross-border frictions identified and addressed in the plan. Legal constraints to information sharing should be identified and, as best practicable, addressed to ensure timely and effective sharing of information for planning and for execution of options once the recovery plan is activated. Cross-border cooperation is necessary to avoid unnecessary ‘ring-fencing’ or obstructive behavior that has not been addressed and mitigated within the recovery plan.⁵

22. **The Agency should review its current information-sharing and coordination agreements with key domestic and foreign authorities and, where needed, information-sharing and cooperation agreements that meet international standards put in place.** Existing agreements should be reviewed to ensure their compliance with international standards, identify and address any obstacles to effective sharing and coordination necessary to support development and execution of recovery plans, in particular the Agency should consider any constraints imposed by bank secrecy provisions of the Banking Law. Multi-lateral and firm-specific sharing agreements should be in place as needed. Standards for effective cross-border information-sharing and cooperation agreements have been established which require key elements that specify the information to be shared,⁶ the circumstances for such sharing, and the anticipated cooperation between authorities. The agreements should include elements such as:

- Objectives, nature, and scope
- General framework for cooperation

⁵ The Banking Law sets forth multiple provisions related to bank secrecy requirements. The Agency advises that these provisions do not constrain its sharing of confidential supervisory information with relevant authorities. The impact of bank secrecy or other restrictions should be considered and any obstacles removed as best practicable.

⁶ See, Key Attributes, Annex 1 and 2 for detailed requirements related to Cross-Border Information Sharing and Cooperation Agreements.

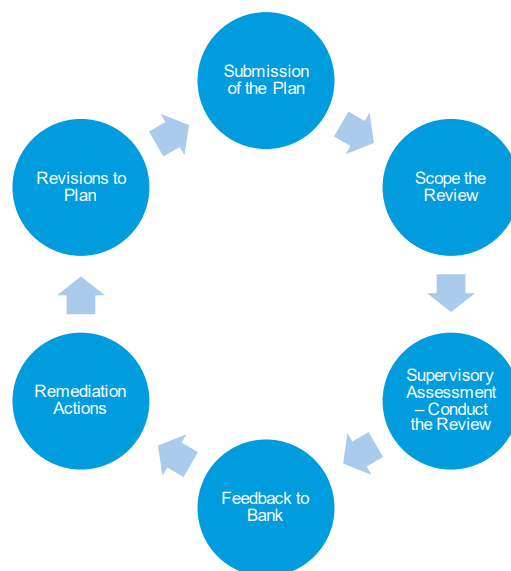
- Commitments to cooperate
- Home authority commitments
- Host authority commitments
- Cooperation mechanisms and information sharing framework
- Cross-border implementation of resolution measures

Mechanisms to facilitate frequent communication between relevant authorities, domestic and foreign, during the development and assessment of recovery plans, and especially during the activation and implementation of the plan should be in place. In the absence of participation in supervisory or crisis management colleges, the Agency should develop formal and informal arrangements with key supervisory and resolution authorities to support effective recovery planning and execution.

C. Supervisory Assessment Process for Recovery Plans

23. **The Agency’s supervisory assessment of recovery plans should be integrated into its overall SREP.** The mission provided information regarding the supervisory assessment process related to recovery plan reviews and discussed integration with the developing processes being implemented by the Agency. Recovery plans would be submitted on an annual basis, and the timing, scope, and conduct of the reviews would need to be considered and made a part of the annual supervisory plan (see Figure 1). Given the strong relationship between recovery plan review elements and existing risk management and other prudential standards, the review of recovery plans should not stand in isolation. The plan review should be a complementary process that allows a coordinated assessment with related areas (e.g., risk management, governance, information systems, capital, and liquidity). The concept of ‘resilience’ addressed in recovery planning relates to a bank’s safety and soundness condition generally, and the overall rating of the bank given its risk profile and operations should consider the adequacy of its recovery plan.

Figure 1. Recovery Plan Supervisory Review Cycle



Source: Keith Ligon (MCM External Expert)

The scoping of a recovery plan review should focus on aspects of “completeness” and “credibility” and reviews focused across key plan areas (e.g., strategy, options, triggers, governance, etc.). Expectations regarding “complete” plans should be communicated to banks (See Appendix V for an example from the EU Bank Recovery and Resolution Directive ((BRRD)). Template plan elements or other standard reporting requirements can be employed.

24. **The Agency should consider the nature and extent of the resources that would be required for an effective and comprehensive review of recovery plans; coordination across departments will be important.** The plan review should follow the Agency’s current risk-based approach and allow for resources to be applied to address key risks. Scoping of the recovery plan review should coordinate with other onsite and offsite evaluation processes as well as stress-testing and macro-prudential analysis. The Agency should seek to incorporate the bank’s internal assessments and audit functions into its review of the plans to leverage resources. Targeted and horizontal reviews that would allow for cross-bank comparison of identified weaknesses should be considered. Given the multiple issues presented by recovery plan reviews, various departments will be involved, and coordination will be important.

25. **The Agency should consider its approach to notifying banks’ supervisory boards and senior management regarding plan deficiencies; a formal and transparent process with clear supervisory messaging is important.** Following its gap analysis of current enforcement tools, the Agency should put in place a clear and transparent process that supports the identification and mitigation of recovery plan deficiencies. The law or regulation should clearly set forth plan remediation expectations and requirements, such as the time period to remediate deficiencies, the supervisory actions that are authorized should deficiencies not be addressed. The process should

ensure that bank boards and senior management are provided clear feedback regarding their recovery planning responsibilities. Uniformity and consistency in communications with banks regarding supervisory expectations for recovery plans is necessary and appropriate methods (e.g., Q and A or workshops) should be considered.

26. **Supervisory procedures, internal documentation requirements, and other processes should be developed consistent with the new regulatory requirements.** Following the standards set forth in the new regulation, supervisory procedures, and supervisory assessment processes, including internal analysis and documentation requirements, will need to be established. These supervisory procedures could be developed simultaneously with the development of the new regulation. The procedures would guide supervisory staff in their assessment of banks' recovery plans and focus their analysis on key issues that have been included within the scope of review. The types of questions that need to be addressed for "completeness" and "credibility" were discussed and reviewed during the mission. Suggestions and examples are set forth in Appendix VI.

