



CREDIT UNION Risk Based Supervision Service Manual

Credit Union solution no. 11



ASSOCIATION
OF ASIAN CONFEDERATION OF CREDIT UNIONS

1 Introduction

Foundation

1. The objective of this paper is to provide a systematic description of the risk-based framework for the supervision credit unions. This paper aims to increase understanding of how national federations will conduct its supervision of credit unions under its network. It remains the ultimate responsibility of the Board of Directors of credit unions to ensure that its business is conducted in accordance with the requirements set out by the regulations and best practices on good governance.
2. The approach enables the national federation to carry out its responsibilities in protecting the credit union system by its assessment of the credit union's businesses, risk profiles and macro-economic context. The federation is also responsible in designing effective supervisory plans and making appropriate use of this supervisory tool.
3. The traditional supervisory approach has been to review the operations of credit union to ensure that it complies with the legislation and regulations and to ensure that the financial statements meet the requirements of the reporting methodology and to ensure that the results are an accurate representation of the facts. However, the risk to which this approach is exposed is the risk that the audit process and the process that is used to select the audit criteria can miss a significant error or misstatement. This is the type of error, or risk, that any audit process can experience. This necessitates the use of a risk-based approach.
4. One of the limitations of the transactions-based method is its inability to address the future performance of individual credit unions including their managements' ability to deal with banking businesses they engage in and the economic environment over which they may have little or no control.

Risk-Based Supervision

5. Risk-based Supervision is an object-based supervisory approach concerned with translating economic and other information into potential risk factors for a credit union. It focuses on the quality of risk-management systems and the recognition of systemic risks to the credit union system.

6. RBS presents a framework with which credit unions are assessed regarding the probability and impact of risks as opposed to the intuitive assessment by the traditional approach. In contrast to the traditional form of supervision which is biased in favor of risk-avoidance and hence against innovative products and services, risk-based supervision treats risks mitigating and offsetting as valid approaches to risk management.
7. A risk- focused supervisory process provides flexible and responsive supervision to foster consistency, coordination as well as communication among supervisors, relies on the understanding of the institution, the performance of the risk assessment as well as the development of a supervisory plan and procedures tailored to the risk profile of individual institutions. In that regard, risk-based supervision identifies, measures and controls risks; and monitors the risk management process put in place by a financial institution during a supervisory period.
8. The main objective of risk-based supervision is to sharpen supervisory focus on credit unions that pose the greatest risk to the credit union system.
9. Risk based supervision is a structured approach to:
 - identify the key risks to which the industry and individual credit union are exposed;
 - assess the risk mitigation techniques that are used to manage these risks;
 - assess the net risk exposure that emerges in terms of its level and volatility; and
 - focus the supervisory effort on the most significant of these net risk exposures.
10. The basic objective of the process is to identify as efficiently as possible the areas of the credit union's operation that present the greatest financial risk to its continued viability.
11. Effective Risk Management is the hallmark of successful financial institutions like credit unions. Due to the nature of the business, the success of credit unions depends on the security, privacy, and reliability of services backed by robust operational practices.
12. Effective risk management strategies can be implemented by integrating effective management, operational supervision and market discipline. It is also imperative for credit unions to update their risk management practices in accordance with prevalent legislation and regulatory environment.
13. Basel 2 was devised to improve the soundness of the financial system by aligning regulatory capital requirement to the underlying risks of the banking industry. This step was taken due to the vulnerability of the financial industry. As one of the players in the financial market, credit unions must also take an aggressive stance to ensure that the credit union system is addressing and mitigating risks for safety and soundness.
14. The Regulators Conference organized by ACCU in 2003, 2005 and 2007 served as platform for regulators to exchange experience and introduce enabling regulatory framework for Asian credit unions. The combined work of ACCU and its member organizations brought about changes in the ways cooperative regulators support credit union development. This was evident in the way regulators see the role of the national federations as partners in promoting prudential norms for credit unions and demonstrates new development possibilities, in which member organizations of

ACCU are the leading actors. Prudential norms developed in five countries are a tangible impact.

- Bangladesh-PEARLS-GOLD
 - Hong Kong-GLARES plus regulation on Good Cooperative Governance
 - Nepal-PEARLS-HIMAL
 - Sri Lanka-COOP-RUPEES
 - Thailand-selected ratios of PEARLS
15. Recognizing that the credit union system should initiate the in-system protection measures, the Credit Union Risk Based Supervision Service (CURBSS) is introduced to the national federation of credit unions. CURBSS carry out review of the status of risk management architecture and initiate measures to bridge the gaps. The requirements of risk based supervision model in this respect are:
- The risk-based supervision will not be transaction based – it will be systems based inspection by CUBBS team
 - The supervisor will go into details of the systems and procedures for managing and controlling risks.
 - Need to review and develop systems and procedures for undertaking transactions and the reporting and the controlling systems
 - Need to properly document systems and procedures
16. The introduction of risk based supervision (RBS) would require credit unions to reorient their organizational set up towards RBS and put in place an efficient risk management architecture, adopt risk focused internal audit, strengthen the management information system, and set up compliance units. The credit unions would also be required to address HRD issues like personnel planning, selection and deployment of staff and their training in risk management and risk based audit. It is evident that change management is a key element in RBS and the credit unions should have clearly defined standards of governance, well-documented policies and efficient practices in place to demarcate the lines of responsibility and accountability so that they align themselves to meet the requirements of RBS.

Benefits

17. Among the important attributes and potential benefits of risk-based supervision is that it:
- i. Provides a framework that offers two distinct advantages:
- Establishes common terminology and approaches to evaluate risk and risk management in credit unions;
 - Is flexible enough to be applicable to all financial products and services;
- Unlike traditional supervision, which focuses on the internal operations of a single institution, risk-based supervision considers external factors affecting not only individual credit unions but also the credit union system as a whole;
 - Provides an ‘in-system’ regulatory environment in which credit unions are not just pushed to avoid risks but can also mitigate and offset risks as acceptable risk-management practices.

- National federation will have better allocation of supervisory resources according to perceived risk, i.e. focusing resources on the credit union's highest risk or devoting more supervisory efforts to those credit unions that have a high-risk profile. It will, therefore, enable the national federation to target and prioritize the use of available resources.
 - The national federation will be better placed to decide on the intensity of future supervision and the amount and focus of supervisory action in accordance with the perceived risk profile of the credit union
 - The national federation may also focus more attention on credit unions whose failure could precipitate systemic crisis.
18. The National Federation's supervisors gain a better understanding of the quality of management, the characteristics of the business and the risks a credit union faces. It also enables national federation to display more consistency in carrying out its supervisory function and to assess more systematically whether credit unions continue to meet the minimum criteria of the national and international prudential standards as well as ACCESS Brand.
 19. The credit unions should benefit from the improved focus of the national federation's supervision and from the specific targeting of the tools of supervision, such as specialist on-site visits and reporting accountants' reports on internal controls, to the areas of greatest risk and concern in individual credit union.
 20. The more explicit linking of the tools of supervision to areas of risk or concern should mean that credit unions' management understand why a supervisor has used a particular supervisory tool. As a credit union's management and supervisors have a common interest in ensuring that risks are properly identified and that adequate and effective control systems are established, the supervisory work commissioned should be of value to both parties.
 21. A risk assessment will involve the commitment of resources by both the supervisors and a credit union's management. In particular, the supervisors need to spend time on-site discussing the issues with senior credit union management. The time taken to perform this work will vary from credit union to credit union depending on the size and complexity of the institution. However, following a risk assessment, the supervisor will be better placed to decide on the intensity of the future supervision having obtained a better understanding of a credit union's risk profile. The intensity of supervision and the amount and focus of supervisory action will increase in line with the perceived risk profile of a credit union. One advantage this has for credit unions is that the cost of supervision, in terms of management time or through direct costs (e.g. reporting accountants' fees), should be more directly related to its risk.
 22. From the national federation's perspective, the allocation of its own resources according to risk - devoting more supervisory effort to those credit unions that have a high-risk profile - will be more efficient.

Coverage

23. CURBSS will be available to all credit unions under the network of the national federation as 'in-system' protection.
24. In undertaking its supervision, the national federation will not seek to set higher standards as set by the regulatory body. This is to ensure that credit unions will be more prepared for the government supervision. The national federation will liaise as necessary with relevant regulatory body to provide information for them to understand CURBSS approach to supervision, including the extent to which supervision is carried out.

Definitions

25. For ease of reference and unless otherwise stated, the use of the word 'credit union' throughout this paper refers to financial cooperative institutions. Thus, this refers to:
 - Credit Cooperatives
 - Savings and Credit Cooperatives (SACCOS)
 - Thrift and Credit Cooperative Society (TCCS)
 - Savings and Credit Cooperative (SCC)
 - People's Credit Fund (PCF)
 - Village Bank
 - Community Based Financial Institution (CBFI)
26. In some circumstances, risk based supervision is also applicable to Multi-Purpose cooperatives wherein financial services represent more than 80% of its business.

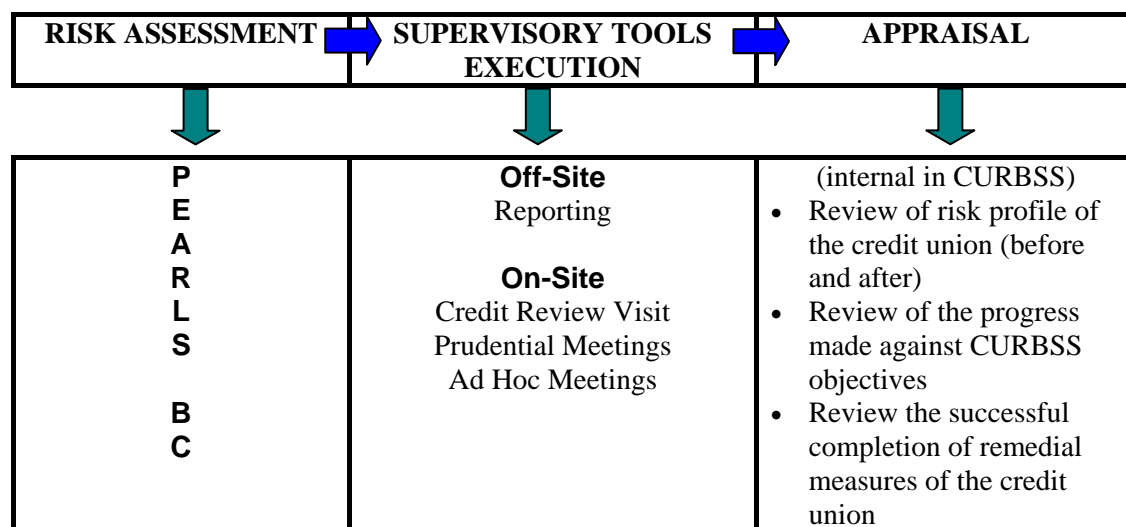
2 CURBSS

Framework

Synopsis

27. An overview of CURBSS framework is shown in Figure 1. This describes the CURBSS process into risk assessment, supervision tools execution and appraisal.
28. In practice, the process is not self-contained but rather is dynamic because new information will be received throughout the process, which may require adaptation or revision of supervisory actions and initiatives at any stage.
29. Each of the phases takes place during a ‘supervisory period’, which is then length of time between undertaking formal risk assessments on a particular credit union. The period will vary according to the business and control risk profile of the credit union concerned. From six months for a credit union, whose overall risk profile is low and whose business and control framework are stable. For a credit union whose overall risk profile is classified as very high or for a credit union undergoing major change, up to two years, or possibly longer.
30. In each supervisory period, CURBSS will undertake a formal **risk assessment** using ____ evaluation factors. This assessment will be performed by analyzing information, which the CURBSS already has available and from a series of meetings (which will normally take place in a short, discrete period), with senior management of the credit union. The objective of this phase is to identify, in a systematic manner, the business or inherent risks of a credit union and to assess the adequacy and effectiveness of its controls, organization structure and management in order to establish the supervisory program. Through this risk-based approach to supervision, national federation’s CURBSS will be well placed to judge whether a credit union meets the minimum criteria for authorization.
31. After each risk assessment, CURBSS will feed back its views on the credit union’s risk profile in a letter to the credit union and. The letter will also contain details of any remedial action CURBSS requires the credit union to take, and of the supervisory program comprising the **tools of supervision**, which the CURBSS intends to apply. These tools will be targeted at areas considered to be of higher risk and will be used to investigate other potentially higher risk areas identified during the risk assessment. The results of the tools will be examined as they become available, which may require CURBSS to reassess the risk profile of the credit union, require the credit union to take remedial actions or for the CURBSS to take appropriate supervisory action.

Table 1



32. During the course of the supervisory period, CURBSS will constantly evaluate the information it receives. In addition, CURBSS will undertake a formal **evaluation** to ensure that the credit union has implemented any agreed remedial actions, that CURBSS has completed its original work plan; that the findings of the supervisory tools have been acted upon and to assess the effectiveness of its own supervision. The conclusions from the evaluation will be a key input into the next risk assessment.
33. Where either CURBSS identifies significant concerns from the risk assessment or at any time during the supervisory period, it will seek appropriate and timely remedial action from the credit union.
34. Actions available to the CURBSS include:
 - i. *Increasing the credit union's institutional capital requirement* – CURBSS can require an increase in the institutional capital requirement of the credit union.
 - ii. *Suspension of any officials or key staff* – such action may be deemed necessary by CURBSS if the continuation of the services of such officials due to the widespread misconduct or mismanagement in the past and future operations.
 - iii. *Abolition of a financial product* - CURBSS may cancel a financial product (s) from the service of offering of a credit union if such product is creating consistent financial failure to the credit union and its continuation may cause significant risk in the safety and soundness of a credit union.
 - iv. *Formal supervisory action under the regulation of Stabilization Fund* - such action may be in the form of restrictions on the credit union's business, either formal or informal, or revocation of a credit union's membership if there is reasonable uncertainty as to whether the credit union is engaging in unacceptable business practices.

