# RISK BASED SUPERVISION FRAMEWORK


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***Bank of Tanzania***<br>
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## LIST OF ABBREVIATIONS

| | |
|---|---|
| BOT | Bank of Tanzania |
| CAMELS | Capital adequacy, Asset quality, Management, Earnings, Liquidity and Sensitivity to market risk |
| DBS | Directorate of Banking Supervision |
| EIC | Examiner- In-Charge |
| FIEM | Financial Institution Engaged in Microfinance Operations |
| RAS | Risk Assessment Summary |
| RBS | Risk Based Supervision |
| ROE | Report of Examination |
| SRAF | Supervisory Risk Assessment Framework |

## 1.0 INTRODUCTION

This document presents the Risk Based Supervision (RBS) Framework adopted by the Bank of Tanzania (BOT) for supervision of banks and financial institutions, including Financial Institutions Engaged in Microfinance (FIEMs), hereinafter collectively referred to as 'institutions'.

The main objective of the RBS framework adopted by BOT is to provide an effective and efficient process to assess the safety and soundness of institutions which is achieved through:

(i) Evaluating institutions' risk levels and trends associated with current and planned activities;

(ii) Assessing the management processes to identify, measure, monitor and control risks;

(iii) Assessing the institutions' financial conditions;

(iv) Assessing compliance with applicable laws and regulations;

(v) Communicating findings, directives, and recommendations in a clear and timely manner, and obtain commitments by board of directors and management to correct significant deficiencies; and

(vi) Making follow up on implementation of corrective actions to ensure that all the deficiencies are rectified at appropriate time and in the right manner.

Under the RBS approach, focus is on areas of greatest risks and concerns in individual institutions to ensure effective and efficient supervision. This approach enables BOT to prioritize the use of its resources by allocating them according to risk profiles of institutions.

The framework shall apply to all institutions operating in Tanzania. It is intended to be flexible to allow examiners to exercise their own judgment to a large extent in choosing what supervisory tools to apply in the supervisory process. This also includes selecting procedures to perform during the onsite examination depending on the risk profile of the institution. Both off-site and on-site techniques are applied in this framework.

Development of the supervisory framework is a dynamic process due to continuous changes in the banking industry both locally and globally. Accordingly, BOT shall continue to review this framework from time to time to ensure that it remains effective.

BOT's RBS Manual provides a more detailed description and guidance, including sample forms, procedures and working papers.

## 2.0 RESPONSIBILITY FOR SUPERVISORY ACTIVITIES

The Directorate of Banking Supervision (DBS) is responsible for carrying out the supervisory activities. Supervision of commercial banks shall be under Banks Supervision Department and that of financial institutions shall be under Non-Banks Supervision Department, while supervision of microfinance institutions shall be under the department of Microfinance Supervision. Operations and Policy Review Department shall be responsible for quality assurance of all the supervisory processes.

For each institution, there shall be two key examiners responsible for that institution: Relationship Officer and Examiner-In-Charge (EIC). The Relationship Officer will be the permanent contact person of the designated institution for a minimum period of two years while the EIC will change in every supervisory cycle.

For each of the supervisory departments, there shall be teams/divisions each of which will be responsible for a number of institutions allocated to it and each team/division shall be headed by a supervisor.

## 3.0 RISK BASED SUPERVISION METHODOLOGY

The risk-based supervision methodology reflects a continuous and dynamic process. As described in the table below, this methodology is comprised of five key activities, each of which uses certain written products to facilitate communication and coordination.