27. **The Agency should consider developing an internal approach to the identification of critical functions and ensure consistency in the application of "systemic" criteria.** Under the current framework, the NBK is solely responsible for designating banks as systemically important. Under Decree No. 240, various factors are considered when rendering such a determination, including size, complexity, inter-connectedness, and substitutability.⁷ This analysis and determination is strongly related to the determination whether a bank activity is, or is not, a critical function that must be addressed in the recovery plans. A core objective of recovery planning is to demonstrate that critical functions and critical shared services can be supported, and continuity maintained during periods of financial stress. The Agency will need independent authority to review bank's analysis and identification of critical functions when it assesses recovery plans for credibility. The criteria applied for the designation of certain bank functions as critical will likely be somewhat distinct yet should not be inconsistent with that applied by the NBK. Some level of coordination is suggested.

IV. IRRBB

A. Regulatory Framework for IRRBB in Kazakhstan

28. **The existing requirements on banks in respect of interest rate risk are set out in Regulation 188.** Regulation 188 sets general risk management requirements for interest rate risk within its broader requirements for market risk, and there are specific requirements on banks to set a risk appetite for interest rate risk and for internal management information to include the level of interest rate risk being run. There is also a specific requirement for banks to measure interest rate

⁷ See, Rules for classifying financial institutions as systemically significant (December 23, 2019) No. 240.

risk separately for all financial instruments denominated in foreign currency that exceed 5 percent of assets or liabilities.

29. **Regulation 188 should be revised by the Agency to align more closely with international standards on IRRBB.** The specific requirements in Regulation 188 relating to interest rate risk do not distinguish specifically between requirements for interest rate risk being run by banks in their trading and banking books. The Regulation sets out more general requirements for “interest rate risk” only. There are requirements in Regulation 188 on banks to identify the structure of their trading and banking books, to establish procedures for dividing instruments into the two books, and to identify the assets and liabilities that are sensitive to changes in interest rates. There is no mention, however, of the measurement approaches to be adopted specifically for interest rate sensitive instruments in the banking book. These should be set out clearly in the revised Regulation—see below. The Regulation should also require banks to specify the scope of their IRRBB, and have a clear definition of the types of IRRBB to which they are exposed (e.g., repricing risk, basis risk, or other). All interest rate risk sensitive items, both on- and off-balance, in the banking book should be included within the scope of a bank’s IRRBB measurement. Building on the existing requirements in Regulation 188, the revised regulation should also require banks to specify their IRRBB strategy and governance arrangements around the management of IRRBB, including relevant limits.

30. **The revisions to Regulation 188 should specify the measurement approaches that banks should apply in respect of IRRBB.** The Regulation does not currently include any requirements on the approaches that banks should adopt to measure IRRBB. When considering a revision of the Regulation, the Agency should require banks to calculate at least one earnings-based indicator (for assessing the short-term impact of interest rate changes on net income), and one economic value indicator (for assessing the long-term impact on equity value), and set high level requirements for banks’ modelling assumptions and for their stress tests and scenarios. The Agency should consider requiring banks which are designated DSIBs to apply all six prescribed standardized interest rate shock scenarios that are set out in Annex 2 of the Basel Standard on Interest Rate in the Banking Book issued in April 2016⁸ that capture non-parallel gap risks for economic value of equity (EVE). The Agency may wish to consider requiring banks to report the outputs of these scenarios via regular supervisory reports—see discussion below. Banks should also be required to quantify the behavioral and other modelling assumptions that are relevant for their business model (e.g., prepayment risk, modelling of non-maturing deposits, early redemption risk), and have procedures for defining other inputs (e.g., yield curves). The underlying assumptions should be fully integrated into banks’ measurement of IRRBB.

31. **The Agency should apply the concept of proportionality when introducing a revised regulation on IRRBB.** The general requirement for calculating at least one earnings-based indicator (to

⁸ <https://www.bis.org/bcbs/publ/d368.pdf> The April 2016 standard was discussed in detail with senior management and staff during the mission, and examples of other jurisdictions’ IRRBB methodologies were shared with the Working Group.

capture short-term impact), and one economic value indicator (to capture long-term impact) is a minimum requirement for all banks, but the Agency should consider the size, nature and complexity of the bank when applying other requirements of the Basel Standard issued in April 2016. These include, but are not limited to: the granularity of maturity gaps (hence granularity of limits); balance sheet mapping of less significant portfolios (instead of more appropriate cash flow mapping); assessment, validation, and incorporation of underlying assumptions; the application of less/more complex measurement methods; and the use of less/more sophisticated calculation software. A range and number of interest rate scenarios and shocks that are required to be performed by the banks should be also adjusted to reflect the size, nature and complexity of the institution and the scale of IRRBB the bank is running.

B. Current Approach to Assessing IRRBB

32. The Agency’s current approach to supervising IRRBB is very limited and does not conform to the relevant Principles (10-12) set out in the Basel Standard issued in April 2016. Principle 10 of the Standard requires supervisors to collect, on a regular basis, sufficient information to be able to monitor trends in banks’ IRRBB exposures, assess the soundness of banks’ IRRBB management and identify outlier⁹ banks that should be subject to review and/or should be expected to hold additional capital. The information currently collected by the Agency does not provide sufficient information to meet these requirements. The only IRRBB specific information the Agency collects is the information submitted annually for the purposes of the assessment of eight qualitative and two quantitative indicators on IRRBB. The Agency has yet to conduct an onsite IRRBB review of a bank.