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a step by step guide

35. In each supervisory period, CURBSS will perform a risk assessment, take appropriate supervisory action, apply the tools of supervision and undertake a formal evaluation. Although these are described in this, paper as discrete phases, there will be considerable interaction among them.
36. CURBSS will determine the length of the supervisory period after completing each risk assessment. During the supervisory period, credit union's management should be proactively contacting CURBSS to explain any significant changes to the business risk profile or control environment. In addition, CURBSS will use the tools of supervision to ensure that it is aware of significant developments and changes to the credit union's risk profile, business or control structure. CURBSS may alter the length of the supervisory period at any time.

Introduction of the Risk Assessment Framework

37. As designed, it establishes statutory/supervisory objectives and identifies the individual institutions' risks that may threaten these objectives and outlines the supervisory tools to mitigate them.
38. The framework involves a series of structured stages that are designed to:
 - focus the supervisor's attention on the risks that threaten the achievement of supervisory objectives; and
 - enable the supervisor devise a risk mitigation program to address those risks.
39. The Framework is premised on the following main supervisory objectives:
 - i) Promoting stability and soundness of the credit union system;
 - ii) ensuring consumer protection; and

iii) reducing financial crimes.

Description of the Framework

40. The framework is in six stages as illustrated in Figure 2 below. However, at the commencement of the implementation of the Risk-Based Framework, there will be seven stages incorporating the full-scale maiden examination.
- Stage 1 - Full scope maiden examination
 - Stage 2 - Impact assessment
 - Stage 3 - Risk assessment
 - Stage 4 - Development of risk mitigation program
 - Stage 5 - Evaluation and validation
 - Stage 6 - Communicating the results of the assessment and risk mitigation program
 - Stage 7 - Implementation of the risk mitigation program, on-going assessment of the credit union and response to risk escalation.

Full Scope Maiden Examination

41. Full Scope Maiden Examination covering 20 risk elements (as detailed ____ will be conducted at the commencement of the risk-based supervisory process. The 20-risk elements cover the full range of risks in a credit union. This stage will be a one-off event, as subsequent examinations will depend on the CURBSS assessment and perception of the risks of individual credit union.

Impact Assessment

42. The first step at this stage is to determine the potential impact of a credit union, in the event of distress, on the entire financial system by appraising quantitatively, balance sheet items such as total assets and deposits against defined **impact thresholds**. This will indicate the scale and significance of the problem if it were to occur. The credit union will then be categorized into impact bands - Very High, High, Medium, Low and Very Low. The impact threshold is as shown in Figure 2 below.

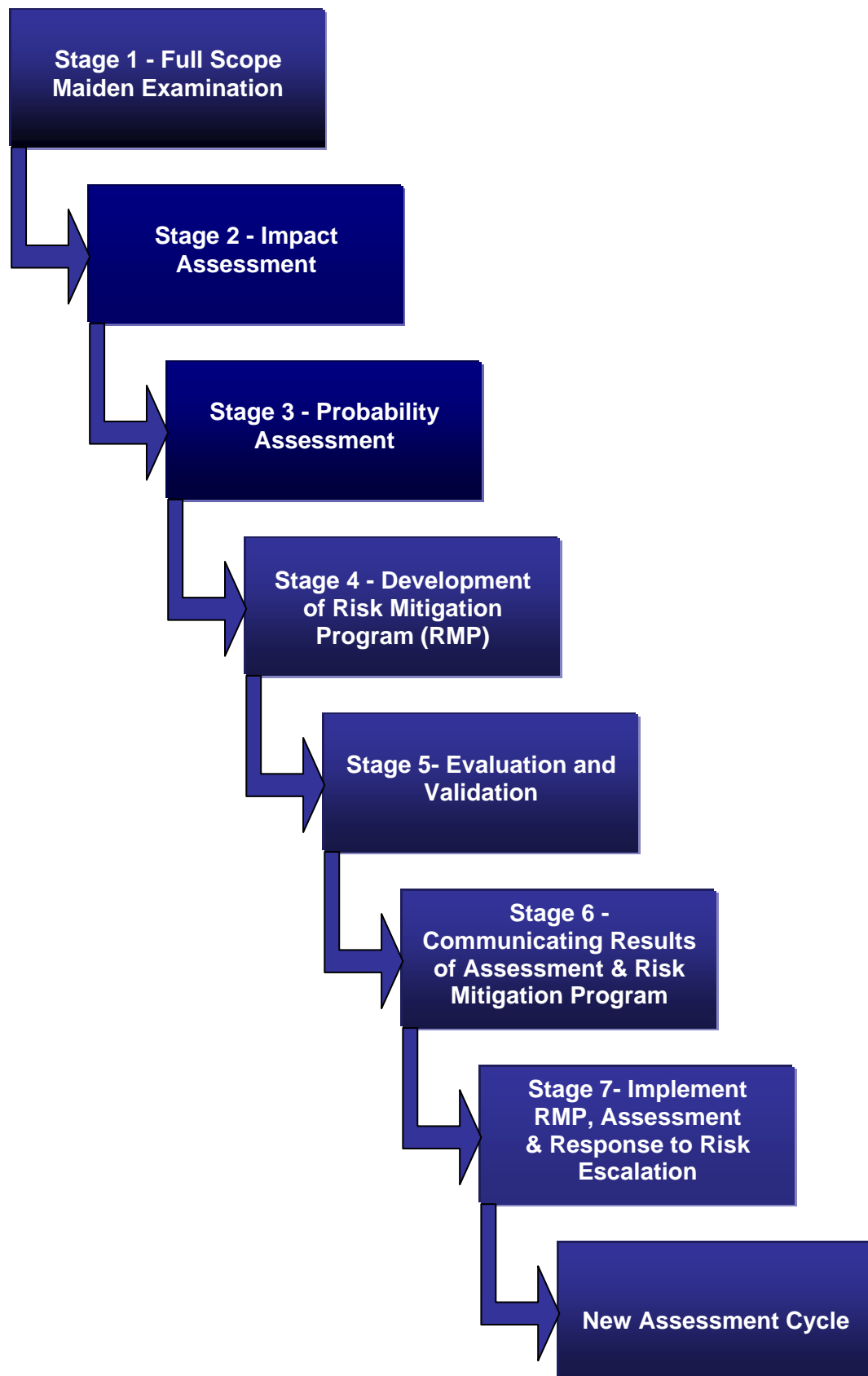
Table 2

Thresholds	Total Assets			Total Shares and Deposits		
	Million	Market Share %	Number of Credit Unions	Million	Market Share %	Number of Credit Union
Very High	Above 100			???		
High	51 – 100			???		
Medium	11 – 50			???		
Low	5 – 10			???		
Very low	< 5			???		

This will vary in different countries

A credit union's risk impact category is the higher of the two impact parameters. For example, if a credit union has "High" impact rating using the assets parameter and has a "medium" or "Low" rating using the deposits parameter, its impact classification will be "High".

Figure 1 - The Credit Union Risk Assessment Framework



Risk Assessment of Credit Unions

43. At this stage, the focus is to assess the likelihood of various credit union-specific risks. Credit unions will be assessed based on a risk map, which takes into account external events or threats (environmental risks) and credit union-specific risk issues and scores each of these risks in a common way. This will involve off-site assessments and on-site visits to complement available information on a credit union.
44. **Environment Risks** - These are risks that are external to the financial institution, which directly or indirectly affect the credit union's business or control risks. Environmental risks will not be assessed directly under this framework, as their effect will be captured in the assessment of credit union-specific risks and sector wide assessment.
45. **Credit Union Specific Risk Assessment** - involves determining where the risks arise and which statutory objectives they may affect. The assessment will focus on the 20 risk elements structured into four business risk groups and five control risk groups.
 - i. **Business Risks** are derived from the overall philosophy of the credit union and include issues of strategy, target market, products and services, and the risk attached to the financial soundness of the institution.
 - ii. **Control Risks** are the risks arising from the failure and/or inadequacies of systems, processes and procedures as well as organization and culture.
46. The main business and control risk elements adopted include the risks described in Table below:

Table 3

	Risks	Description of Risks
A. BUSINESS RISKS		
1	Strategy	
i)	Quality of corporate strategy or Nature of Business	<p>The risks arising from the overall strategy of the credit union. These include the quality of the strategic planning process, the achievability of the strategy, the implications of the strategy, particularly for risk appetite, and the record of accomplishment of implementation.</p> <p>Also it involves risks arising from the characteristics of the business that the credit union is targeting going forward, such as risks from credit union's products, services and members and users as well as the interrelationships between them.</p>
2	Market, Credit and Operational Risk	
ii)	Credit Risk	<p>The risks arising from the type and nature of credit activities undertaken by a credit union. These include the risk appetite of the credit union, the nature of counterparty exposures involved in the credit union's products and services, portfolio characteristics and the nature and extent of credit risk mitigation. The challenges posed to a credit union under this risk area:</p> <ul style="list-style-type: none"> – Default probability and low recovery rate of the loan – Loan pricing – Loss reserve/provision – Diversification of loan portfolio

	Risks	Description of Risks
iii)	Market Risk	The risk of losses in on and off balance sheet positions arising from movements in market prices. These include the risk appetite of the credit union, the nature of market risk exposures involved in the credit union's products and services, and portfolio characteristics arising from adverse movements in market rates/prices, interest rates, foreign exchange or equity prices. This would apply in savings, loans and financial investments.
iv)	Operational Risk	The risks arising from the type and nature of operational risk involved in the credit union's activities. These include direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events.
v)	Litigation/Legal Risk	The risks arising from the type and nature of the credit union's contractual agreements. These include the risk that contracts may not be enforceable under applicable law and that the nature of the product/service may render the credit union particularly vulnerable to litigation.
3	Financial Risk	
vi)	Protection of Assets	<p>The risk arising from inadequate protection of assets measured by the adequacy of the allowances for loan losses against the amount of delinquent loans and the allowances for investment losses with the total amount of non-regulated investments.</p> <p>Inadequate loan loss protection produces two undesirable results: inflated asset values and fictitious earnings. Most credit unions are not anxious to recognize loan losses, and much less, to charge them off against earnings. That unwillingness leads to widespread abuse of the principles of safety and soundness. Reported net income is overstated, asset values are inflated, provisions for loan losses are inadequate, and member savings are not adequately protected.</p>
vii)	Effective Financial Structure	The risk arising from the imbalance of fund sources and asset investment may result to liquidity problem, reduced income, and slow growth. Credit unions are encouraged to maximize productive assets as the means to achieve sufficient earnings. Since the loan portfolio is the most profitable asset of the credit union, maintaining 70-80% of total assets in the loan portfolio is recommended. Excess liquidity is discouraged because the margins on liquid investments (e.g., savings accounts) are significantly lower than those earned on the loan portfolio. Non-Earning assets are also discouraged because once purchased, they are often difficult to liquidate.
viii)	Assets Quality	The risk arising from a non-productive or non-earning asset that does not generate income for the credit union. An excess of non-earning assets affects credit union earnings in a negative way.
ix)	Rates of Return and Costs	The risks arising from the nature of earnings of the credit union and its capacity to meet the financial costs and operating expenses. The volatility of revenues could pose risks to credit union operation in the future.

	Risks	Description of Risks
x)	Liquidity	The risk of loss due to inability of a credit union to meet cash obligations. Effective liquidity management becomes a much more important skill as the credit union shifts its financial structure from member shares to more volatile deposit savings.
xi)	Signs of growth	The risk that a credit union may not maintain its asset values if a strong, accelerated growth of assets, accompanied by sustained profitability is not achieved. Growth by itself is insufficient. CURBSS will link the growth to profitability, as well as to the other key areas by evaluating the strength of a credit union.
4	Members	
xii)	Type of members	The risks arising from the characteristics of the current members' base.
B. CONTROL RISKS		
1	Treatment of Members	
xiii)	Service delivery, training, recruitment, remuneration and security of members	The risks arising from the recruitment quality and training procedures for customer service, remuneration scheme for employees and controls over customers' monies and assets when transacting with the credit union.
xiv)	Disclosure and adequacy of product literature	The risks arising from the nature of product advertisement issued by the credit union.
2	Organization	
xv)	Clarity of ownership/group structure ¹	The risks arising from the structure of the credit union and the relationship among entities. These include the nature of the legal and ownership structure, management arrangement, reliance on centralized functions, financial health and activities of subsidiaries and affiliates.
3	Internal Systems and Controls	
xvi)	Risk management system	The risks arising from the nature and effectiveness of the systems and procedures in place to identify, measure, monitor and control the risk of the business in an appropriate and timely manner. These include credit risk, market risk, operational risk, legal risk and new product risk.
xvii)	Information and Communication Technology	The risks arising from the nature of management information and controls over the ICT infrastructure. These include the adequacy, accuracy, relevance, timeliness, procedure for implementation and procurement and security framework as well as the effectiveness and efficiency of the ICT infrastructure.
xviii)	Compliance/Internal Audit	The risks arising from the nature and effectiveness of the compliance and internal audit functions. These include its mandate, structure, staffing, methodology and effectiveness, as well as the nature of policies, procedures and controls and their implementation

¹ This is in the case the credit union/cooperative also operates a subsidiary business under its organizations set up or even independently. However, such undertakings are funded by the credit union.

	Risks	Description of Risks
4	Board, Management and Staff	
xix)	Governance and Human Resources	The risks arising from the nature of the board composition, quality of top management, and human resources. These include the role and effectiveness of the board, non-executive directors and board committees, management responsibilities and delegation as well as recruitment, training, remuneration, disciplinary procedure and availability of resources for staff.
5	Business and Compliance Culture	
xx	Relationship with Regulators	The risks arising from the nature of the organization's relationships with the regulator, other regulators and recent regulatory history. These include the adequacy, relevance, reliability and timeliness of financial and regulatory reporting.

Risk-to-Objectives

47. The Risk-to-Objectives (RTOs) are risk elements that threaten the achievement of supervisory objectives. The risk to the three supervisory objectives will include the following as shown in Table 4.