**Table 1: RBS Activities and Deliverables**

| S/No. | ACTIVITIES | OUTPUTS/DELIVERABLES |
|---|---|---|
| 1. | Developing Institutional Profile:<br>- Understanding the Institution<br>- Assessing the Institution's Risks | Institutional Profile which shall have two main parts:<br>1. Institutional Overview<br>2. Risk Assessment Summary |
| 2. | Planning and Scheduling Supervisory Activities | Supervisory Plan |
| 3. | Defining Examination Activities | 1. Examination Time Line<br>2. Information Request Letter<br>3. Scope Memorandum |
| 4. | Performing On-site Examination | 1. Examination Work Papers<br>2. Report of Examination |
| 5. | Follow up of findings and recommendations | Updated Institutional Profile |

An overview of each activity is provided in the subsequent sections, with further detail available in the RBS Manual.

## 4.0 DEVELOPING AN INSTITUTIONAL PROFILE

The starting point for risk-based supervision is developing an understanding of the institution. This step is critical to tailoring the supervisory plan to meet the characteristics of the institution and adjusting that plan on an ongoing basis as circumstances change.

Through increased emphasis on planning and monitoring, supervisory activities can focus on the significant risks to the institution and related supervisory concerns. Given the technological and market developments within the banking sector in Tanzania and the speed with which an institution's financial condition and risk profile can change, it is critical to keep abreast of events and changes in risk exposure and strategy. In view of this, Institution Profile shall be prepared and updated quarterly.

The Institution Profile shall have two main parts, Institutional Overview and Risk Assessment Summary. The Institutional Overview should provide a summary that communicates, in a concise form, information demonstrating an understanding of the institution’s present condition as well as highlighting key issues and past supervisory findings. The Risk Assessment Summary (RAS) should present a comprehensive, risk-based view of the institution, delineating the areas of supervisory concerns and serving as a platform for developing the supervisory plan. Contents of RAS are flexible and should be tailored to the individual institution.

Risk Matrix and Functional Risk Mapping will form part of attachments to the Institution Profile. Format and sample of Institutional Profile together with instructions for completion are in the RBS Manual.

## 5.0 PLANNING AND SCHEDULING SUPERVISORY ACTIVITIES

BOT will prepare an annual supervisory plan for each institution which will set out the tools of supervision that will be applied during the ensuing financial year (supervisory period). The plan will be explicitly linked to the areas of greatest risks and concerns and should demonstrate how supervisory concerns identified through the risk assessment process, the deficiencies noted in the previous examination and any other concerns are being, or will be, addressed. A comprehensive supervisory plan should be developed annually and updated as appropriate when circumstances so demand.

Supervisory plan for each institution should be prepared before the end of June every year in order to facilitate preparation of the Directorate

Work Plan for the ensuing financial year. Supervisory plans should identify the tools of supervision to be employed, define the scope of and timing supervisory activities, and identify the examiner resources required.

Tools of supervision that may be applied include:

(i) Full scope on-site examination;

(ii) Targeted examination;

(iii) Planned and ad hoc meetings with the management of the institution;

(iv) Meetings with external auditors of the institution;

(v) Liaison with home/host supervisory authorities or other domestic supervisory authorities; and

(vi) Off-site surveillance.

During the supervisory period, the findings from different supervisory tools that have been applied will provide BOT with new and more detailed information about the areas of risk or concern identified during the risk assessment stage. This information will assist BOT to draw conclusions, make directives and recommendations for remedial actions.

At any time during the supervisory period, BOT may need to seek remedial action from the institution or take action itself to deal with issues of serious supervisory concern. In addition, an institution's circumstances may change. If such events occur, the supervisory plan may need to be revised. Alternatively, BOT may decide that it should undertake another risk assessment as the profile of the institution may have changed significantly.

More detail on the various tools of supervision and guidance on planning and scheduling supervisory activities, including sample supervisory plans, is provided in the RBS Manual.

## 6.0 DEFINING ON-SITE EXAMINATION OBJECTIVES AND ACTIVITIES

The EIC shall prepare on-site examination time line for the forthcoming examination and request information from the institution for the purpose of conducting preliminary review and preparing Scope Memorandum. Scope Memorandum identifies the key objectives and scope of on-site examination. A letter introducing examiners to be involved in the examination exercise should be sent to the institution.