33. The supervisory assessment of the ten questions informs the Agency’s Risk Assessment System (RAS) and SREP. The Agency collects relevant policies, procedures, and internal documentation from banks necessary for supervisors to undertake a comprehensive assessment to answer the eight qualitative questions on IRRBB under the SREP. The Agency also collects data on the impact of the parallel shocks on EVE and net interest income (NII) (the two quantitative indicators) by request from banks to inform the SREP quantitative assessment on IRRBB. The limited scope of the qualitative questions do not, however, enable the Agency to form a comprehensive view on the quality or effectiveness of a bank’s policies and procedures for measuring and managing IRRBB, and the annual collection of quantitative data from banks does not provide the frequency of reporting required by Principle 10 of the Standard to identify trends or outliers. The Agency should collect more granular and frequent information to enable supervisors to undertake a comprehensive SREP assessment of IRRBB. The Agency should also consider reviewing the content of the qualitative questions to provide a suitably targeted set of

⁹ An outlier bank is defined as a bank with an impact on its EVE of more than 15 percent of Tier 1 capital in any of the six Basel prescribed scenarios.

information that will better inform the Agency's assessment of a bank's IRRBB risk management framework.

34. The Agency should consider conducting an industry wide survey on banks' approaches to managing and measuring IRRBB before introducing a regular reporting regime. Given the limited information the Agency currently has on banks' approaches to managing and measuring IRRBB or of the levels of IRRBB exposures across the sector (as the frequency is only annual and the assumptions of calculations are not known), a survey of bank's current practices in respect of IRRBB management and measurement should be considered ahead of introducing a reporting regime. The survey could also be structured to facilitate the assessment of the level of preparedness of Kazakhstan banks to fully implement the new requirements on IRRBB. Analysis of the information provided from the survey would enable the Agency to form its own view on the levels of IRRBB exposures across the sector, and the effectiveness of IRRBB risk management, and inform the design of any regular IRRBB supervisory report. The mission had a very informative discussion with a medium-sized bank on its approach to managing and measuring IRRBB, which demonstrated that banks are very familiar with the Basel IRRBB framework and its measurement approaches, and that these are used for their internal purposes. A revised or expanded IRRBB reporting regime and greater use of targeted onsite inspections would broaden the Agency's understanding of the level and trend of IRRBB exposures across the sector and the quality of its risk management of this risk. The additional data would also inform the Agency's approach to setting IRRBB Pillar 2/SREP capital add-ons.

C. Internal Methodology for IRRBB

35. The Agency should develop an internal supervisory methodology for assessing banks' IRRBB for use by both onsite and offsite supervisors. As IRRBB is not covered by the Pillar 1 capital framework, it is important that supervisors are able to assess the effectiveness of banks' frameworks for identifying, measuring, monitoring, and controlling this risk, and to consider whether a bank should be required to hold additional capital against this risk. The internal supervisory methodology should enable onsite supervisors to assess the effectiveness of a bank's governance, risk management and internal controls around IRRBB, and supervisory staff more generally to understand the sources of interest rate risk (nature and composition of the risk) in a bank's balance sheet, and to challenge the assumptions in the scenarios and models that determine the quantity of a bank's IRRBB.

36. The Agency has already identified a list of issues that need to be reviewed when assessing IRRBB as part of its draft ICAAP review methodology, but this does not constitute a detailed internal supervisory methodology for assessing IRRBB. TA was provided in the November 2020–January 2021 mission on the approach to be adopted by the Agency to assessing IRRBB as a component of a bank's ICAAP. The draft ICAAP methodology provides a useful basis for setting out the elements of IRRBB that supervisors should consider as part of their assessment of the effectiveness of a bank's approach to managing IRRBB, but it does not provide practical

supervisory guidance for both onsite and offsite supervisors on how the assessment should be conducted.

37. There is no prescriptive format for an internal methodology on IRRBB, but the Basel Standard on IRRBB issued in April 2016 provides a useful template for the issues to be considered in such a document. The mission discussed the possible format and content of an internal methodology with the WG and suggested, at a minimum, that it cover the assessment of:

- a) a bank's IRRBB governance, strategy, risk appetite, and risk management framework;
- b) the nature and composition of a bank's IRRBB profile (in term of repricing of assets, liabilities, and off-balance sheet items/cash flows);
- c) the behavioral assumptions built into the measurement of IRRBB (non-maturing deposits, prepayments etc.);
- d) the impact of different interest rate scenarios on economic value as a portion of the bank's own funds (or EVE) and the aggregation across currencies if relevant;
- e) the impact of different interest rate scenarios on earnings (NII), and aggregation across currencies if relevant; and
- f) peer analysis to identify any market outliers in respect of IRRBB.

A more detailed set of issues for consideration when undertaking a supervisory assessment of IRRBB are set out in Appendix VIII. These issues should be considered for inclusion by the WG when developing the internal methodology.

38. The Agency should ensure that IRRBB becomes an integral part of the Agency's ICAAP review and SREP framework. When fully operational, the ICAAP submissions from banks should include significant qualitative information on banks' IRRBB policies and risk management procedures to inform the Agency's assessment of the effectiveness of a bank's management and measurement of IRRBB. Subject to the principle of proportionality, the information provided by a bank in its ICAAP submission should provide, at a minimum, the set of qualitative data in Table A of Principle 8 of the Basel Standard issued in April 2016. The Agency should also consider requesting the quantitative information requested within Table B either in the bank's ICAAP submission or through regular supervisory reporting as discussed above. Analysis of the qualitative documentation and quantitative data should enable supervisors to gain a better understanding of the nature and scale of a bank's IRRBB exposures and the quality and effectiveness of the governance and risk management of IRRBB. Through peer analysis, outlier banks should be identified that may prompt additional supervisory action, for example an onsite review to assess the effectiveness of a bank's risk management of IRRBB or the addition of capital add-ons to reflect excessive IRRBB exposures.

39. **The internal methodology should describe the range of enforcement tools available to supervisors to mitigate risks identified in the assessment of a bank’s approach to measuring and managing IRRBB.** In addition to evaluating the adequacy, integrity, and effectiveness of a bank’s IRRBB management framework in the SREP, the Agency should also assess the adequacy of a bank’s capital relative to its IRRBB exposures. The Agency should describe the supervisory tools it has available to address risk management weaknesses and/or any capital shortfalls in the internal methodology. The supervisory tools available may include the use of onsite reviews; requirements for enhancements to risk management processes and procedures; requirements to reduce the overall level of IRRBB exposures; constraints being set on specific internal risk parameters (e.g., reduced limits); Pillar 2 capital add-ons or a combination of any of these actions.