Table 4: Risks to Objectives

	Supervisory Objectives	Risk-To-Objectives
1	Promoting Safety and Soundness	Financial failure
		Poor corporate governance
		Widespread misconduct and mismanagement
		Financial crime, fraud or dishonesty
2	Ensuring Protection of Members Interest	Financial Failure
		Widespread misconduct and mismanagement
		Financial crime, fraud or dishonesty
		Poor corporate governance
		Inadequate member understanding
3	Reduction of financial crimes	Financial crime, fraud or dishonesty

48. In view of the fact that some RTOs are common threats to more than one supervisory objective as indicated above, it is summarized under five broad categories:
- i) Financial Failure (Objectives 1 & 2)
 - ii) Misconduct and Mismanagement (Objectives 1, 2 & 3)
 - iii) Poor Corporate Governance (Objectives 1 & 2)
 - iv) Inadequate Member Understanding (Objective 2)
 - v) Financial Crime/Fraud or Dishonesty (Objectives 1, 2 & 3)

Scoring of Credit Union-Specific Risks

49. Having identified the risk elements, the risk assessment will involve measuring the threat of each credit union's risk element against the RTO categories using the risk map, as shown in Table 5 below. The measurement will be on a scale of 1 – 5 with 1 representing the lowest risk and 5 the highest. The risk bands will be as follows:
- i) 1 Very Low
 - ii) 2 Low
 - iii) 3 Medium
 - iv) 4 High
 - v) 5 Very High
50. The overall credit union specific risk score will be derived as shown in the risk matrix in Table 5. Following the identification of the risks, CURBSS assigns various attributes to each risk.

Impact Assessment: At a minimum, relevant period, impact, and probability of occurrence are assigned. Time frame is the beginning and end dates of when a risk may occur. Then CURBSS sets impact definitions. The Risk Matrix impact definitions are:

- **C (Critical):** If the risk event occurs, the program will fail. Minimum acceptable requirements will not be met.
- **S (Serious):** If the risk event occurs, the program will encounter major cost/schedule increases. Minimum acceptable requirements will be met. Most secondary requirements may not be met.
- **Mo (Moderate):** If the risk event occurs, the program will encounter moderate cost/schedule increases. Minimum acceptable requirements will be met. Some secondary requirements may not be met.
- **Mi (Minor):** If the risk event occurs, the program will encounter small cost/schedule increases. Minimum acceptable requirements will be met. Most secondary requirements will be met.
- **N (Negligible):** If the risk event occurs, it will have no effect on particular aspects of operation. All requirements will be met.

Probability - Po (%): Probability of occurrence is the team's assessment of the likelihood that a risk may happen. Estimating the probability of occurrence may be difficult in practice. Fortunately, all that matters when using Risk Matrix is the relative order of the probability estimates (which risks are more likely to occur). For this purpose, it is sufficient to estimate probabilities using a relative scale:

- i. **0 - 10%** : very unlikely the risk will occur
- ii. **11- 40%** : unlikely the risk will occur
- iii. **41- 60%** : even likelihood the risk will occur
- iv. **61- 90%** : likely the risk will occur
- v. **91- 100%** : very likely the risk will occur

51. The risk ratings will be based on the following Risk Rating Scale on Table 5

Table 5 – Risk Rating Scale

Probability	Impact Category				
	Critical	Serious	Moderate	Minor	Negligible
91 – 100% - very likely the risk will occur	Very High	Very High	High	Medium	Medium
61 – 90% - likely the risk will occur	Very High	High	High	Medium	Low
41 – 60% - even likelihood the risk will occur	High	Medium	Medium	Medium	Low
11 – 40% - unlikely the risk will occur	High	Medium	Low	Low	Low
0-10% - very unlikely the risk will occur	Medium	Low	Low	Very Low	Very Low

52. Risk Map is the summary of the Business and Control Risks of the credit union. The rating is based on the Risk Rating Scale on Table 5.

Table 6 – Risk Map

		Financial Failure	Misconduct & Mis-management	Poor Corporate Governance	Inadequate Member Under-standing	Financial Crime, fraud & dishonesty
A. BUSINESS RISKS						
1	Strategy					
i)	Quality of corporate strategy or Nature of Business					
Strategy Score						
2	Market, Credit and Operational Risk					
ii)	Credit Risk					
iii)	Market Risk					
iv)	Operational Risk					
v)	Litigation/ Legal Risk					
Market, Credit & Operational Risk Average Score						
Market, Credit & Operational Risk Score						
3	Financial Risk					
vi)	Protection of Assets					
vii)	Effective Financial Structure					
viii)	Assets Quality					
ix)	Rates of Return and					

	Costs					
x)	Liquidity					
xi)	Signs of growth					
Financial Risk Average Score						
Financial Risk Score						
4	Members					
xii)	Type of members					
Members Risk Score						
Business Risk Average Score						
BUSINESS RISK SCORE						
B. CONTROL RISKS						
1	Treatment of Members					
xiii)	Service delivery, training, recruitment, remuneration and security of members					
xiv)	Disclosure and adequacy of product literature					
Treatment of Members Risk Average Score						
Treatment of Members Risk Score						
2	Organization					
xv)	Clarity of ownership/ group structure ²					
Organization Risk Score						
3	Internal Systems and Controls					
xvi)	Risk management system					
xvii)	Information and Communication Technology					
xviii)	Compliance/ Internal Audit					
Internal Systems and Controls Risk Average Score						

² This is in the case the credit union/cooperative also operates a subsidiary business under its organizations set up or even independently. However, such undertakings are funded by the credit union.

Internal Systems and Controls Risk Score						
4	Board, Management and Staff					
xix)	Governance and Human Resources					
Board, Management and Staff Risk Score						
5	Business and Compliance Culture					
xx	Relationship with Regulators					
Business Compliance Risk Score						
Business Risk Average Score						
CONTROL RISK SCORE						
CREDIT UNION SPECIFIC RISK SCORE PER RTO GROUP						

53. The scores for each of the business control risks elements in the risk map are aggregated to arrive at the average risk scores.
54. The assessment of business risks as low control risks will often mitigate the overall business risks and vice versa. For instance, where the aggregate score under the business risks is Very High and the control risk Very Low, then the overall score will be Medium. Conversely, when business risk is Very Low but control risk is Very High, the aggregate rating should be considered High.
55. The overall credit union specific risk score will be derived as shown in the risk matrix in Table 7.

Table 7 – Overall Credit Union Specific Risk Score Matrix

Control	Business				
	Very High	High	Medium	Low	Very Low
Very High	Very High	Very High	High	Medium	Medium
High	Very High	High	High	Medium	Low
Medium	High	Medium	Medium	Medium	Low
Low	High	Medium	Low	Low	Low
Very Low	Medium	Low	Low	Very Low	Very Low

56. The next step will be to determine the overall risk. A combination of the credit union Risk to Objectives score and the impact score gives a measure of the overall risk posed to the supervisory objectives of the credit union system. The sample matrix is derived from no. 47-48 of this manual.

Table 8 – Overall Risk to Objectives Rating

No	Supervisory Objectives	Financial Failure	Misconduct & Mis-management	Poor Corporate Governance	Inadequate Member Understanding	Financial Crime, fraud & dishonesty
1	Promoting Safety and Soundness					
2	Ensuring Protection of Members Interest					
3	Reduction of financial crimes					

57. The credit union's overall risk rating will be used to take informed decisions on the type and frequency of regulatory response to be adopted.
58. Preliminary Feedback – at this stage, significant findings from the risk assessment will be discussed with the credit union board and management, following which the risk mitigation program will be adopted and formalized. The purpose of the meeting provides an opportunity for the credit union to mitigate risks and adopt a sustainable risk management program for the credit union.
59. Development of Risk Mitigation Program (RMP) – the risk mitigation programs are supervisory actions that will be taken by CURBSS and the credit union management to mitigate the risks found in the assessment. The RMP will address the nature of risks, intended outcome, and the actions to be taken by CURBSS and the credit union within a reasonable timeframe.
60. Supervisory Tools – these are the tools used to diagnose and mitigate risks. These are classified into four broad groups:

Table 8 – Supervisory Tools

Diagnostic	Monitoring	Preventive	Remedial
<ul style="list-style-type: none"> On-site and off-site examination Investigations Risk assessments 	<ul style="list-style-type: none"> Off-site surveillance On-site visits External auditors Internal auditors 	<ul style="list-style-type: none"> Disclosures Member education Public Statements Regulatory Standards Credit union system standards (National federation) such as ACCESS Contingency planning Management Tools (policies, 	<ul style="list-style-type: none"> Compensation schemes Complaints resolution Disciplinary actions Interventions Penalties Amalgamation Suspension Termination

		systems and procedures)	
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Note: this can also be classified into CURBSS and credit union

61. The following are the uses of the supervisory tools:
- Diagnostic tools will be used mostly to identify and/or measure risks
 - Monitoring tools will be used to keep track of risks on an on- going basis,
 - Preventive tools are meant to mitigate or reduce risks
 - Remedial tools will be used to address defined risks.
62. The selection of regulatory tools will be based on the overall rating of the credit union:
- Very High or High, remedial and preventive tools will mainly be applied
 - Medium, monitoring and preventive tools will be applied
 - Low and Very Low, diagnostic and monitoring tools will be mainly applied.
63. Determining the Supervisory Period - The supervisory period is the time between one formal risk assessment and another or the period for which the risk mitigation program lasts. This will vary depending on the overall risk rating of a credit union and will range between 12 and 24 months. The following are the suggested time frame for the supervisory period:
- Very High and High - 12 months
 - Medium and Low - 18 months
 - Very Low - 24 months
- However, any credit union that is rated as a ‘Very High’ impact credit union should have a supervisory period of 12 months.
64. Evaluation and Validation - having completed the risk assessment and the risk mitigation program, the next stage entails conducting an internal evaluation and validation, before the results are adopted for implementation. The validation and testing process is expected to provide quality control and ensure consistency. A committee whose members will be independent of the risk assessment of a particular credit union will conduct it. The process will include the following:

Table 8 – Evaluation and Validation Procedure

Types of Review	Reviewer
A review of the risk assessment for the completeness and appropriateness of the scores assigned	Stabilization Fund Head and Consulting Department Head
A review of any business and control risks rating	Do
A review of the risk mitigation program for completeness, adequacy, proportionality and optimal allocation of resources	Do
Approval of the overall risk rating and mitigation program	CEO with the recommendation of the Stabilization Fund Head

Communicating the Results of the Assessment and Risk Mitigation Program to credit union

65. The results of the risk assessment, and the threat it poses to achieving supervisory objectives, the on-site examination report and the risk mitigation program, will be formally communicated to the credit union.
66. The letter communicating the result of the risk assessment will contain the following:
 - i. The credit union-specific risk scores and impacts against each objective
 - ii. Key findings that lead to the credit union-specific risk scores of “Very High” or “High”
 - iii. The length of the regulatory period
 - iv. A requirement that the credit union should, at all times, communicate significant events that may affect the risk assessment to CURBSS
67. The letter also, will include findings of on-site visit, which should contain the following:
 - i. The CURBSS’ view of key environmental or external risks facing the credit union (where appropriate) that provides the context for the credit union-specific issues identified in the risk assessment
 - ii. The detailed comments and observations of the examiner
68. Finally, the letter will also inform the credit union of the prescribed risk mitigation program that will set out the following:
 - i. The issues identified by CURBSS
 - ii. The intended outcome CURBSS seeks to achieve for each issue
 - iii. The action to be taken to achieve the intended outcome, specifying whether the action is to be taken by CURBSS or the credit union
 - iv. The timetable of the action
69. CURBSS addresses the letter to the Board of Directors to emphasize the importance placed on the board’s responsibility for setting up and operating effective internal controls and running the credit union’s business in compliance with the standards set by the regulation and sound business practices.
70. The credit union will be required to respond formally to the letter confirming that it will follow the prescribed risk mitigation program (RMP).
71. If the credit union declines to carry out the actions in the RMP, CURBSS will consider the use of other supervisory tools. CURBSS also considers whether the credit union has breached any rule, principle or threshold condition and whether other formal actions, consistent with the regulation of the Federation or the Stabilization Fund, should be taken.
72. The issuance of the letter will trigger-off implementation actions, as specified in the RMP, by both the CURBSS and the credit union.

Implementation of Risk Mitigation Program, On-Going Assessment and Response to Risk Escalation

73. Where a credit union's supervisory period exceeds 12 months, an interim review will be carried out before the expiration of the supervision period to determine whether the earlier risk assessment and risk mitigation program are still applicable. The review will also determine whether there has been an escalation of the risks and the appropriateness of the risk mitigation program. The review will be an off-site assessment, covering all the risk factors, issues and the supervisory tools deployed.
74. Reviews could also be carried out when any of the following occurs:
- i. Developments in the external environment that could materially affect the credit union
 - ii. Changes in the credit union's business, strategy, infrastructure or management
 - iii. Where the supervisory tools deployed have not been effective
 - iv. Successful achievement of desired outcomes in the RMP, which should ordinarily lead to an improvement in the risk profile of the credit union

4

Credit union's risk management process

Introduction

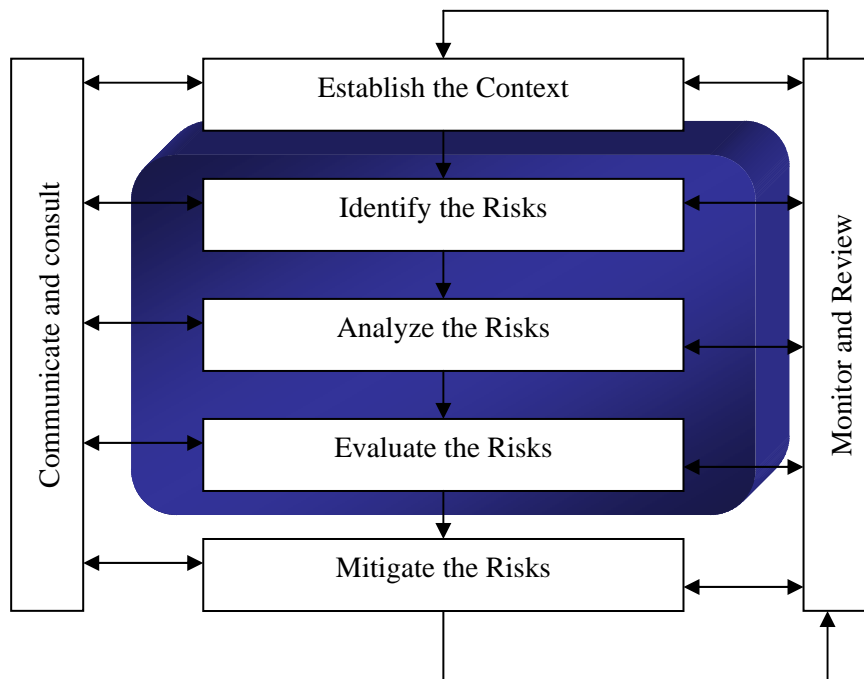
- 75. This chapter describes the risk management process of a typical credit union and proposes guidelines for developing a risk management model for a credit union. Such a model would facilitate the assessment of the risk that credit unions may pose to the overall supervisory objectives and to proactively decide on a menu of responses to such risks, should they arise.
- 76. The credit union's risk management model will facilitate CURBSS assessment of the effectiveness of a credit union's own risk management system and thereby determine the risk it poses to supervisory objectives.
- 77. It would assist in determining the degree of reliance to be placed on senior management's commitment to consider and address changes in the environment that may create new risks or change existing risks significantly.
- 78. Supervisory actions that would be taken will largely be driven by the adequacy of the credit union's risk management model vis-à-vis its risk appetite.