An examination time line is a tool that guides the whole process from the planning to completion of an on-site examination, including responses to report of examination from the examined institution. It specifies time periods within which specified activities should be completed by the individuals concerned. A sample of the on-site examination time line and guidance for preparation are presented in the RBS Manual.

The Information Request Letter identifies the information necessary for the successful execution of the on-site examination procedures. It is important that the information request letter be tailored to fit the specific characteristics and risk profile of the institution to be examined and the scope of the activities to be performed. Thus, the effective use of the information request letter is highly dependent upon the planning and scoping of a risk-based examination. To eliminate duplication and minimize the regulatory burden on an institution, the letter should not request information that is provided on a regular basis to or that is available within BOT, such as regulatory reports and various financial information. A sample Information Request Letter and guidance for preparation is presented in the RBS Manual.

In the course of preparing the Scope Memorandum, EIC will coordinate Preliminary Review, both on-site and off-site including pre-examination meeting with the senior management of the institution. The pre-examination meeting entails a general discussion of major concerns arising from offsite and pre-examination reviews.

The Scope Memorandum is an integral product in the risk-based methodology as it identifies the key objectives and scope of the on-site examination. The focus of on-site examination activities, identified in the scope memorandum, should be oriented to a top-down approach that includes a review of the institution's internal risk management systems and an appropriate level of transaction testing. The Scope Memorandum should be tailored to the size, complexity and current rating of the institution and should define the objectives of the examination. The Scope Memorandum should be submitted to DBS Management for authorization. Authorization is granted by signing the Scope Authorization Form. Format and sample of Scope Memorandum and the Scope Authorization Form are presented in the RBS Manual.

Examiner-in-Charge should prepare an introduction letter indicating the objectives and scope of the examination, staff to be involved, commencement and completion dates. The institution should be informed at least one week prior to commencement of examination. Sample Introduction letter is presented in the RBS Manual.

## 7.0 PERFORMING ON-SITE EXAMINATION

In performing on-site examination, examiners should be guided by procedures as detailed in the RBS Manual. Examiners should tailor the procedures to the characteristics of each institution, keeping in mind its size, complexity and risk profile. Examination procedures focus on developing appropriate documentation to adequately assess management's ability to identify, measure, monitor, and control risks. Procedures should be completed to the degree necessary to determine whether the institution's management understands and adequately controls the types and levels of risks that are assumed.

In performing full scope examination, examiners will use core assessment to assess whether the risks within each institution are appropriately identified and managed. The examination will also determine and validate the institution's condition. The core assessment will cover procedures to review the following areas:

(i) Asset Quality and Credit Risk;

(ii) Liquidity and Liquidity Risk;

(iii) Market Risk;

(iv) Operational Risk;

(v) Strategic Risk; and

(vi) Compliance Risk;

(vii) Audit and Internal Control;

(viii) Capital Adequacy;

(ix) Management;

(x) Earnings;

The core assessment procedures are divided into minimum-scope core assessment and standard core assessment. The minimum-scope core assessment procedures are used in risks identified as minimal while standard core assessment procedures are used in risks identified as moderate or significant in the preliminary Risk Matrix whereas standard core assessment with more detailed review (as needed) are used in risks identified as high. However, for FIEMs standard assessment procedures will be used for all preliminary risk-ratings. The table below indicates the relationship between the risk rating and the examination procedures applicable:

**Table 2: Relationship between preliminary risk rating and examination procedures**

| MINIMAL RISK RATING | MODERATE OR SIGNIFICANT RISK RATING | HIGH-RISK RATING |
|---|---|---|
| Minimum-scope core assessment | Standard core assessment | Standard core assessment with more detailed review |

When the preliminary risk assessment is high or specific concerns are present that warrant a more detailed review, examiners should widen the scope of the supervisory activities. These activities will be tailored by the examiners to address the specific areas of concern and may include additional transaction testing, an expansion of the sample size for review of individual loans and investments or greater depth in the assessment of the risk management process.