40. **An output of a bank’s SREP should be an assessment of whether the bank is holding sufficient capital for the scale of its IRRBB exposures.** The Agency’s draft ICAAP methodology includes an approach for assessing additional Pillar 2 capital to cover a bank’s IRRBB exposures. The proposal contains a matrix transforming the results of a standardized interest rate shock into an additional capital requirement when taking the additional variable, the internal rating of the bank, into account. The internal methodology should be consistent with, and linked to, the IRRBB approaches set out in the Agency’s ICAAP methodology and wider SREP framework. The calibration of the capital add-on should be regularly reviewed/validated within the SREP framework

V. UPDATE ON PREVIOUS TA RECOMMENDATIONS

41. **The Agency has made good progress on implementing the recommendations arising from the two previous TA missions—see Appendix I.** An action plan for implementation of the recommendations was approved by the Chairperson of the Agency in February 2021. In respect of institutional strengthening, a draft MoU setting out the coordination and cooperation arrangements between the Agency and the NBK has been prepared and is scheduled to be signed later in 2021. The Agency has undertaken a review on the internal decision-making processes of other supervisory agencies before deciding on how to formalize the decision-making powers of its Supervisory Committee.

42. **Following a review of its organizational structure and staffing, the supervision of banks and non-banks within the Agency’s Bank Regulation Department (BRD) has been separated, and a dedicated team has been established to focus specifically on banking supervision policy issues within the Methodology Department.** The Bank Analytics and Stress Testing Department (BASTD) has been established and plays a central role in the supervisory function, with responsibilities for undertaking the AQR, stress testing and supervisory reporting. Coordination with the BRD supervisory teams is being embedded in the new structure as procedures and processes develop. The Agency has designed an annual training plan for staff, including all supervisors, and has requested assistance from external bodies, including other

supervisory agencies, to assist in staff development. The aim to build up specialist risk expertise in the onsite and offsite teams is an ongoing exercise.

43. **The development and roll out of the Agency's SREP, AQR, and supervisory stress testing are key banking supervisory priorities in 2021.** The Agency has set out a detailed plan for the development of its SREP and of its approach to setting pillar 2 capital add-ons. The SREP process has been formalized by a decree issued by the Chairperson of the Agency and work continues on updating the SREP internal processes and manuals to ensure effective coordination across BRD and BASTD. The SREP process is planned to be in place by end 2021, and the capital add-on process to be implemented from July 2022. Capital add-ons arising from the supervisory stress testing process are scheduled to be implemented from January 2023. As the SREP process evolves, the Agency should incorporate periodic requests for internal risk and audit reports from banks and incorporate regular prudential meetings with banks' senior and middle management into the SREP to inform supervisors of ongoing changes to a bank's risk profile.

44. **The Agency has planned to complete its internal ICAAP methodology by end 2021, with implementation set for January 1, 2022.** This roll-out will require amendments to Regulation 188 and approval of an ICAAP standard reporting form for banks. The internal methodology will provide guidance to supervisors on the process for assessing a bank's ICAAP and set out the linkages between the ICAAP process and the Agency's RAS and SREP. The first ICAAP submissions from banks are expected to be received in the first quarter of 2022.

APPENDIX I. Key Recommendations November 2020 TA Mission

Key Recommendations	Priority	Timeline ¹⁰
1. Develop and adopt an action plan to strengthen the Agency's institutional set up, including its operational independence, accountability and transparency, and overall banking supervisory capacity.	High	I
2. Sign a MoU with the NBK that sets out the coordination and cooperation arrangements between the two institutions, including the responsibilities and accountability of each institution and protocols for the exchange of information.	High	ST
3. Review and enhance the organizational structure and staffing of the BRD to ensure effective prudential banking supervision. To include: <ul style="list-style-type: none"> – restructure the BRD to transfer all non-critical to financial stability functions to other Departments of the Agency; – establish a dedicated banking supervisory policy team for drafting supervisory procedures and operating manuals, ensuring consistent treatment of the implementation of the Agency's supervisory approach, and supporting supervisory planning; – embed the new Bank Analytics and Stress Testing Department into the SREP framework to ensure effective coordination with offsite and onsite teams and to provide valuable input to effective banking supervision; – prescribe the role and responsibilities of the Agency's Supervisory Committee in legislation and ensure that supervisory decisions are taken at a level appropriate to the significance of the issue; – build up specialist risk expertise among onsite and offsite teams; – introduce a comprehensive training programme for offsite and onsite supervisors to address identified skill shortages required to assess banks' corporate governance, risk management, business models; consider the possibility of seconding staff to foreign supervisory authorities. 	High	M
4. Develop or update offsite, onsite, and SREP processes and procedures. To include: <ul style="list-style-type: none"> – undertake more frequent offsite qualitative risk and corporate governance reviews, using banks' internal management documents and reports; – introduce regular prudential meetings with banks' senior and middle management, including an annual meeting with Supervisory and Executive boards on strategic issues; – enhance annual supervisory plans for the banking sector, by producing high-level supervisory priorities, the supervisory programmes for individual banks and more risk-focused onsite inspection plans; – implement fully an ICAAP regime and capital-ons; – update the supervisory procedures, manuals, roles and responsibilities of structural units, including supervisors' job descriptions, for conducting a SREP and fully integrating offsite and onsite supervision into the new framework; 	High	M

¹⁰ **ST**, *short-term*, with results less than 6 months; **MT**, *medium term*, with results from 6 to 24 months.