Risk Management Process

- 79. Risk refers to the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of an organization's objectives. The phrase "the expression of the likelihood and impact of an event" implies that, as a minimum, some form of quantitative or qualitative analysis is required for making decisions concerning major risks or threats to the achievement of an organization's objectives. For each risk, two

calculations are required: its likelihood or probability; and the extent of the impact or consequences.

80. The risk management process involves the identification, measurement, monitoring and control of the institution's risks. It entails a proper understanding of the institution and its various activities.
81. The purpose of the Integrated Risk Management Framework is to:
- provide guidance to advance the use of a more corporate and systematic approach to risk management;
 - contribute to building a risk-smart workforce and environment that allows for innovation and responsible risk-taking while ensuring legitimate precautions are taken to protect the public interest, maintain public trust, and ensure due diligence; and
 - propose a set of risk management practices that credit unions can adopt, or adapt, to their specific circumstances and mandate.
82. The risk management process consists of a series of steps that, when undertaken in sequence, enable continual improvement in decision-making. The elements of the risk management process are summarized in -----



83. Minimum Information Required – the various risk elements and the type of information that credit union could consider are summarized in table:

	RISK ELEMENT	ASSOCIATED RISKS/TYPES OF INFORMATION
Business Risk Group		
1	Quality of corporate strategy	Quality of strategic planning process, implications of the strategy vis -à-vis the risk appetite and achievability of strategy, the institutions services and products, members and the inter-relationships between them.
2	Credit Risk	Type and nature of Credit risk undertaken, risk appetite of the credit union; nature of loan exposures involved in its products & services, portfolio characteristics and the nature & extent of credit risk mitigation.
3	Market Risk	Types & nature of market risk undertaken, risk appetite, nature of market risk exposures involved in its products & services and portfolio characteristics.
4	Operational Risk	Direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events.
5	Litigation/Legal Risk	Type & nature of contractual agreements vis -à-vis enforceability under applicable laws and the vulnerability of nature of product or service to litigation.
6	Protection of Assets	<p>The risk arising from inadequate protection of assets measured by the adequacy of the allowances for loan losses against the amount of delinquent loans and the allowances for investment losses with the total amount of non-regulated investments.</p> <p>Inadequate loan loss protection produces two undesirable results: inflated asset values and fictitious earnings. Most credit unions are not anxious to recognize loan losses, and much less, to charge them off against earnings. That unwillingness leads to widespread abuse of the principles of safety and soundness. Reported net income is overstated, asset values are inflated, provisions for loan losses are inadequate, and member savings are not adequately protected.</p>
7	Financial Structure Risk	The risk arising from the imbalance of fund sources and asset investment may result to liquidity problem, reduced income, and slow growth. Credit unions are encouraged to maximize productive assets as the means to achieve sufficient earnings. Since the loan portfolio is the most profitable asset of the credit union, maintaining 70-80% of total assets in the loan portfolio is recommended. Excess liquidity is discouraged because the margins on liquid investments (e.g., savings accounts) are significantly lower than those earned on the loan portfolio. Non-Earning assets are also discouraged because once purchased, they are often difficult to liquidate.

	RISK ELEMENT	ASSOCIATED RISKS/TYPES OF INFORMATION
8	Assets Quality Risk	The risk arising from a non-productive or non-earning asset that does not generate income for the credit union. An excess of non-earning assets affects credit union earnings in a negative way.
9	Rates of Return and Costs Risk	The risks arising from the nature of earnings of the credit union and its capacity to meet the financial costs and operating expenses. The volatility of revenues could pose risks to credit union operation in the future.
10	Liquidity Risk	The risk of loss due to inability of a credit union to meet cash obligations. Effective liquidity management becomes a much more important skill as the credit union shifts its financial structure from member shares to more volatile deposit savings.
11	Growth Risk	The risk that a credit union may not maintain its asset values if a strong, accelerated growth of assets, accompanied by sustained profitability is not achieved. Growth by itself is insufficient. .
12	Types of Members	Member base & characteristics.
13	Types of Products and services	Complexity, tenor and performance of products
Control Risk Group		
14	Service delivery, training, recruitment, remuneration and security of members	Recruitment quality and training procedures, adequacy of training plans, procedures for determining training needs and maintaining competence, remuneration policy and impact on misconduct & fraud, safety and control over members' monies and assets.
15	Disclosure and adequacy of product literature	Nature of product advertisement is sued, the content of the advertisement and product literature.
16	Clarity of ownership	Nature of Legal and ownership structure, openness of structure to regulators, jurisdiction and characteristics of shareholders or directors, nature of other group entities, management arrangements
17	Risk Management System	Nature and effectiveness of systems and procedures to identify, measure, monitor and control risk in an appropriate & timely manner.
18	Information Communication Technology	Adequacy, accuracy, relevance and timeliness as well as effectiveness and efficiency of distribution of management information; adequacy of resources to support IT infrastructure, procedures for implementation and procurement, effectiveness of security framework and appropriateness of IT platform to run the business.
19	Compliance/Internal Audit	Mandate, structure, staffing methodology and effectiveness of the compliance and internal audit functions.
20	Corporate Governance and Human resources	Role and effectiveness of the Board, non-executive directors & Board Committees; Recruitment, Training, Remuneration, disciplinary procedures & resources.
21	Relationship with regulators	Relationship with major (or lead) regulator and other regulators, including recent regulatory history.

Guidelines for Developing Individual Risk Management Model

- 84. In promoting a stable and sound financial system, the supervisory authorities place high priority in credit unions establishing effective risk management processes. The guideline aims at aiding that process.
- 85. The processes put in place for the effective management of risks in any financial institution underscores the ability of board and management of each credit union to identify, measure, monitor and control all risks inherent in its activities.

Policy Statement

- 86. It is the overall responsibility of the Board and Management of each credit union to ensure that adequate policies are in place to manage and mitigate the adverse effects of both business and control risks in its operations.
- 87. Each credit union should develop and implement appropriate and effective information systems and procedures to manage and control risks in line with the risk management policies of the credit union.
- 88. CURBSS will appraise the adequacy of the risk management processes of each credit union. All the facets of the risk management processes of the credit union will be reviewed as the need arises to take account of changing circumstances.
- 89. Each credit union should submit a copy of its Risk Management Process (and any amendments thereto) to CURBSS and the Stabilization Fund for appraisal and review.

Issues to Consider in Developing Guidelines for Risk Management Processes

90. Self Assessment

- i. Each credit union is expected to identify significant activities, types and levels of inherent risks and the adequacy of its risk management process.
- ii. Each credit union should assess itself to determine the level of risks inherent in its operations.

91. Risk Identification and Assessment

- i. This process involves identifying the risks inherent in a credit union's business activities, which may affect its business objectives.
- ii. Each credit union would need to assess the likelihood of risks crystallizing from within the credit union.
- iii. The risk assessment entails the development of a risk map by credit unions, which should take into account external events and threats

92. Risk Measurement Methods

- i. Credit unions would be required to score the risk elements identified in terms of size, duration and probability of adverse consequences.
- ii. The measurement should graduate risk levels, based on the scale or significance of the activities in relation to the credit union's risk management goals and objectives.

- iii. Thus, a risk element may be scored Very High, High, Medium, Low or Very Low.

93. **Risk Mitigation and Control Program**

- i. The risk mitigation program is a set of self regulatory actions designed to address the impact of risks and its associate problems if and/or when they occur.
- ii. The type of risk mitigation program that would be put in place would depend on the result of self-assessment carried out by the credit union.
- iii. Generally, risks viewed as Very High or High would require actions to be taken to mitigate such risks.
- iv. The mitigation program from the individual credit union's perspective would entail actions that are diagnostic, monitoring, preventive or remedial.
- v. Actions are preventive when they are aimed at preventing the occurrence of an identified risk and remedial where they are to address crystallized risks.
- vi. The risk control process involves the establishment of risk management standards. The standards to be set should be a deliberate policy of the credit union to achieve its business objectives.
- vii. The objective would be to minimize the occurrence of such identified risks and contain the effects of the risks when they occur.

94. **Risk Monitoring Process**

- i. Management should review the standards set for the credit union on a continuous basis, to ensure that they are appropriate to meet the set objectives. This would be achieved by appointing specific Risk Managers or designated staff who would review the adequacy or otherwise of the risk management processes across the organization.
- ii. It is the duty of the Chief Executive Officer of the credit union to ensure compliance with the risk controls put in place.

Credit union's supervisory processes

Introduction

- 95. This chapter details steps in off-site surveillance and on-site examination under the new Framework. The new Framework, based essentially on risk profiling of credit unions, would be largely carried out through baseline monitoring. Through analyses of information rendered by the credit union, the supervisor would monitor, identify and deal with credit union-specific risks, and provide an insight into industry developments.
- 96. Since supervisory action would be risk driven, routine monitoring visits will not be a dominant feature of the new Framework.

Off-Site Surveillance

- 97. The off- site function will principally be pre-emptive. It will aim at preventing, controlling and mitigating risks. It will aim at early identification of problems with a view to taking prompt corrective actions, thereby minimizing overall risk in the system.
- 98. In line with the Framework, off-site supervisory activity will involve risk identification and assessment; implementing and monitoring on-going corrective actions; providing statistical report to operators; discussions with management and/or external auditors; collaboration with on-site Examiners and identification of high risk areas for on-site examination.

Pre Conditions for Effective Off-Site Surveillance

99. Pre Conditions for Effective Off-Site Surveillance

- i. **Data Integrity** – The efficacy of RBS relies heavily on integrity of data upon which informed and accurate analysis of risks are based. Where information and data are either false or unreliable, assessment from the analysis conducted on such data would also be unreliable and faulty. Credit unions should adhere to financial standards that may include the proper valuation of loan portfolio, chart of accounts, and financial reporting.
- ii. **Legal Protection for Compliance Officers** - The Compliance Officers of credit union will play a very significant role under a risk-based supervision regime. Accordingly, there should be adequate legal protection for them. They are to ensure that returns comply with rules and regulation before appending their signatures. They should be made to operate within minimum operating standards.
- iii. **Legal Protection for Whistle Blower** - The supervisor needs to be alerted on happenings in the institutions being supervised that constitute threat to the supervisory objectives. One source of such information is the insiders of the credit unions and others whose information could be relied upon. To assure adequate protection for those providing the information, appropriate legal backing will be necessary.
- iv. **Fit and Proper Persons Test** - The process of carrying out the fit and proper persons test should be reviewed to make it more effective. The Chairman of the Board should not serve as the Chairman of Board Committees while the posts of Board Chairman and Managing Director/ Chief Executive Officer should not be vested in one person.

Off-Site Surveillance Processes

- i. **Impact Assessment of Credit Unions** - The off-site processes will commence with the impact assessment of credit unions. This entails determining the relative significance of a credit union to the entire system if it becomes unsafe or unsound. Balance sheet items, (i.e. total assets and total deposits) are compared against defined **impact thresholds**. This will indicate the scale and significance of the problem if it were to occur. The credit union will then be categorized into impact bands - Very High, High, Medium, Low and Very Low. The impact threshold is as shown in the table below:

Table --- Impact Thresholds

Thresholds	Total Assets			Total Shares and Deposits		
	Million	Market Share %	Number of Credit Unions	Million	Market Share %	Number of Credit Union
Very High	Above 100			???		
High	51 – 100			???		
Medium	11 – 50			???		

Low	5 – 10			???		
Very low	< 5			???		