Work papers are the primary documentation for the examination process. They include printed and electronically stored information prepared or obtained during the process and are useful for the following:

(i) Providing evidence of work performed, findings, and conclusions;

(ii) Supporting information, comments, and conclusions in the Report of Examination;

(iii) Assuring that examination objectives and BOT standards are achieved;

(iv) Evaluating quality of work performed and examiner performance; and

(v) Planning and conducting future examination activities.

Guidance on the preparation and use of work papers, and samples of work papers for all minimum scope and standard core assessment procedures are presented in the RBS Manual.

After completion of on-site examination, EIC will prepare a report for the examined institution. For full scope on-site examination, contents of the report should clearly and concisely communicate to the institution

CAMELS ratings, risk ratings, and any supervisory issues or concerns related to the institution as well as directives or recommendations made by BOT. For targeted examination, the report should communicate findings arising from specific areas examined. Recommendations should be specific, time bound and listed in order of importance. The Manager responsible for the examined institution shall present the report to the institution's board of directors. Format and contents of report of examination are in the RBS Manual**.**

## 8.0 FOLLOW-UP AND MONITORING

The objective of this activity is to follow up on implementation of the supervisory directives and recommendations made to the examined institution. The Relationship Officer should ensure that quarterly status of implementation reports from examined institutions are timely submitted to BOT. Further, the Relationship Officer should maintain an on-going list of issues to be followed up with the institution management within a specified timeframes.

## 9.0 SUPERVISORY RISK ASSESSMENT FRAMEWORK (SRAF)

The Supervisory Risk Assessment Framework (SRAF) is an analytical approach that underpins the identification and assessment of risks and the quality of risk management in institutions. In order to focus supervisory activities on the areas of greatest risk to an institution, an institutional risk assessment should be carried out quarterly. By systematically applying the SRAF, the risk assessment will highlight both the strengths and vulnerabilities of an institution and provide a foundation for determining the supervisory activities to be conducted.

There are six key steps in the application of the SRAF which lead to the completion of a risk matrix for the institution. The risk matrix summarizes the level of risks inherent in the institution's activities and quality of risk management function in mitigating such risks. It also summarizes the direction of those risks after taking into account both internal and external factors which may affect the institution's risk profile over the next twelve months. A sample risk matrix and guidance on completion of the six steps of the SRAF are presented in the RBS Manual**.**

The following provides an overview of the preparation of the Risk Matrix. More detailed guidance is available in the RBS Manual.

### *(i) Identification of Significant Activities/Functional Areas*

Significant activities include any significant line of business, unit or process. Identification of significant activities is important for determining the risks inherent in the activities of the institution. For the purpose of risk assessment, BOT has identified six common risks (credit, liquidity, market, operational, strategic and compliance risks) which should be mapped onto such significant activities in order to assist examiners in identifying the risks inherent in each activity. A sample Functional Risk Mapping Chart and guidance on its preparation and application is presented in the RBS Manual.

### *(ii) Determination of Quantity of Inherent Risk*

Inherent risk is a risk associated with the nature, complexity and volume of the activities giving rise to the risk in question. It is important to note that assessment of inherent risk is made without considering management processes and controls which are considered in evaluating the quality of the institution's risk management systems. Risk Rating Guidelines for assessment of quantity of risk are in the RBS Manual.

The quantity of each individual risk will be assessed using qualitative and quantitative criteria. Overall quantity of inherent risk will be determined using simple average of the risk rating scores for each criterion. According to SRAF, there are four levels of inherent risks which are ***minimal, moderate, significant and high*** of which scores of 1, 2, 3 and 4 are assigned, respectively. Definitions of the four levels and guidance on applying the qualitative and quantitative criteria for assessing the quantity of internet risks are provided in the RBS Manual.