Key Recommendations	Priority	Timeline ¹⁰
– develop supervisory procedures for documenting and recording supervisory findings and supervisory judgements, arrangements for the approval of SREP results, including scores, and for communicating the outcomes of the SREP to the banks.		
5. Amend legislation by including additional safeguards to enhance the Agency's operational independence, including the implementation of FSC recommendations, and by prescribing the accountability framework; strengthen the Agency's transparency by additional disclosures.	Medium	M
6. Require banks to produce credible medium-term capital and liquidity restoration plans to mitigate the impact of the exceptional COVID-19 measures.	High	I

Key Recommendations January 2021 TA Mission

Key Recommendations	Priority	Timeline
<p>1. Agency to review and finalize the draft methodology for assessing a bank's ICAAP. To revise:</p> <ul style="list-style-type: none"> - Process for requesting a bank's ICAAP documentation; - Supervisory evaluation process of the documentation received; - Process for review of a bank's internal governance, risk management, and internal controls; and - Usability of methodology by supervisors. <p>To include:</p> <ul style="list-style-type: none"> - Review of a bank's risk appetite statement; - Analysis of the Pillar 1 and 2 risks against which a bank is required to hold capital; - Linkages with the RAS and SREP; - Peer group analysis; and - The governance of the ICAAP assessment. 	H	ST
<p>2. Agency to review and finalize the draft methodology for setting individual Pillar2 supervisory capital requirements. To include:</p> <ul style="list-style-type: none"> - Agreeing methodologies for calculating capital requirements for Pillar 2 risks; Identifying the material risks that are not fully captured by Pillar1 and draft methodologies for calculating the capital required to cover these risks; and - A revision of the approach to determining capital add-ons for governance, business model or risk management weaknesses. 	H	ST
<p>3. Agency to review the existing SREP methodology to enhance the overall assessment of a bank's risk profile. To include;</p> <ul style="list-style-type: none"> - Integration of the processes for, and results of, the ICAAP assessment; - Peer group analysis; and <p>- The setting of individual Pillar 2 supervisory capital requirements aligned to the risk profile of each bank.</p>	H	ST
<p>4. Supervisors to integrate the assessment of banks' ICAAPs and setting individual Pillar2 supervisory capital requirements in the supervisory framework to better tailor supervisory activities to the risk profile of each bank.</p>	H	MT
<p>5. Supervisors to review and assess banks' ICAAPs and include results of the assessment in SREP reports.</p>	H	MT

Key Recommendations	Priority	Timeline
6. Supervisors to set up additional individual capital requirements based on banks' risks that are not fully covered in Pillar1 of Basel II.	H	MT

APPENDIX II. STRUCTURE OF THE BANKING SECTOR: APRIL 1, 2021¹¹

#	Bank	ASSETS (US\$ BN)	MARKET SHARE (PERCENT)	CONTROL	PARENT COUNTRY
1	HALYK SAVINGS BANK OF KAZAKHSTAN*	23.4	30.7	JSC	
2	SBERBANK	8.0	10.5	subsidiary	Russia
3	KASPI BANK	6.9	9.0	JSC	
4	Forte Bank	5.5	7.2	JSC	
5	HOUSE CONSTRUCTION SAVINGS BANK	5.1	6.7	JSC	
6	BANK CENTER CREDIT	4.4	5.8	JSC	
7	FIRST HEARTLAND JYSAN BANK	3.9	5.1	JSC	
8	EURASIAN BANK	3.1	4.0	JSC	
9	ATF BANK	2.7	3.5	JSC	
10	BANK RBK	2.5	3.2	JSC	
11	CITIBANK	2.2	2.9	JSC	USA
12	ALFA-BANK	1.8	2.3	subsidiary	Russia
13	ALTYN BANK	1.5	1.9	subsidiary	China
14	NURBANK	1.0	1.3	JSC	
15	HOME CREDIT AND FINANCE BANK	1.0	1.3	subsidiary	Czech Republic
16	JSC BANK VTB (KAZAKHSTAN)	0.8	1.1	subsidiary	Russia
17	BANK OF CHINA	0.8	1.1	subsidiary	China
18	BANK FREEDOM FINANCE**	0.5	0.7	subsidiary	Russia
19	INDUSTRIAL AND COMMERCIAL BANK OF CHINA	0.4	0.6	subsidiary	China
20	AB "KAZAKHSTAN-ZIRAAT INTERNATIONAL BANK	0.3	0.4	subsidiary	Turkey
21	SHINHAN BANK KAZAKHSTAN	0.2	0.3	subsidiary	Korea
22	AL-HILAL ISLAMIC BANK	0.1	0.2	subsidiary	UAE
23	CAPITAL BANK KAZAKHSTAN	0.1	0.1	JSC	
24	ZAMAN-BANK	0.1	0.1	JSC	
25	NATIONAL BANK OF PAKISTAN	0.0	0.0	subsidiary	Pakistan
Total		76.4	100.0		

¹¹ Source: The Agency.

	TENGRI BANK***	-	-	subsidiary	India
	ASIA CREDIT BANK	-	-	JSC	

* 14 banks participated in AQR (in grey)

** Previously Bank Kassa Nova

*** Tengri Bank License Revoking on September 17, 2020
Asia Credit Bank License Revoking on February 11, 2021

APPENDIX III. International Standards and Comparative Example Regulatory Approaches on Recovery Planning

Various international standards have been established that address recovery plan requirements. These standards have been implemented in multiple jurisdictions and examples of regulatory standards can serve to support the Agency's consideration of new regulatory standards. The standards provided during the mission include:

- BIS - Basel Core Principles for Effective Bank Supervision (BCP)
- FSB - Key Attributes of Effective Resolution Regimes and the related Key Attributes Assessment Methodology (updated 2014).
- European Union - Bank Recovery and Resolution Directive (“BRRD”) (EU) 2016/1075 23 March 2016 supplementing Directive 2014/59/EU; and EBA Guidelines and Regulatory Technical Standards
- Georgia - Decree of the Governor of the National Bank of Georgia on the Rule on Developing and Assessment of Recovery Plan of a Commercial Bank
- Russia - Regulation “On the requirements for the content, procedure and timing of submission by credit institutions to the Bank of Russia of plans for restoring financial stability, amendments to plans for restoring financial stability, and the procedure for their assessment by the Bank of Russia.”
- Ukraine - Regulation on Recovery Plans of the Banks of Ukraine and Banking Groups (RESOLUTION 18 July 2019; No. 95)
- United Kingdom – Bank of England Supervisory Statement/Policy Statement on Recovery Planning
- USA – Office of the Comptroller of the Currency; CC Guidelines on Recovery Plans; Federal Reserve; SR 14-8 on Recovery Planning