- ii. **Credit Union Specific Risk Assessment** - This will involve an off-site review of the credit union-specific risk elements **in line with the Risk Review Guide detailed in Appendix 1**. Integrating the outcome of the on-site credit union-specific risk assessment with that of the offsite will complete the credit union-specific risk review.
- iii. **Development of Risk Mitigation Program** - once the credit union-specific risk assessment is completed; the Risk Mitigation Program (RMP) should be developed. The off-site and on-site Examiners as detailed below will develop this, jointly:
 - The risk mitigation programs (RMPs) are actions designed to address the issues identified at the risk assessment stage. The program will address the nature of the risk, intended outcome, actions to be taken by the supervisor and/or the credit union and the timeframe within which to implement the program.
 - This will involve the selection of supervisory tools, based on the severity and nature of the risk and the expected outcome.
 - The tools, which consist of actions to be taken either by the supervisor or the credit union, are classified under four broad groups as shown in the table below:

Table ---- – Supervisory Tools

Diagnostic	Monitoring	Preventive	Remedial
<ul style="list-style-type: none"> • On-site and off-site examination • Investigations • Risk assessments 	<ul style="list-style-type: none"> • Off-site surveillance • On-site visits • External auditors • Internal auditors 	<ul style="list-style-type: none"> • Disclosures • Member education • Public Statements • Regulatory Standards • Credit union system standards (National federation) such as ACCESS • Contingency planning • Management Tools (policies, systems and procedures) 	<ul style="list-style-type: none"> • Compensation schemes • Complaints resolution • Disciplinary actions • Interventions • Penalties • Amalgamation • Suspension • Termination

- iv. **Evaluation and Validation** - Having completed the risk assessment and the risk mitigation program, the next stage entails conducting an internal evaluation and validation, before the results are adopted for implementation. The validation and testing process is expected to provide quality control and ensure consistency. A group whose members will be independent of the risk

assessment team of a particular credit union will conduct this function. The process will include the following:

Types of Review	Reviewer
A review of the risk assessment for the completeness and appropriateness of the scores assigned	Stabilization Fund Head and Consulting Department Head
A review of any business and control risks rating	Do
A review of the risk mitigation program for completeness, adequacy, proportionality and optimal allocation of resources	Do
Approval of the overall risk rating and mitigation program	CEO with the recommendation of the Stabilization Fund Head

- v. **Communicating the Results of the Assessment and Risk Mitigation Program to the Credit Union** - The results of the risk assessment, and the threat it poses to achieving supervisory objectives and the risk mitigation program, will be formally communicated to the credit union.
- vi. **On-Going Assessment and Response to Risk Escalation** - After communicating the results of the assessment and RMP to the credit union, the next stage is the on-going assessment and response to risk escalation. The on-going assessment will also focus on prompt corrective actions and contingency plan to curtail possible escalation of risk. Apart from the risk assessment that is carried out for each credit union during the supervisory cycle, an on- going off- site assessment of the financial soundness of the credit union will continue. The process would include off-site rating of credit unions, sending offsite reports to credit unions, and review of compliance with prudential thresholds and guidelines.

On-Site Examination Process

- 100. The Risk-Based Supervision will commence with a full-scope examination of a credit union. Subsequently, the on-site examination will range from a full scope examination that will cover the 20 risk elements identified to a target examination as may be determined by the supervisory program developed for each credit union.
- 101. On-site visitation will be required at the following stages of the Framework.
 - i. Risk assessment
 - ii. Development of RMP
 - iii. Implementation of the RMP
 - iv. Commencement of a new assessment cycle

Examination Process

- 102. **The examination process will include the following phases:**
 - i. Examination Planning
 - ii. Examination Program
 - iii. Examination Procedures

Examination Planning

103. The examination planning will include the following:

i. **Institutional Overview Report** - The starting point for RBS is an understanding of the credit union being examined. The process begins with the review of all available information on the credit union. The Examination Team will prepare a report titled “Institutional Overview Report” in the form of an executive summary that concisely describes the credit union’s present condition as well as its current and prospective risk profile. The institutional Overview Report should contain, but not limited to the following:

- **Overall condition:** A general assessment of the credit union.
- **Structure:** The size, branch network and subsidiaries of the credit union and its organizational structure.
- **Strategic Initiatives:** A summary of the credit union’s strategies, key business lines, product mix, market emphasis, growth areas, etc.
- **Inherent Risks:** A highlight of areas of significant risk.
- **Corporate Overview:** A description of current business activities, revenue base and future prospects.
- **Management Overview:** Comments on the level of board oversight, strengths and weaknesses of leadership, weaknesses in risk management process, policy formulation and strategic planning emphasizing the participation of key executives, the adequacy of MIS, etc.
- **Financial Overview:** A brief analysis of the financial condition and trends in earnings, asset quality, capital adequacy, liquidity ratio, ROE, ROA, etc.
- Supervisory activity performed since the previous examination.
- Considerations for future on-site visits, etc.

ii. **Developing an Examination Planning Memorandum and Entry Letter**

To define the examination activities as well as provide information for the conduct of risk-based examination, two important documents must be prepared. These are the Examination Planning Memorandum and the Entry Letter.

a. The Examination Planning Memorandum (EPM) - This document summarizes the activities to be performed during the onsite examination, as an integral part of the RBS. The document, which would be prepared before undertaking the on-site visit, should identify the specific objectives of the examination and ensure that the objectives and strategy are communicated to the team members. The focus of on-site examination identified in the EPM, should be oriented to a top-down approach that includes a review of the credit union’s risk management systems and appropriate level of transaction testing. Transaction testing and asset review would be necessary to verify the integrity of the systems.

The Primary purpose of the EPM is to document and convey Examiners’ conclusions regarding allocation of examination resources according to perceived risks. However, it should not serve as an off-site analysis of the institution to be examined.

The EPM includes a discussion of all CAMELS components (and in some cases, ancillary areas), regardless of the risk involved or the volume of resources anticipated to be devoted to these areas.

The EPM will also include data and discussion regarding examination hours (budgeted hours, average hours, and previous examination hours).

The EPM comments will be prepared on an “exception only” basis, according to areas of higher-than-normal or lower than-normal perceived risk. It will also encourage brief, bullet comments, not necessarily of report quality; include high-level performance ratios and financial data which will be documented in the EPM; define the deadline for submission to be the last five (5) business days prior to the commencement of the examination.

The Examination Planning process will generate concise pre-planning documents that are consistent with the stated examination objectives and detail allocation of resources according to perceived risks.

- b. Entry Letter - This is a document that is used to request a credit union to supply specific information on its activities to the supervisor. It identifies information necessary for the successful execution of the on-site examination. The letter would be tailored to fit the specific character and profile of the credit union to be examined and the scope of the activities to be performed. To eliminate duplication, the letter will not request for any information that is provided on a regular basis to CURBSS, such as the various financial information.

iii. **Examination Program**

The examination program will provide a comprehensive schedule of all examination activities to be conducted on a credit union. The examination program should incorporate the following:

- A schedule of activities, commencement and conclusion dates, duration of time, staff and other resource estimates for the examination as well as output e.g. reports, sub-reports, etc.
- Areas of emphasis e.g. credit review, Board and Management, etc.
- Specialist examiners’ skill required, and where necessary, the extent of their participation, etc.

iv. **Targeted Risk Areas**

These are defined as areas with more than normal risk, to which the Examiner intends to devote additional or “above normal” examination resources. Targeted Risk Areas may [but do not have to] include CAMELS components, specialty areas [e.g. e-banking], internal audit environment, internal routine and controls. Targeted Risk Areas should not include discussions of areas that are perceived to present average or moderate risk. For areas of moderate or “normal” risk, the Examiner will perform standard examination procedures. Specific discussion of these areas is therefore, not necessary.

v. **Low Risk Areas Subject to Limited Review**

Examiners will specifically discuss any areas of perceived low risk, where normal examination resources and procedures will be reduced or eliminated. Comments will include a brief explanation of why the area is considered low risk.

vi. **Loan Scope**

The Examiner will comment on the proposed loan scope, with emphasis on risk areas within the portfolio where loan file review will be concentrated. To the extent possible, Examiners will disclose the target loan penetration percentage. The Examiner will discuss loan scoping with the Off-site Examiner during the pre-examination planning contact.

vii. **Staffing**

The Examiner will prepare a schedule of duties, apportioning tasks to members of the Examination team. The job schedule should be accomplished within the specified time frame.

viii. **Documentation Methodology**

The Examiner is expected to indicate the specific examination modules which he/she anticipates using. The actual documentation methodology used may differ from that discussed in the EPM.

ix. **Submitting the Examination Planning Memorandum**

The EPM is expected to be submitted for approval not later than the last business day prior to the commencement of the examination. A copy of the EPM should also be forwarded to the Relationship Manager for comments.

Examination Procedures

104. Having developed the EPM, examination procedures will be tailored to the characteristics of each credit union, bearing in mind the size, complexity and risk profile. The procedures will be contained in Examination Manuals.

i. **Evaluation of Areas of Significant Risk**

The field work will focus on developing appropriate documentation to adequately assess management's ability to identify, measure, monitor and control risks. Procedures will be completed to the degree necessary to determine whether the bank's management understands and adequately controls the levels and types of risks that are assumed. Full-scope examinations are expected to include Examiners' evaluation of all the 20 risk elements, which usually are the common sources of significant risks. In addition, Examiners are also expected to evaluate other areas of significant sources of risk to the bank. The Examiner should hold formal meetings with the bank's management team to discuss and obtain commitment on their findings on each functional area.

ii. **Documentation of Findings and Conclusions**

It is important for Examiners to document their findings and overall conclusions after performing the procedures contained in the relevant examination manual. The comments are expected to be clear and well organized. The conclusions, as each relates to the functional area under review, should clearly communicate the Examiners' assessment of the risk management system, the financial condition, and compliance with laws and regulations

iii. **Exit Discussion**

At the end of the examination, the Examiners will arrange for a meeting with the bank's management during which all findings will be discussed.

- The Examiner is expected to prepare an agenda for the exit discussion.
- The purpose of the Agenda in addition to allowing the Examiner to decide the direction of the discussion is to ensure that the attention of the bank's management is focused on the issues to be discussed.
- The amount and order of information presented in the Agenda will depend on the proposed ratings, seriousness of issues, and causes of the problems.
- Examination findings will be presented in a logical flow, prioritized in order of importance.
- All PEARLS components should be covered.
- The exit meeting is an opportunity for the Examiners to clear any remaining questions that they may have concerning the examination. During the meeting, commitments for corrective action will be obtained or re-affirmed. The Examiner and bank management will need to be clear as to:
 - a) What was committed to be corrected, when and how.
 - b) Recommended Examiner ratings (component/ composite) should be discussed.
- The bank's management is expected to have a clear understanding of the significance of examination findings after the meeting.

iv. **Risk Report**

At the conclusion of each on-site visit, a Risk Map as detailed below will be produced. Accompanying the Risk Map, a detailed report will also be produced. It should clearly and concisely contain any supervisory issues, problems, or concerns related to the bank. All comments regarding deficiencies noted in the bank's risk management systems, as highlighted during the exit discussion, should be included in the Report. Accordingly, the report should detail observations under each of the risk element.

Table 6 – Risk Map

		Financial Failure	Misconduct & Mis-management	Poor Corporate Governance	Inadequate Member Under-standing	Financial Crime, fraud & dishonesty
A. BUSINESS RISKS						
1	Strategy					
i)	Quality of					

	corporate strategy or Nature of Business					
Strategy Score						
2	Market, Credit and Operational Risk					
ii)	Credit Risk					
iii)	Market Risk					
iv)	Operational Risk					
v)	Litigation/ Legal Risk					
Market, Credit & Operational Risk Average Score						
Market, Credit & Operational Risk Score						
3	Financial Risk					
vi)	Protection of Assets					
vii)	Effective Financial Structure					
viii)	Assets Quality					
ix)	Rates of Return and Costs					

x)	Liquidity					
xi)	Signs of growth					
Financial Risk Average Score						
Financial Risk Score						
4	Members					
xii)	Type of members					
Members Risk Score						
Business Risk Average Score						
BUSINESS RISK SCORE						

B. CONTROL RISKS

1	Treatment of Members					
xiii)	Service delivery, training, recruitment, remuneration and security of members					
xiv)	Disclosure and adequacy of product literature					
Treatment of Members Risk						

Average Score						
Treatment of Members Risk Score						
2	Organization					
xv)	Clarity of ownership/ group structure ³					
Organization Risk Score						
3	Internal Systems and Controls					
xvi)	Risk management system					
xvii)	Information and Communication Technology					
xviii)	Compliance/Internal Audit					
Internal Systems and Controls Risk Average Score						
Internal Systems and Controls Risk Score						
4	Board, Management and Staff					
xix)	Governance and Human Resources					
Board, Management and Staff Risk Score						
5	Business and Compliance Culture					
xx	Relationship with Regulators					
Business Compliance Risk Score						
Business Risk Average Score						
CONTROL RISK SCORE						
CREDIT UNION SPECIFIC RISK SCORE PER RTO GROUP						

³ This is in the case the credit union/cooperative also operates a subsidiary business under its organizations set up or even independently. However, such undertakings are funded by the credit union.

6

Implementation

105. This chapter deals with the phases, issues and structures necessary or required to implement Risk Based Supervision in Nigeria. Prior to commencement, the issues briefly outlined below, must be addressed in order to ensure its successful implementation.

Integrity and Reliability of Records and Information

106. The efficacy of Risk Based Supervision relies heavily on the integrity of data upon which informed and accurate analysis for assessment of risk may be conducted. Where information and data is false or unreliable, assessment from analysis conducted on such data would also be unreliable and faulty. The need for zero tolerance for data and information unreliability is *sin qua non* to effective risk based supervision.
107. In order to further ascertain the quality of data received from banks, proper validation tests should be carried out with adequate links to examination reports through e-FASS.
108. In addition, appropriate incentives should be given to officers and banks that maintain high integrity of data and information submitted to the Supervisory Authorities.
109. Generally, the sanctions and penalties for rendition of false information/statements should be robust and predicated upon prompt and timely intervention as well as varied and directed at the personnel responsible. This would entail a review of the current legal framework. In this regard, officers designated by financial institutions to prepare and render specific returns, data or provide information, and who fall foul of the law in this respect, should be held accountable and liable to pay liquidated penalties deductible from their emoluments, denied privileges such as promotions, overseas training, etc for a specified period, while repeat offenders could be tried in the Federal High Court and if found guilty, sentenced to jail terms, suspended or

barred from working in any financial institution, without prejudice to senior management and the bank being held responsible, and liable to appropriate sanctions.

Obligation to Furnish Information to Facilitate On-Going Assessment

110. The Risk assessment process involves an on-going assessment and response to risk change in the interval between formal risk assessments. This entails the bank providing information to the supervisor at all times and on all issues to enable the supervisor adapt the Risk Mitigation Programme to accommodate changes in risk levels of the financial institutions on an on- going basis. Presently, information is only supplied upon specific request from supervisory authorities, or only when rendering statutory returns. Financial Institutions should be compelled to supply relevant information voluntarily if such could impact upon the risk profile of their institutions.
111. BOFIA should be amended to stipulate provisions which allow for voluntary and unsolicited information and data to be furnished by Financial Institutions at all times, on all issues (**guidelines to be provided**), to enable Supervisory Authorities carry out on-going assessment of risk and response to risk changes in Financial Institutions.