### *(iii) Assessment of the Quality of Risk Management*

When assessing the quality of an institution's risk management, primary consideration should be placed on the review of the following key elements of a sound risk management system:

(a) Board and senior management oversight;

(b) Policies, procedures, and limits;

(c) Risk measurement, monitoring, and management information systems; and

(d) Internal controls.

The relative strengths of the risk management processes and controls for each identified risk should be assessed under the above four key elements. Risk score will be assigned basing on the judgmental assessment, applying established criteria as detailed in the RBS Manual. Overall rating of the quality of risk management will be determined using simple average of the scores for the key elements. Quality of risk management should be rated as **strong, adequate, inadequate, or weak** in which scores of 1, 2, 3 or 4 will be assigned, respectively. Definitions of these ratings and guidance for assessing the quality of risk management are provided in the RBS Manual.

### *(iv) Determination of Composite Risk*

The composite risk for each risk category is determined by balancing the quantity of inherent risk with the quality of risk management systems in the institution. For example, credit risk may be determined to be inherently high in an institution, however, the probability and the magnitude of possible loss may be reduced by having very conservative loan appraisal standards, effective credit administration, strong internal loan review, and a good early warning system. Consequently, after accounting for these mitigating factors, the overall risk profile and level of supervisory concern associated with credit risk may be moderate. The following grid illustrates the determination of the composite risk by balancing the observed quantity of inherent risk with the quality of risk management systems. More detailed guidance on the completion of the Composite Risk Grid is provided in the RBS Manual.

**Table 3: Composite Risk Grid**

| DETERMINATION OF COMPOSITE RISK RATINGS | | | | |
|---|---|---|---|---|
| **Quantity of inherent Risk** | **Quality of Risk Management** | | | |
| | Strong | Adequate | Inadequate | Weak |
| Minimal | Minimal | Moderate | Moderate | Significant |
| Moderate | Moderate | Moderate | Significant | Significant |
| Significant | Moderate | Significant | Significant | High |
| High | Significant | Significant | High | High |

To facilitate consistency in the preparation of the risk matrix, general definitions of the level of composite risk for risk categories are provided in the RBS Manual.

### *(v) Direction of Risk*

The direction of risk adds the forward looking perspective to the risk-based supervision approach. In general, the direction of risk is forecast for the next twelve months and is a function of various factors including:

(a) Anticipated changes in the institution's external environment;

(b) Planned changes in the strategic direction e.g. new markets, products, systems, or distribution channels, etc; and

(c) Current state of management and the related risk management systems.

The direction of risk can be **increasing, decreasing** or **stable**. More detailed guidance on assessing the direction of risk is provided in the RBS Manual.

### *(vi) Determination of Overall Risk*

Once the composite risk for each risk category has been determined, an overall risk assessment should be made for the institution. This is the final step in the development of the risk matrix. The overall risk rating is based on the weighted average of all composite risk ratings, the weights being the risk significance factors determined judgmentally by the EIC. The direction of overall risk is also determined basing on the judgement of the direction of each individual composite risk.

Significance weights are derived according to the importance/significance of the risk to the overall business profile of the institution. Significant risks are those that have a greater risk to business failure or survival of the institution (before considering levels and related controls). The composite score is multiplied by the significance weight to arrive at the weighted composite score for each risk category. The overall risk rating will be determined as a simple summation of the weighted composite scores.

The significance weights will be determined by the EIC at the planning stage of an on-site examination. A cap of 40% and a floor of 5% weights (i.e. no single risk category will have weight of lower than 5% or higher than 40%) will be applied. It should be noted that high weights shall be assigned to a risk significantly important to the success or survival of the institution and its business.

Determination of significance of a given risk is part of the examiner's assessment of risks and is a matter of professional judgment. Additional guidance to frame the examiners' professional judgment is provided in the RBS Manual. Table 4 presents a sample of risk matrix with assumed significance weights.