APPENDIX IV. Information to be Included in a Recovery Plan

The recovery plan shall include the following information (BRRD example):

- (1) A summary of the key elements of the plan and a summary of overall recovery capacity;
- (2) a summary of the material changes to the institution since the most recently filed recovery plan;
- (3) a communication and disclosure plan outlining how the firm intends to manage any potentially negative market reactions;
- (4) a range of capital and liquidity actions required to maintain or restore the viability and financial position of the institution;
- (5) an estimation of the timeframe for executing each material aspect of the plan;
- (6) a detailed description of any material impediment to the effective and timely execution of the plan, including consideration of impact on the rest of the group, customers and counterparties;
- (7) identification of critical functions;
- (8) a detailed description of the processes for determining the value and marketability of the core business lines, operations and assets of the institution;
- (9) a detailed description of how recovery planning is integrated into the corporate governance structure of the institution as well as the policies and procedures governing the approval of the recovery plan and identification of the persons in the organization responsible for preparing and implementing the plan;
- (10) arrangements and measures to conserve or restore the institution's own funds;
- (11) arrangements and measures to ensure that the institution has adequate access to contingency funding sources, including potential liquidity sources, an assessment of available collateral and an assessment of the possibility to transfer liquidity across group entities and business lines, to ensure that it can continue to carry out its operations and meet its obligations as they fall due;
- (12) arrangements and measures to reduce risk and leverage;
- (13) arrangements and measures to restructure liabilities;
- (14) arrangements and measures to restructure business lines;
- (15) arrangements and measures necessary to maintain continuous access to financial markets infrastructures;

(16) arrangements and measures necessary to maintain the continuous functioning of the institution's operational processes, including infrastructure and IT services;

(17) preparatory arrangements to facilitate the sale of assets or business lines in a timeframe appropriate for the restoration of financial soundness;

(18) other management actions or strategies to restore financial soundness and the anticipated financial effect of those actions or strategies L 173/344 Official Journal of the European Union 12.6.2014

(19) preparatory measures that the institution has taken or plans to take in order to facilitate the implementation of the recovery plan, including those necessary to enable the timely recapitalization of the institution;

(20) a framework of indicators which identifies the points at which appropriate actions referred to in the plan may be taken.

APPENDIX V. SUPERVISORY ISSUES FOR ASSESSING RECOVERY PLANS

The following is a list of supervisory questions that would need to be considered when evaluating the completeness and credibility of recovery plans. The list should not be considered exhaustive but serve as an example of areas that will require review and should serve as a basis upon which to craft procedures tailored to the Agency's needs.

COMPLETENESS

1. Plan provides content required by rules/regulations? (e.g., Annex A; BRRD (2014))
2. Plan's format and structure follows rules/regulations?
3. Plan's format and structure is usable, especially during stress?
4. Plan provides adequate, accurate and comprehensive data and information?
5. Plan identifies required elements: critical functions/critical shared services, material legal entities, core business lines, inter-connectedness, mapping, core MIS?
6. Demonstrates clear and effective governance for approving the Plan?
7. Required review and approval by senior management and supervisory board?
8. Has the plan been subject to internal audit or external third-party review?
9. Plan provides required number and type of stress scenarios?
10. Plan provides required number and type of triggers identified?
11. Plan sets forth a range of options?
12. Plan includes an impact analysis – assesses recovery capacity?
13. Has the information template been completed adequately (if required)?

CREDIBILITY

1. Is the scope and coverage of the Plan reasonable and appropriate, given current understanding of bank's operations?
2. Does the overall recovery plan strategy and approach reflect a thoughtful and reasonable approach, given the bank's operations and risk profile?
3. Does the plan provide a coherent discussion of the bank's approach and supporting criteria and analysis regarding its assessment of materiality and criticality for the identification of material legal entities, core business lines, critical/critical shared functions?
4. Are the plan scenarios reasonable, appropriate, and relevant to the bank's operations and risk profile?
 - a. Not just generic scenarios, but firm-specific and tailored to the bank's operations?
 - b. Adequately severe scenarios that threaten PONV, pose threat to critical functions?
 - c. Range of scenarios provided: idiosyncratic; system-wide; combination; fast and slow?
 - d. Capital and liquidity impacts analyzed and sized?
5. Trigger/Indicator selection appropriate and calibrated effectively?

- a. Appropriate selection of triggers; quantitative and qualitative (capital, liquidity, profitability, asset quality; market-based, macro)?
 - b. Triggers include leading indicators; not overly reliant on lagging indicators (e.g., capital levels)?
 - c. Triggers are calibrated at levels early enough to restore viability, prior to breaching regulatory minima?
 - d. Triggers reflect a continuum of stress; ‘traffic-light’ escalation of severity?
 - e. Triggers are related to early warning indicators, reflect integration with bank’s risk management?
 - f. Triggers are clearly tied to appropriate escalation procedures and governance for activating/executing the Plan?
 - g. Triggers are monitored regularly as element of ongoing risk management?
 - h. Triggers reviewed annually and are re-calibrated appropriately?
 - i. Are the scenarios and triggers effectively integrated internally within the plan and bank’s risk management?
 - j. Consistency with group/subsidiary level triggers and scenarios?
 - k. Consistency with ICAAP/ILAAP, contingency funding, business continuity plans?
6. Provide a wide range of concrete and credible recovery options in response to individual triggers?
 - a. Impact of recovery options adequately analyzed and described?
 - b. Options adequate to restore viability?
 - c. Includes extraordinary options (i.e., divestiture) and not just ‘BAU’ options?
 - d. Options generate adequate ‘recovery capacity?’
 - e. Options analyzed for impact to financial stability?
 - f. Options analyzed for viability and are implementable?
 - g. Timelines for implementing options are reasonable?
 7. Intra-group and external dependencies appropriately considered (continuity analyzed and addressed)?
 - a. Obstacles identified and mitigated?
 8. Are the Plan’s assumptions and valuations acceptable and realistic given scenario and available options?
 9. Is the governance over Plan execution adequate and effective and capable of supporting timely implementation during crisis?
 - a. Roles and responsibilities of the board and senior management for execution of the Plan are clear and appropriate?
 - b. Board and senior management are fulfilling leadership and oversight responsibilities?
 - c. Recovery plan governance is incorporated into ‘BAU’ risk management?
 - d. Plan reviewed as least annually?
 - e. Board engagement is effective and adequate?
 10. MIS and reporting adequate and effective?
 - a. Timely and accurate information adequate to support recovery plan; provided to bank board, senior management, domestic and foreign regulators?