Issuance of Risk Assessment Report and Risk Mitigation Programme

112. BOFIA and NDIC Act provide for issuance of examination report after conducting an examination. Under the framework for RBS, the end product is a letter, which incorporates the Risk Assessment Report (RAP) and Risk Mitigation Programme (RMP). Since RBS is being introduced at this time, the BOFIA and NDIC Act could not have provided for the issuance of the RAP and RMP.
113. The Risk Mitigation Programme developed for a financial institution is an integral part of the RBS process. Financial Institution should be obliged to faithfully implement the RMP for RBS to be effective. There must be legal mechanism put in place to ensure faithful implementation of the RMP.
114. Specifically BOFIA should provide for a financial institution to faithfully implement the RMP developed by the supervisory authorities. Adequate sanctions for failure to faithfully implement the RMP should be stipulated, and this could include making such failure or refusal a ground for revocation of the relevant bank's operating license.

Structural/Organizational issues

115. It would be necessary for the Supervisory Authorities to fashion out structures that would facilitate seamless operation of RBS in view of the different supervisory authorities and departments that would be involved in its implementation. In that regard, Managements of the CBN and NDIC would need to work out modalities for evolving an appropriate institutional arrangement.

Design Test Process of each Phase of the Framework

116. A simulation should be conducted to test each of the critical phases of the Framework.
 - i. Risk Assessment
 - ii. Supervisory Action Plan/Tools

- iii. Evaluation (including remedial measures)

Transitional Activities

117. The transition to the commencement of the RBS shall be for a period of fourteen (14) months starting from the date of approval of the framework for publication. During this period, the following major activities will be undertaken to ensure successful implementation:

- i. **Consultations**

In order to ensure wide acceptance, smooth transition, as well as successful implementation of the RBS, the supervisory authorities would consult widely with the operators, other stakeholders and the general public. In that regard, copies of the approved framework for RBS should be made available to the following stakeholders for comments/suggestions. The stakeholders are:

- Staff of CBN/NDIC Supervision Departments;
- Members of the Bankers' Committee;
- FITC; and CIBN.

- ii. **Review of the Framework** - The framework for RBS shall be reviewed to reflect relevant comments/suggestions received from the stakeholders.

- iii. **Issuance of Guidelines** - The following Guidelines have been identified as being relevant for effective implementation of RBS. While some of them are already in operation, others not already in use would be designed and deployed, accordingly. Areas requiring issuance of Guidelines are:

- Overall Risk Management Framework and Risk Management Frameworks for Specific Risk Elements like Credit, Market, Liquidity, Operational,
- Information and Communication Technology (ICT), Internal Control and Audit, Out sourcing, and Money Laundering, among others.
- Corporate Governance; and Information Disclosure for On-going Assessment

- iv. **Review of Returns and Reporting Format**

The subsisting returns and reporting format are inadequate for the implementation of the RBS. There is therefore, the need to review and develop new sets of returns and reporting format. In that regard, a joint committee of the Technical Committee and e-FASS implementation Committee could be constituted and assigned the responsibility.

- v. **Training**

The appropriate manpower training would be conducted for both supervisors and operators to ensure a clear understanding of the processes and procedures involved in RBS approach. On the part of the supervisors, both on-site and offsite risk assessment and mitigation procedures would be emphasized with a view to evolving a seamless operation and synergy of resources. Essentially

integration and collaboration of on-and off-site efforts should be emphasized. The operators should be trained on how to institute their own risk assessment and mitigation program to strengthen their internal controls and also ensure a credible risk management process that could be relied upon by the supervisory authorities to maintain a sound financial system.

[Display full size graphic](#)

Exhibit 2 presents the model, developed by the PCO-led ADM Working Group on Risk Management, which addresses the issue of risk management in the context of public policy development. This model presents a basis for exploring issues of interest to government policy-makers, and provides a context in which to discuss, examine, and seek out interrelationships between issues associated with public policy decisions in an environment of uncertainty and risk (i.e., a model of public risk management).

As in Exhibit 1, this model recognizes six basic steps: identification of the issue; analysis or assessment of the issue; development of options; decision; implementation of the decision; and evaluation and review of the decision. ⁴

In this model, several key elements were identified as influencing the public policy environment surrounding risk management:

- There is a *public element* to virtually all government decision-making, and it is a central and legitimate input to the process.
- Uncertainty in science, together with competing policy interests (including international obligations) has led to increased focus on the *precautionary approach*.
- A decision-making process *does not occur in isolation*--the public nature and complexity of many government policy issues means that certain factors, such as communications and consultation activities, legal considerations, and ongoing operational activities, require active consideration at each stage of the process.

Integrating Results for Risk Management into Practices at all Levels

The results of risk management are to be integrated both horizontally and vertically into organizational policies, plans and practices. Horizontally, it is important that results be considered in developing organization-wide policies, plans and priorities. Vertically, functional units, such as branches and divisions, need to incorporate these results into programs and major initiatives.

In practice, the risk assessment and response to risk would be considered in developing local business plans at the activity, division or regional level. These plans would then be considered at the corporate level, and significant risks (horizontal or high-impact risks) would be incorporated into the appropriate corporate business, functional or operational plan.

The responsibility centre providing the advisory and "corporate challenge" functions can add value to this process, since new risks might be identified and new risk management strategies

required after the roll-up. There needs to be a synergy between the overall risk management strategy and the local risk management practices of the organization.

Each function or activity would have to be examined from three standpoints:

- **its purpose:** risk management would look at decision-making, planning, and accountability processes as well as opportunities for innovation;
- **its level:** different approaches are required based on whether a function or activity is strategic, management or operational; and
- **the relevant discipline:** the risks involved with technology, finance, human resources, and those regarding legal, scientific, regulatory, and/or health and safety issues.

Tools and Methods

At a technical level, various tools and techniques can be used for managing risk. The following are some examples:

- **risk maps:** summary charts and diagrams that help organizations identify, discuss, understand and address risks by portraying sources and types of risks and disciplines involved/needed;
- **modelling tools:** such as scenario analysis and forecasting models to show the range of possibilities and to build scenarios into contingency plans;
- **framework on the precautionary approach:** a principle-based framework that provides guidance on the precautionary approach in order to improve the predictability, credibility and consistency of its application across the federal government;
- **qualitative techniques:** such as workshops, questionnaires, and self -assessment to identify and assess risks; and
- **Internet and organizational Intranets:** promote risk awareness and management by sharing information internally and externally.

Exhibit 3 provides an example of a risk management model. In this model, one can assess where a particular risk falls in terms of likelihood and impact and establish the organizational strategy/response to manage the risk.

Exhibit 3: A Risk Management Model

Impact	Risk Management Actions		
Significant	Considerable management required	Must manage and monitor risks	Extensive management essential
Moderate	Risks may be worth accepting with monitoring	Management effort worthwhile	Management effort required
Minor	Accept risks	Accept, but monitor risks	Manage and monitor risks
	Low	Medium	High
	Likelihood		

[Display full size graphic](#)

In developing methods to provide guidance on risk management, the different levels of readiness and experience in a department, as well as variations in available resources need to be recognized. Therefore, methods need to be flexible and simple using clear language to ensure open channels of communication.

Several practical methods that could be used to provide guidance are:

- **a managers' forum:** where risks are identified, proposed actions are discussed and best practices are shared;
- **an internal risk management advisory function:** dedicated to risk management, either as a special unit or associated with an existing functional unit; and
- **tool kits:** a collection of effective risk management tools such as checklists, questionnaires, best practices.

Communication and Consultation

Communication of risk and consultation with interested parties are essential to supporting sound risk management decisions. In fact, communication and consultation must be considered at every stage of the risk management process.

A fundamental requirement for practising integrated risk management is the development of plans, processes and products through ongoing consultation and communication with stakeholders (both internal and external) who may be involved in or affected by an organization's decisions and actions.

Consultation and proactive citizen engagement will assist in bridging gaps between statistical evidence and perceptions of risk. It is also important that risk communication practices anticipate and respond effectively to public concerns and expectations. A citizen's request for information presents an opportunity to communicate about risk and the management of risk.

In the public sector context, some high-profile risk issues would benefit from proactively involving parliamentarians in particular forums of discussion thus creating opportunities for exchanging different perspectives. In developing public policy, input from both the empirical

and public contexts ensures that a more complete range of information is available, therefore, leading to the development of more relevant and effective public policy options. Internally, risk communication promotes action, continuous learning, innovation and teamwork. It can demonstrate how management of a localized risk contributes to the overall achievement of corporate objectives.

Risk communication involves a range of activities, including issue identification and assessment, analysis of the public environment (including stakeholder interests and concerns), development of consultation and communications strategies, message development, working with the media, and monitoring and evaluating the public dialogue. The public sector has the additional responsibility of reporting to and communicating with Parliament.

Within the federal Public Service, it is expected that consultation activities, including those related to risk management, will be undertaken in a manner that is consistent with the *Government Communications Policy*.

Element 4: Ensuring Continuous Risk Management Learning

Continuous learning is fundamental to more informed and proactive decision-making. It contributes to better risk management, strengthens organizational capacity and facilitates integration of risk management into an organizational structure. To ensure continuous risk management learning, pursue the following outcomes:

- *Learning from experience is valued, lessons are shared--a supportive work environment.*
- *Learning plans are built into organization's risk management practices.*
- *Results of risk management are evaluated to support innovation, capacity building and continuous improvement--individual, team and organization.*
- *Experience and best practices are shared--internally and across government.*

Creating a Supportive Work Environment

A supportive work environment is a key component of continuous learning. Valuing learning from experience, sharing best practices and lessons learned, and embracing innovation and responsible risk-taking characterize an organization with a supportive work environment. An organization with a supportive work environment would be expected to:

Promote learning

- by fostering an environment that motivates people to learn;
- by valuing knowledge, new ideas and new relationships as vital aspects of the creativity that leads to innovation; and
- by including and emphasizing learning in strategic plans.

Learn from experience

- by valuing experimentation, where opportunities are assessed for benefits and consequences;
- by sharing learning on past successes and failures; and

- by using "lessons learned" and "best practices" in planning exercises.

Demonstrate management leadership

- by selecting leaders who are coaches, teachers and good stewards;
- by demonstrating commitment and support to employees through the provision of opportunities, resources, and tools; and
- by making time, allotting resources and measuring success through periodic reviews (e.g., learning audits).

Building Learning Plans in Practices

Since continuous learning contributes significantly to increasing capacity to manage risk, the integration of learning plans into all aspects of risk management is fundamental to building capacity and supporting the strategic direction for managing risk.

As part of a unit's learning strategy, learning plans provide for the identification of training and development needs of each employee. Effective learning plans, reflecting risk management learning strategies, are linked to both operational and corporate strategies, incorporate opportunities for managers to coach and mentor staff, and address competency gaps (knowledge and skills) for individuals and teams. The inclusion of risk management learning objectives in performance appraisals is a useful approach to support continuous risk management learning.

Supporting Continuous Learning and Innovation

In implementing a continuous learning approach to risk management, it is important to recognize that not all risks can be foreseen or totally avoided. Procedures are paramount to ensure due diligence and to maintain public confidence. Goals will not always be met and innovations will not always lead to expected outcomes. However, if risk management actions are informed and lessons are learned, promotion of a continuous learning approach will create incentives for innovation while still respecting organizational risk tolerances. The critical challenge is to show that risk is being well-managed and that accountability is maintained while recognizing that learning from experience is important for progress.

In addition to demonstrating accountability, transparency and due diligence, proper documentation may also be used as a learning tool. Practising integrated risk management should support innovation, learning, and continuous improvement at the individual, team and organization level.

An organization demonstrates continuous learning with respect to risk management if:

- an appropriate risk management culture is fostered;
- learning is linked to risk management strategy at many levels;
- responsible risk-taking and learning from experience is encouraged and supported;
- there is considerable information sharing as the basis for decision-making;
- decision-making includes a range of perspectives including the views of stakeholders, employees and citizens; and
- input and feedback are actively sought and are the basis for further action.

Conclusion

The Integrated Risk Management Framework advances a more systematic and integrated approach for risk management. By focusing on the importance of risk communication and risk tolerance, it looks outside the organization for the views of Canadians. Internally, it emphasizes the importance of people and leadership and the need for departments and agencies to more clearly define their roles. The Framework provides a tool that helps organizations communicate a vision and objectives for management of risk based on government values and priorities, lessons learned, best practices and consultation with stakeholders.

The Framework is a fundamental part of the federal management agenda and Modern Comptrollership. It is designed to support the optimization of resource allocation and responsible spending, paramount for achieving results. It also builds on public sector values, knowledge management and continuous learning for innovation. The Integrated Risk Management Framework is the first step in establishing the foundation for more strategic and corporate integrated risk management in departments and in government. In the future, the Framework will be supported by tools and guidance documents as well as complemented by other risk management initiatives.

The Treasury Board of Canada Secretariat intends to work closely with departments and agencies in implementing the Integrated Risk Management Framework and in tracking progress toward building a risk-smart workforce and environment in the Public Service.

Appendix: Shared Leadership--Suggested Roles and Responsibilities

In moving toward an integrated risk management function, everyone has a role to play. Combining shared leadership with a team approach will help contribute to the success of integrated risk management throughout the organization. Suggested roles and responsibilities that could be considered by the different parties involved in integrated risk management are outlined below.

Treasury Board of Canada Secretariat

- communicating and explaining the Integrated Risk Management Framework;
- providing guidance, training and a centre of expertise in support of the Integrated Risk Management Framework;
- providing Treasury Board, other central agencies and Parliament with risk management information and advice appropriate to their responsibilities; and
- periodically examining and evaluating the effectiveness of the Integrated Risk Management Framework, tracking progress and reporting on best practices.