**Table 4: Sample Risk Matrix with Significance Weights**

| Risk Category | Inherent Risk Score | Quality of Risk Management Score | Composite Risk Score | Significance Weight | Weighted Composite Risk Score | Direction of Risk |
|---|---|---|---|---|---|---|
| Credit Risk | **3** [Significant] | **2** [Adequate] | **3** [Significant] | 25% | 0.75 | Increasing |
| Liquidity Risk | **2** [Moderate] | **1** [Strong] | **1** [Minimal] | 40% | 0.40 | Stable |
| Market Risk | **3** [Significant] | **2** [Adequate] | **3** [Significant] | 10% | 0.20 | Decreasing |
| Operational Risk | | | **1** [Minimal] | 15% | 0.15 | Stable |
| Strategic Risk | | | **2** [Moderate] | 5% | 0.10 | Stable |
| Compliance Risk | | | **2** [Moderate] | 5% | 0.10 | Stable |
| **TOTAL** | | | | **100%** | **2** | |
| **OVERALL RISK RATING & DIRECTION** | | | | | **MODERATE** | **STABLE** |

## 10.0 CAMELS RATING SYSTEM

In addition to SRAF, BOT also applies CAMELS rating system in the analysis of institutions' financial condition and operational soundness. Under CAMELS analysis, all institutions are evaluated in a comprehensive and uniform manner, and that supervisory attention is appropriately focused on the institutions exhibiting financial and operational weaknesses or adverse trends. The CAMELS analysis also serves as a useful vehicle for identifying problem or deteriorating institutions, as well as for categorizing institutions with deficiencies in particular component areas. Further, the rating system assists in following up safety and soundness trends and in assessing the aggregate strengths and soundness of the banking industry.

Under the CAMELS, each institution is assigned a composite rating based on an evaluation and rating of six essential components of an institution's financial condition and operations. These component factors address the adequacy of capital, the quality of assets, the capability of management, the quality and level of earnings, the adequacy of liquidity and sensitivity to market risk. Evaluation of the components takes into consideration the institution's size and sophistication, the nature and complexity of its activities, and its risk profile.

Composite and component ratings are assigned based on a 1 to 5 numerical scale where 1 indicates the highest rating, implying strongest performance, risk management practices and least degree of supervisory concern while 5 indicates the lowest rating, implying weakest performance, inadequate risk management practices and, therefore, the highest degree of supervisory concern.

The composite rating generally bears a close relationship with the component ratings. However, composite rating is not derived by computing an arithmetic average of the component ratings but rather, the ratings are dependent on the worst rating in any of the five[1] CAMELS components. Each component rating is based on both quantitative and qualitative analyses of the factors comprising that component and its interrelationship with the other components. It is important to note that rating definitions under Composite 4 and 5 are similar with exception of two factors outlined below which could lead an institution being rated 5 instead of 4:

(i) If the volume and severity of problems are beyond management's ability or willingness to control or correct; and

(ii) If immediate outside financial or other assistance is needed in order for the institution to be viable.

The composite rating definitions, and the descriptions and definitions for the five CAMELS component ratings is provided in the RBS Manual**.**

The ability of management to respond to changing circumstances and to address the risks that may arise from changing business conditions, or the initiation of new activities or products, is an important factor in evaluating an institution's overall risk profile and the level of supervisory attention warranted.

## 11.0 QUALITY ASSURANCE

Quality assurance process is designed to ensure BOT has consistent, high quality bank supervision. Quality assurance incorporates both ongoing quality control processes which ensure work products are in compliance with established policies and procedures, and an after-the-fact review of material to assess the effectiveness of these policies and procedures. Quality assurance covers all aspects of bank supervision including the development of strategies, off-site surveillance, onsite examination, communication with the institution's management and directors and an assessment of the actions required of the institution. Details of the quality control process are provided in the RBS Manual.

[1] Management is not rated under CAMELS rating system because of the difficulty in quantifying risk factors related to management.