11. Adequate and effective communication and disclosure plan?
 - a. Legal requirements and constraints identified?
 - b. Roles and channels described?
 - c. Timelines and actions established?
12. What preparatory actions have been taken to allow for prompt execution of recovery options?
13. Has the Plan been tested? Playbooks developed? Simulations or fire drills conducted?
 - a. Communication protocols, pre-positioning collateral at Central Bank, testing of funding lines/sources, development of needed legal documentation and establishing actual/virtual 'war room' and shelf documentation.

APPENDIX VI. International Standards and Comparative Example Regulatory Approaches on IRRBB

Various international standards have been established that address interest rate risk in the banking book requirements. These standards have been implemented in multiple jurisdictions and examples of regulatory standards can serve to support the Agency's consideration of new regulatory standards. The standards provided during the mission include:

BIS - BCBS Principles for the Management and Supervision of Interest Rate Risk (July 2004)

Revised by BCBS Standards - Interest rate risk in the banking book, April 2016,

Europe - EBA Guidelines on the management of the interest rate risk arising from non-trading book activities, EBA/GL/2018/02, (18 July 2018)

EBA Guidelines on the revised common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing, EBA/GL/2018/03, section 6.5

Other national examples:

Hong Kong – Hong Kong Monetary Authority, Policy Manual, Interest rate risk in the Banking book, December 2018

Hungary - Magyar Nemzeti Bank, The Internal Capital Adequacy Assessment Process (ICAAP), the Internal Liquidity Adequacy Assessment Process (ILAAP) and their supervisory review, and the Business Model Analysis (BMA), December 2019

Canada – Office of the Superintendent of Financial Institutions Canada, Interest rate risk management, January 2020

Thailand - Bank of Thailand, No. FPG. 42/2551 Re: Regulations on Interest Rate Risk in the Banking Book of Financial Institutions, July 2018

Philippine – Banko Sentral Ng Pilipinas, Guidelines on the Management of Interest Rate Risk in the Banking Book and amendment of the Guidelines on Market Risk Management, July 2019

Russia – Bank of Russia, No 8-MP Methodology Recommendation, July 2020

India – Reserve Bank of India, Draft Guidelines on Interest Rate Risk in Banking Book, 2017

APPENDIX VII. BIS and EBA Principles and Assumptions on IRRBB

BIS Principle 8, Paragraph 70

Δ EVE

- a) Banks should exclude their own equity from the computation of the exposure level.
- b) Banks should include all cash flows from all interest rate-sensitive assets, liabilities and off-balance sheet items in the banking book in the computation of their exposure. Banks should disclose whether they have excluded or included commercial margins and other spread components in their cash flows.
- c) Cash flows should be discounted using either a risk-free rate or a risk-free rate including commercial margins and other spread components (only if the bank has included commercial margins and other spread components in its cash flows). Banks should disclose whether they have discounted their cash flows using a risk-free rate or a risk-free rate including commercial margins and other spread components.
- d) Δ EVE should be computed with the assumption of a run-off balance sheet, where existing banking book positions amortize and are not replaced by any new business.

(ii) Δ NII

- a) Banks should include expected cash flows (including commercial margins and other spread components) arising from all interest rate-sensitive assets, liabilities and off-balance sheet items in the banking book.
- b) Δ NII should be computed assuming a constant balance sheet, where maturing or repricing cash flows are replaced by new cash flows with identical features with regard to the amount, repricing period and spread components.
- c) Δ NII should be disclosed as the difference in future interest income over a rolling 12-month period.

EBA – common assumptions for calculating outlier test (EBA/GL/2018/02), paragraph 115

- a) All positions from interest rate sensitive instruments should be taken into account.
- b) Small trading book business should be included unless its interest rate risk is captured in another risk measure.
- c) All CET1 instruments and other perpetual own funds without any call dates should be excluded from the calculation of the standard EVE outlier test.
- d) Institutions should reflect automatic and behavioral options in the calculation. Institutions should adjust key behavioral modelling assumptions to the features of different interest rate scenarios.
- e) Pension obligations and pension plan assets should be included unless their interest rate risk is captured in another risk measure.
- f) The cash flows from interest rate sensitive instruments should include any repayment of principal, any repricing of principal and any interest payments.

- g) Institutions with an NPE ratio of 2 percent or more should include NPEs as general interest rate sensitive instruments whose modelling should reflect expected cash flows and their timing. NPEs should be included net of provisions.
- h) Institutions should consider instrument-specific interest rate floors.
- i) The treatment of commercial margins and other spread components in interest payments in terms of their exclusion from or inclusion in the cash flows should be in accordance with the institutions' internal management and measurement approach for interest rate risk in the non-trading book. Institutions should notify the competent authority whether they exclude commercial margins and other spread components from the calculation or not. If commercial margins and other spread components are excluded, institutions should use a transparent methodology for identifying the risk-free rate at inception of each instrument; (ii) use a methodology that is applied consistently across business units; and (iii) ensure that the exclusion of commercial margins and other spread components from the cash flows is consistent with how the institution manages and hedges IRRBB.
- j) The change in EVE should be computed with the assumption of a run-off balance sheet.
- k) A maturity-dependent post-shock interest rate floor should be applied for each currency starting with -100 basis points for immediate maturities. This floor should increase by 5 basis points per year, eventually reaching 0 percent for maturities of 20 years and more. If observed rates are lower than the current lower reference rate of -100 basis points, institutions should apply the lower observed rate.
- l) Institutions should calculate the change in EVE at least for each currency where the assets or liabilities denominated in that currency amount to 5 percent or more of the total non-trading book financial assets (excluding tangible assets) or liabilities, or less than 5 percent if the sum of assets or liabilities included in the calculation is lower than 90 percent of total non-trading book financial assets (excluding tangible assets) or liabilities (material positions).
- m) When calculating the aggregate EVE change for each interest rate shock scenario, institutions should add together any negative and positive changes to EVE occurring in each currency. Positive changes should be weighted by a factor of 50 percent.
- n) An appropriate general 'risk-free' yield curve per currency should be applied (e.g. swap rate curves). That curve should not include instrument-specific or entity-specific credit spreads or liquidity spreads.
- o) The assumed behavioral repricing date for retail and non-financial wholesale deposits without any specific repricing dates (non-maturity deposits) should be constrained to a maximum average of 5 years. The 5-year cap applies individually for each currency. Non-maturity deposits from financial institutions should not be subject to behavioral modelling.