Deputy Heads or Equivalent

- setting the tone from the top that systematic and integrated risk management is valuable for understanding uncertainty in decision-making and for demonstrating accountability to stakeholders;
- determining the best way to implement the Integrated Risk Management Framework in their organization;
- ensuring that a supportive learning environment exists for risk management, including sensible risk taking and learning from experience;
- ensuring, from a corporate perspective, that risks are prioritized, and that appropriate risk management strategies are in place to respond to identified risks; and

- ensuring the capacity to report on the performance of the risk management function (i.e., knowing how well the department or agency is managing risk).

Senior Management

- integrating risk management into overall departmental strategy and management frameworks;
- providing managers and employees with learning opportunities and training to build competencies; and
- allocating resources for investment in more systematic risk management.

Managers

- considering risk as a part of their decision-making process; and
- ensuring there is appropriate ongoing operational and corporate-related risk management action, planning, training, control, monitoring and documentation.

Functional Advisors and Specialists

- ensuring that policy and related advice, guidance and assistance is in line with central agency and departmental policies on risk management and senior management's objectives;
- helping managers identify and assess risk and the effectiveness, efficiency and economy of existing measures to manage risk; and
- helping managers design and implement tools for more effective risk management.

Review, Internal Audit

- reporting to the Deputy Head on the department's or agency's performance under the Integrated Risk Management Framework.

All Public Servants

- staying aware of and attentive to risk management issues;
- risk-smart behaviours and outcomes--considering limitations, key risk areas and fundamental rules to understand risks they can and cannot take (i.e., understanding where there is allowance for honest mistakes and where prudence is paramount); and
- documenting decisions and supporting information.

1. *Australian and New Zealand Public Sector Guidelines for Managing Risk* (HB 143:1999) defines risk as the "chance of something happening that will have an impact on objectives. It is measured in terms of consequences and likelihood."

The Canadian Institute of Chartered Accountants defines risk as "the possibility that one or more individuals or organizations will experience adverse consequences from an event or circumstance."

The *Canadian Standards Association Risk Management: Guidelines for Decision-Makers* (CAN/CSA -Q850-97) defines risk as "the chance of injury or loss as defined as a measure of

the probability and severity of an adverse effect to health, property, the environment or other things of value."

The November 1, 2000, working draft of the International Organization for Standardization (ISO) Risk Management Terminology defines risk as the "combination of the probability of an event and its consequences. Note 1- In some situations, risk is a deviation from the expected." [[Return](#)]

2. *Risk Management for Canada and Canadians: Report of the ADM Working Group on Risk Management* (PCO). [[Return](#)]

3. This is a general definition and while it includes the assessment of risk as a function of the decision -making process, it is not intended to prescribe a system for prioritizing specific risks.

Also of note is that in many international fora, *risk analysis* is used as the more comprehensive label, referring to an overall process for dealing with risk, including identification, assessment and implementation of measures. The use of *management* rather than *analysis* is intended to reflect the general applicability of the concepts to be developed, not only in technical or science-based sectors, but also in other public policy areas. [[Return](#)]

4. For further details, refer to the PCO report, *Risk Management for Canada and Canadians: Report of the ADM Working Group on Risk Management* (March 2000). [[Return](#)]

Exhibit 1: A Common Risk Management Process

- Management direction on risk management is communicated, understood and applied--vision, policies, operating principles.
- Approach to operationalize integrated risk management is implemented through existing decision-making structures: governance, clear roles and responsibilities, and performance reporting.
- Building capacity--learning plans and tools are developed for use throughout the organization.

An example of a likelihood scale is:

Level	Likelihood	Description
A	Almost certain	e.g. will occur at least once a year or more often
B	Likely	
C	Possible	
D	Unlikely	
E	Rare	
F	Very rare	
G	Almost incredible	e.g. once in 100,000 years

Consequences scale

This consequence scale will vary on the different types of risk. It is useful to have a consequences scale for a given category or risk. An example of a consequences scale for the low quality corporate strategy:

Level	Inadequate Members understanding
1.	– the products are matched to the current membership demographics: age, occupation; gender; religion; behavior; lifestyles; social status; etc.; offering value-added services such as insurance....
2.	– the products are matched to the majority of the current membership demographics: age, occupation; gender; religion; behavior; lifestyles; social status; etc.
3.	– The products are not matched to the current membership demographics: age, occupation; gender; religion; behavior; lifestyles; social status; etc.
4.	– The products are not matched to the current membership demographics: age, occupation; gender; religion; behavior; lifestyles; social status; etc. and are focused on lending
5.	– Traditional products that have not been changed for the last 3 years
6.	– Financial products are limited (e.g. regular, normal loans or savings); products design are traditional
7.	– Traditional products that have not been reviewed for the last 5 years mostly credit oriented

The following table is the sample of a Risk Matrix that can be used in assigning the likelihood and consequence of events that pose risk to credit union.

	Likelihood (Certain to very rare)						
Consequence (small to large)	A	B	C	D	E	F	G
1	Low	Low	Low	Low	Low	Very Low	Negligible
2	Medium	Medium	Medium	Low	Low	Very Low	Very Low
3	High	Medium	Medium	Medium	Low	Low	Very Low
4	High	High	Medium	Medium	Medium	Low	Very Low
5	Very high	High	High	Medium	Medium	Medium	Low
6	Very high	Very high	High	High	Medium	Medium	Medium
7	Very high	Very high	Very high	High	High	Medium	Medium

118. The assessment of the control risk will influence the assessment of business risks as low control risks will often mitigate the overall business risks and vice versa. For instance, where the aggregate score under the business risks is **Very High** and the control risk **Very Low**, then the overall score will be **Medium**. Conversely, when the business risk is **Very Low** but the control risk is **Very High**, the aggregate rating should be considered **High**.
119. The scores for each of the business and control risks elements in the risk map are aggregated to arrive at the average risk scores under the two risk groups as illustrated in Table 5.

The four-eyes principle dictates that at least two people must witness or approve a certain activity. Organizations use the four-eyes principle to protect themselves from dishonest individuals and mistakes.

Slide 20: Likelihood scale

One key task in analyzing risk is to estimate the likelihood of an event. To do this you will need a likelihood scale. Likelihood scales will need to be tailored to the risk management process.

An example of a likelihood scale is:

Level	Likelihood	Description
A	Almost certain	e.g. will occur at least once a year or more often
B	Likely	
C	Possible	
D	Unlikely	
E	Rare	
F	Very rare	
G	Almost incredible	e.g. once in 100,000 years

Slide 21: Consequences scale

This consequence scale will vary on the different types of risk. It is useful to have a consequences scale for a given category or risk. An example of a consequences scale for non-compliance to regulatory requirements:

Level	Regulatory Requirement
1.	No legal action
2.	Reprimanded
3.	Minor legal action filed
4.	Major Legal action filed
5.	Major Legal action and penalties levied
6.	Suspension of legal personality
7.	Cancellation of legal personality

Slide 22: The following table is the sample of a Risk Matrix that can be used in assigning the likelihood and consequence of events that pose risk to credit union.

	Likelihood (Certain to very rare)						
Consequence (small to large)	A	B	C	D	E	F	G
1	Low	Low	Low	Low	Low	Very Low	Negligible
2	Medium	Medium	Medium	Low	Low	Very Low	Very Low
3	High	Medium	Medium	Medium	Low	Low	Very Low
4	High	High	Medium	Medium	Medium	Low	Very Low

5	Very high	High	High	Medium	Medium	Medium	Low
6	Very high	Very high	High	High	Medium	Medium	Medium
7	Very high	Very high	Very high	High	High	Medium	Medium

Evaluation Factors

Protection
 Effective Financial Structure
 Asset Quality
 Rates of Returns and Costs
 Liquidity
 Signs of Growth

Protection

Objective:

To determine whether the credit union's position is adequate to support the level of current and anticipated business activities and associated risks.

In order to achieve the above objective, the CUBSS will assess the following:

Areas of assessment	In assessing, CURBSS will	Risks
<ul style="list-style-type: none"> Adequacy of assets protection 	<ul style="list-style-type: none"> Compare the adequacy of the allowances for loan losses against the amount of delinquent loans Compare the allowances for investment losses with the total amount of non-regulated investments 	<ul style="list-style-type: none"> Inadequate loan loss protection produces two undesirable results a) inflated asset values and b) fictitious earnings Members savings and shares are not protected Rationing of loans Risk to the credit union reputation Inability to raise capital Inability to pay competitive salary for the staff
<ul style="list-style-type: none"> Repayment of members' capital 	<ul style="list-style-type: none"> Measure the degree of protection that the credit union member has for 	<ul style="list-style-type: none"> Insolvency

	member savings and shares in the event of liquidation of the credit union's assets and liabilities	
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Effective Financial Structure

Objective:

To determine whether the credit union's financial structure is appropriately maintained to ensure growth potential, earning capacity, and overall financial strength.

In order to achieve the above objective, the CUBSS will assess the following:

Areas of assessment	In assessing, CURBSS will	Risks
<ul style="list-style-type: none"> Investment in earning assets 	<ul style="list-style-type: none"> Measure the productive assets composed of loans and liquid investments Measure the unproductive assets composed of primarily fixed assets (land, building and equipment) 	<ul style="list-style-type: none"> Members savings and shares are not protected Rationing of loans Risk to the credit union reputation Inability to raise capital Inability to pay competitive salary for the staff
<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Insolvency

Evaluation Factors

Risk ratings must be carried out before and after the examination. The purpose of risk rating prior to the examination is to specify risk areas based on existing data, and correspondingly allocate the appropriate time and resources for the examination. Risk ratings following the examination outline the financial institution's risks which will be indicative of the level of importance supervisors must give to monitoring and implementing risk control measures. Risk examinations shall focus on five main types of risks: strategic risk, credit risk, market risk, liquidity risk, and operational risk and include other types of risk where significant. The examination shall evaluate each type of risk and risk management of each risk type including ranking them by their impacts on income and capital funds, evaluate aggregate risk trends and provide an aggregate risk rating for each type of risks based on the table below.

<u>Aggregate Risk Ratings</u>				
Risk Level				
Low		Medium		High
Quality	Weak	Medium	Medium- High	High
Management	Adequate	Low-Medium	Medium	Medium- High
Risk	Good	Low	Low-Medium	Medium

Following, a composite rating shall be carried out based on considerations of the risk ratings above in conjunction with the institution's ability to generate income, and the adequacy of the capital funds taking account of the effects of the risks

Observations in carrying out risk ratings.

1. The risk factors outlined in this Handbook are guidelines stating the minimum considerations for risk ratings, and additional factors affecting the level and quality of risk management must be considered. For each risk factor, it is not possible to set out fixed values to judge if risks should be considered high, medium, or low; the weight of each risk factor depends on the sensitivity of the capital fund and the institution's income generating capabilities to the risk. A risk factor that is significant to one financial institution may not affect another institution; similarly, in the same institution, a risk factor may be significant in one period and have no relevance in another period. It is therefore not possible to provide fixed parameter values and weights to estimate risks from different risk factors.
2. The risk ratings guidelines in the Handbook outline each risk factor and the risk ratings based on each risk factor individually. In practice, however, all risk factors must be considered together and the effects of all risk factors must be evaluated simultaneously in aggregate before risk ratings are carried out. For any one type of risk, risk factors that appear to result in low risks when considered individually may have medium risks when considered as a group if the aggregate effect of the group of factors has a medium effect on income and on the capital fund.
3. Risk trends shall be evaluated over a forward-looking 12-month horizon, however, if there are risk factors or events, which are likely to effect the financial institution over a longer horizon, these factors, and events must be taken into account. Risk trends shall affect the state authority's supervision strategies, which may include widening the scope of the examination.

4. Evaluations of risk levels and the quality of risk management must be carried out separately and independently. Therefore, the quality of risk management no matter how good or bad should not be considered in risk rating evaluations. An exception may be the risk rating of strategic risks for which it may not be possible to clearly separate risk factors from the quality of risk management due to the inter-relationships between the two, which make it difficult to accurately measure the level of strategic risks. Notably, neither capital funds nor the strength of the institution's financial position can solve inadequacies nor reduce deficiencies in an institution's risk management system.
5. The examiner should not automatically conclude that high-risk levels are bad, nor that low risk levels are good. Risks levels merely reflect the risks resulting from business operations. Where risk levels are appropriate, depend on the institution's risk management system's ability to measure, monitor, and control the risks.
6. Increasing or decreasing forward-looking trends in aggregate risks over a 12-month horizon does not necessarily mean that aggregate risk ratings will increase or decrease following the level implied over the next 12 months. For example, given a high aggregate risk rating, a decreasing risk trend does not mean the institution's risks will fall enough to merit a medium-high or medium risk rating. For all types of risk, a high aggregate risk level still has the potential of higher risk trends; and low aggregate risk levels can still follow decreasing risk trends. The risk ratings are based on threshold levels at which risks are deemed high or low, and upon passing the threshold risks may continue higher or lower.
7. Assets to be sold shall be considered as when evaluating market risk as the item is subject to risks resulting from changes in price. As such, price risks cover the bid-ask spread in the investment amount, and as the prices of assets to be sold have generally fallen quite low, it may be estimated that financial institutions are unlikely to require significant additional reserve provisions in this area, therefore risk ratings are not necessary here. However, observations regarding the management of said assets, if any, should be included in the evaluation of market risk section of the examination report.
8. Evaluations for the composite risk rating must include assessment of the capital adequacy fund, income-generating capabilities, and the aggregate assessment of each type of risk. In cases where capital funds are stable and have a good income generating capabilities but have unsatisfactory aggregate risk ratings, composite ratings considerations shall focus first on the risk assessments. However, in cases where aggregate risk ratings are satisfactory but capital adequacy funds and income generating abilities are not satisfactory, composite ratings considerations shall focus on the capital adequacy funds and said income-generating abilities.
9. Considerations of effects of the five types of risks and their aggregate risk assessments and the weights given to each type of risk must take account of the sensitivities of the capital adequacy fund and its income generating capabilities to each type of risk. The sensitivities to risks and the weights, which should be given to each type of risk, will differ across different financial institutions, and within one financial institution risk sensitivities will vary between different periods, and the examiner must estimate the effects that risks will have on the capital adequacy funds.