APPENDIX VIII. SUPERVISORY ISSUES FOR ASSESSING IRRBB

The following items provide a guide to issues that the Agency should consider when assessing the IRRBB being run by a bank, taking into account the size, nature and complexity of the bank. The list is not exhaustive.

A. Scope and Basic Specifications

- The bank has a clear definition of its IRRBB and its components - gap risk/repricing risk, basis risk, option risk;
- There is clear distinction between interest rate risk in the trading book and banking book, and a clear policy for the classification of instruments which are interest rate sensitive;
- All interest rate sensitive banking book positions are subject to IRRBB measurement, including off-balance sheet items.

B. IRRBB Strategy and Risk appetite

- There is a Board-approved IRRBB strategy that is consistent with and fully integrated into the bank's overall strategy;
- The governing body understands the implications of the bank's IRRBB strategies, limits and exposure, including the potential linkage with and on market, liquidity, credit and other risks;
- The Board-approved Risk Appetite Statement includes reference to IRRBB;
- The bank's risk appetite for IRRBB is expressed in terms of acceptable impact of the fluctuating interest rate on both earnings and economic value and is reflected in limits (e.g. GAP limits, BPV limits, depending on measurement approach the bank chooses);
- The bank's hedging policy for IRRBB is clearly defined.

C. Risk Management Framework and Responsibilities

- Managing IRRBB is an integral part of bank's risk management activity, with all duties and responsibilities clearly defined;
- There are no conflicts of duty (identification, measurement, monitoring and control functions are independent from the risk-taking functions on IRRBB);
- All staff involved in the management of have sufficient expertise and knowledge;
- Escalation procedures are clearly defined;
- Appropriate actions are taken to rectify breaches in agreed IRRBB limits etc

D. Risk policies, Processes, and Controls

- Policies address all aspects of IRRBB (governance, measurement approaches, reporting and escalation procedures);
- Limit approval process is documented;

- Appropriate escalation process is in place (for any exceeded limits);
- IRRBB framework is regularly updated and reviewed (self-assessment);
- Banks have their IRRBB framework regularly reviewed by internal auditor (or hired external expert);
- IRRBB is integral part of the ICAAP process.

E. IT Systems and Data Quality

- Data should be available from the institution's IT systems with adequate accuracy and in timely manner;
- IT system should have the capability of recording of all transactions fully and clearly and deliver all calculations in timely manner;
- IT system should deliver transparent and timely results of any interest rate shock/scenarios (flexibility of shock modelling, reverse modelling);
- Data applied (volumes, interest rates, maturity, repricing information, options etc.) shall be specified properly and in line with nature, size and complexity of the bank;
- Yield curves used - discount rates and reinvestment rates must be clearly defined and specified.

F. Internal Reporting

- There is an appropriate and regular reporting to governing body – at relevant level of aggregation, with sufficient level of detail and periodicity;
- Contains comparison of actual position to limits, proposal of actions to be taken if relevant;
- Key modelling assumptions are shortly described.

G. Model Governance

- Models are properly documented (including developmental evidence);
- There is an ongoing model monitoring in place, including back-testing of key internal parameters (prepayments, stability of deposits, early redemption risk);
- Banks may use models developed by third parties if they fully understand the model and are able to customize it to match bank's specific characteristics.

H. Methods for Measuring IRRBB

- Banks have at least one profit indicator measure (usually NII or NI) and one economic value measure (EVE);
- Models should be able to measure the interest rate risks' short-term impact on income (via NII or NI) and long-term impact on equity value (via EVE);
- Preferably all cash flows are included, principal and interest;
- Procedure for mapping cash flows into the predefined set of time buckets is defined,

- Calculation approach (for NI and EVE) is clearly specified and documented (GAP discounting, discounting on transactional basis, use of modified duration, BPV calculation approach);
- No unexplained expert-judgement adjustments are allowed.

I. Interest Rate Shock Scenarios, Interest Rate Stress Scenarios (for ICAAP)

- Bank shall regularly perform calculation for interest rate shocks scenarios prescribed by the Agency (for both EVE and NI), for all material currencies;
- Banks should quantify the impact of different interest rate scenarios on economic value as a portion of the bank's own funds (or EVE);
- Banks should quantify the impact of different interest rate scenarios on earnings (net interest income (NII));
- Banks shall perform additional internal interest rate scenarios built for the internal capital adequacy assessment process (ICAAP) and/or historical and hypothetical interest rate scenarios (all commensurate with its nature, size and complexity).

J. Measurement Assumptions

- Banks should model at least prepayments, duration of non-maturing deposits and term deposits with early redemption option;
- No unexplained expert-judgement adjustments are allowed;
- Underlying assumptions should be valid, properly documented, prudent, back-tested and sufficiently consistent over time (model governance);
- Assumptions must be subject to regular update and revisions and to approval by management body;
- Banks should be aware of automatic options and include them into the calculation;
- Banks should have clear approach to NPL assessment in respect to IRRBB;
- Banks should have clear approach to mapping pipeline transactions and commitments.