Strategic Risk Ratings

Risk Levels

Low

Changes in the organization structure and key personnel following the previous examination having little effect on the organization.

The financial institution has set out strategic plans to support effective risk management. The assumptions and various factors applied to strategic planning are reasonable and the plan well reflects strengths, weaknesses, opportunities, obstacles, and the market position of the financial institution.

Strategic plans inspire confidence, and have sufficient future support in terms of funding, human resources, operational systems, and management. Risk management systems are in place, and strategic plans have efficient operational procedures, clear strategic targets consistent with the direction of business enterprises and the changing environment. There is comprehensive communication of strategic targets and of the organizational culture, which are consistently followed and met.

Strategy decisions or changes in external factors have little effect on the financial institution.

Medium

Changes in the organization structure and key personnel following the previous examination having some but not significant effects on the organization.

The financial institution has set out strategic plans to support adequate risk management. The assumptions and various factors applied to strategic planning are reasonable and the plan adequately reflects strengths, weaknesses, opportunities, obstacles, and the market position of the financial institution.

Strategic plans have sufficient future support in terms of funding, human resources, operational systems, and management. Risk management systems implementation procedures are consistent with strategies. Strategic targets may be aggressive but are consistent with the direction of business enterprises and the changing environment. Communications of strategic targets and of the organizational culture are carried out and are effectively adopted and followed throughout the organization.

Effects of strategy decisions or changes in external factors are not significant to the financial institution.

High

Changes in the organization structure and key personnel following the previous examination having significant effects on the organization.

Strategic plans do not support effective risk management. The assumptions and various factors applied to strategic planning are unreasonable and the plan does not adequately reflect the strengths, weaknesses, opportunities, obstacles, and the market position of the financial institution.

Capital funds, human resources, operational systems, management, risk management systems, and implementation procedures do not adequately support operational implementation of strategies due to over-expansion or over-extension of business enterprises. Continued over-expansion will affect income and capital adequacy funds. Strategies may be inconsistent with the direction of business enterprises or may be inappropriate to the changing environment. There is inadequate or unclear communications of strategic targets and of the organizational culture, inadequate adoption and compliance or ineffective implementation of strategies. Strategy decisions or changes in external factors may have great detrimental effects on the financial institution.

Risk Management

Good

Business management follows the principles of good governance achieving efficiency and transparency regarding the disclosure of information. Clear policies and operational procedures are set out for work carried out for and by organizational personnel (insiders) to protect against operational problems concerning conflicts of interest where personnel may carry out tasks for personal gain instead of the good of the organization. Strategic decisions may be changed with little expense and no obstacles. Contingency plans are in place in cases of crisis covering key areas, plans have been communicated to personnel throughout the organization, and are regularly tested.

The financial institution has official policies for training and reserve managerial capacity building to ensure management continuity. Information systems effectively support strategy implementation, the management are highly skilled in the development of strategy direction, in increasing efficiency in strategy implementation and business operations to successfully meet set targets.

The financial institution's board of directors is fully qualified, has diversified experience, regularly attend board meetings and each is without any influence over the other members. There is a committee responsible for the supervision of all risks.

Adequate

Business management follows the principles of good governance with transparency regarding the disclosure of information. Adequate policies and operational procedures are set out for work carried out for and by organisational personnel (insiders) to protect against operational problems concerning conflicts of interest where personnel may carry out tasks for personal gain instead of the good of the organisation.

Strategic decisions may be changed with no obstacles and no significant expenses. Contingency plans are in place in cases of crisis adequately covering key areas, contingency plans are regularly tested and communicated to personnel throughout the organisation. The financial institution has adequate official policies for training and reserve managerial capacity building to ensure management continuity. Information systems adequately support strategy implementation, the management show capabilities in implementation and carrying out business operations to meet set targets and objectives, and have good decision-making and managerial skills.

The financial institution's board of directors are qualified, have diversified experience, there may be some in attendance of meetings but with no significant consequences, and no board member has controlling authority over other members. The scope of the board of directors' responsibilities cover the key risk areas.

Weak

Business management does not follow principles of good governance, and there is no transparency regarding the disclosure of information. Inadequate policies and operational procedures regarding work carried out for and by organizational personnel (insiders) to protect against operational problems concerning conflicts of interest where personnel may carry out tasks for personal gain instead of the good of the organization. Changes in strategic decisions will result in obstacles and significant expenses. Contingency plans in case of crisis are inadequate, and are not regularly tested and nor communicated to personnel in the organization.

The financial institution has inadequate official policies for reserve managerial capacity building, or is inefficient and has inadequate training programmes to ensure management continuity. Information systems do not adequately support strategy implementation; the

management do not have the capability to implement and carry out business operations to meet set targets and objectives, and are unsuccessful in decision-making and the management of the business.

The financial institution's board of directors are not adequately qualified, do not have diversified experience, lack attendance of meetings, a board member has controlling authority over other members, and the scope of the board of directors' responsibilities do not cover key risk areas.

Credit Risk Ratings

Risk Levels

Low

Current and forward-looking risk exposures which have the potential to cause loss of income or loss to the capital adequacy fund are low. The credit structure and size of loans are conservative. The risks arising from items which do not comply with loan extension standards and from unauthorized loan extensions are low. Loans portfolios and capital investments have good risk diversification in terms of both rankings of investability and behaviors of debtors regarding reliance on borrowings. Overall, counterparties and issuers of debt instruments with whom the financial institution has carried out investments have good credit ratings. Debtors carry out businesses in markets and industries, which are stable. The financial institution has low concentration risks. Loan portfolios and capital investments have low sensitivity to changes regarding economic conditions, industry, competition, government policies, and technological changes.

Risk of losses due to subsidiaries and related businesses are low, and the returns received compensate for existing risks. The size of expansion of the loan portfolio and capital investments are at levels which do not cause concern. The ratio of problem loans to the capital adequacy fund is low, and are solvable under normal operating conditions. The amount of nonperforming loans is low is likely to decrease. The financial institution is strict in carrying out asset classification and making reserve provisions.

Collateral assets have high liquidity, and have market values, which are not sensitive to changes in market conditions. Losses incurred do not have significant effects on current reserves, and any additional reserve provisions are small in terms of their proportion to income.

Medium

The risk exposures, which have the potential to incur loss of income or loss to the capital adequacy fund, are not at significant levels. The credit structure and size of loans are acceptable. There may be a significant number of items, which do not comply with loan extension standards and from unauthorized loan extensions; however, these do not instigate complex risks. Some portions of capital investments may be ranked as non-investible and some debtors' operations are too dependent on the loans but debtors carry out business in markets or industries with low volatility. Some counterparties and issuers of debt instruments with whom the financial institution has carried out investments may have low credit ratings, but overall, counterparties and issues have average credit ratings. The financial institution's concentration risks from loans are not at significant levels. Loan portfolios and capital investments may be affected by changes regarding economic conditions, industry, competition, government policies, and technological changes.

There are risks of loss due to subsidiaries and related businesses but risks are not at significant levels, and the returns received compensate for existing risks. There may be unusual expansions of the loan portfolio in certain products or region/ industry with supporting work plans, which are consistent and reasonable. The amount of problem

loans are limited compared to the capital adequacy fund, and are solvable over a reasonable length of time. The amount of nonperforming loans is within average industry limits and are likely to decrease. Asset classifications and reserve provisioning comply with the regulations of the Bank of Thailand.

Collateral assets have average liquidity, with market values, which change following market conditions. Losses incurred do not have effects on reserves, or have effects, which are not significant compared to their proportion to income.

High

The risk exposures, which have the potential to cause loss of income or loss to the capital adequacy fund, are significant. There is aggressive credit extension, and a large number of items, which do not comply with loan extension standards. A major portion of capital investments are ranked as non-investible or are debtors which are too dependent on loans to carry out operations or are debtors whose business are in highly volatile markets or industries. Counterparties and issuers of debt instruments, on the average, fail to receive reliable ratings. The financial institution's loans have significant concentration risks. Loan portfolios and capital investments are significantly affected by changes regarding economic conditions, industry, competition, government policies, and technological changes. There are significant risks of loss due to subsidiaries and related businesses, and returns may not compensate for existing risks.

There are aggressive growths of the loan portfolio in certain products or region/ industry. The financial institution has a large amount of problem loans compared to the capital adequacy fund which may require protracted remedial period, or the institution has a large amount of nonperforming loans. Asset classifications and reserve provisioning do not comply with the regulations of the Bank of Thailand.

Collateral assets have little liquidity, with market values, which are highly volatile to market conditions. Losses incurred may significantly reduce reserves, and the financial institution will need to make significant additional reserve provisioning compared to the size of their income.

Risk Management

Good

The financial institution has loan policies which clearly set out acceptable risk limits and the responsibilities of related parties. Loan policies and strategies have been reviewed and approved by the institution's board of directors, and communicated to all related parties. There is a balance between loan market expansion and credit analyses.

The loan approval process is easy to understand and strictly adhered to. Credit analyses are detailed and carried out with careful consideration, and monitoring of loan quality/status is timely. Risk measurement and risk control systems are comprehensive and are able to support management decision-making regarding changes in loan quality and market conditions. Methodologies for risk measurement and risk limits setting are reasonable and carried out by parties independent of the risk generating divisions. Risk systems and methodologies are appropriate for the complexity and size of the organization.

Credit risk measurement and risk management tools are able to provide useful information for timely decision-making. These tools have been evaluated by independent parties, are continuously developed and up-to-date. Credit risk database systems provide sufficient and current information, are linked to risk management systems, and are accurate, complete, timely, reliable, and clearly assist in analyses and evaluations of operations following policies and regulations. Reports of items in non-compliance with operational guidelines are

automatically reviewed as they occur. Rankings of debtors' credit quality are accurate and reported in a timely manner.

Loan department operations are efficient; manager set out and manages risks including risks relating to the structure and concentration of loans. Provisioning methods are appropriate and sufficient. Operations strictly comply with collateral policies.

Personnel have technical and managerial expertise. The turnover or leaving rate of key personnel is low. The committee in charge of the evaluation and approval of loans has appropriate qualifications and carry out their responsibilities for the benefit of the financial institution as a whole. Internal control systems are effective. Loan reviews and internal audits are competent and independent.

Adequate

The financial institution has loan policies, which set out acceptable risk limits and the responsibilities of related parties. Loan policies and strategies have been approved by the institution's board of directors, and communicated to all relevant parties. There is a balance between loan market expansion and credit analyses.

The loan approval process is easy to understand with sufficient credit analyses and monitoring of loan quality/status. Risk measurement and risk control systems provide information which management is able to use in decision-making regarding changes in loan quality and market conditions. Methodologies for risk measurement and risk limits setting are reasonable and carried out by parties independent of the risk generating divisions. Risk systems and methodologies are appropriate for the complexity and size of the organisation with only slight deficiencies.

Credit risk measurement and risk management tools are able to provide adequate information. Said independent parties have evaluated tools, are continuously developed and up-to-date. Credit risk database systems are efficient, and may be used in analyses and evaluations of operations following policies and regulations. Reports of items in non-compliance with operational guidelines are reviewed from time to time. Rankings of debtors' credit quality are accurate and reported in a timely manner.

Loan department operations are acceptable; managers set out and manage risks including risks relating to the loan structure, loan concentration, and adequate provisioning for losses from loan portfolios. Collateral policies are clearly set out and appropriate.

Personnel have the required technical and managerial skills. The turnover or leaving rate of key personnel is at average levels and controllable. The committee in charge of the evaluation and approval of loans has appropriate qualifications though members may not always carry out their responsibilities for the benefit of the financial institution as a whole. Internal control systems are effective. Loan reviews and internal audits are competent and independent.

Weak

The financial institution has loan policies, which do not clearly set out acceptable risk limits or responsibilities of related parties. Loan policies and strategies have not been communicated to all related parties. Aggressive loan market expansions outweigh prudent credit analyses. Loan approval processes are not clearly set out.

Credit analyses and monitoring of loan quality/status is insufficient considering existing risk levels. Risk measurement and risk control systems provide insufficient information to support management decision-making regarding changes in loan quality and market conditions. Methodologies for risk measurement and risk limits setting are not cogent or are carried out

by parties not independent of the risk generating divisions. Risk systems and methodologies are insufficient or are inadequate for the complexity and size of the organisation.

Credit risk measurement and risk management tools are unable to provide useful information. Said tools have not been evaluated by independent parties, are not continuously developed to be up-to-date. Credit risk database systems are flawed and are unable to provide information for analyses and evaluations of compliance with legal stipulations. There is no reporting of items in non-compliance with legal stipulations. Rankings of debtors' credit quality do not accurately reflect the quality of debtors.

Loan department operations are not efficient, managers are unable to set out and monitor risks, and not enough attention is given to the diversification of risks. Provisioning methods are insufficient for loan portfolio losses. The financial institution lacks clear and appropriate collateral policies.

Personnel lack technical and managerial expertise. The attrition rate of key personnel is high. The committee in charge of the evaluation and approval of loans lack the appropriate qualifications and carry out their responsibilities for personal benefit rather than for the benefit of the financial institution as a whole. Internal control systems are ineffective. Loan reviews and internal audits are inefficient and lack independence.

Market Risk Ratings

Risk Levels

Low

Interest rate risk exposures, and market (price) risks from unhedged or illiquid positions are low. Most of the assets which are sensitive to changes in interest rates are short-term assets and/ or have floating interest rates. The financial management departments have low transaction levels. Currencies risks are not significant to the capital adequacy fund. Hedging transactions are well-able to remove risks. Transactions undertaken on behalf of clients usually concern speculation or trading of financial instruments which are liquid and easy to manage, and risk monitoring and controls are able to manage the level of transactions. There are no significant mismatches in long-term risk exposures, the institution is able to forecast cashflows and hedge against almost all its risks. Mismatches in currency positions are short-term and the majority of these have been hedged.

Current and future levels of income and capital adequacy fund are not sensitive to changes in interest rates or to exercising options instruments. Exposures to price risks are limited and therefore the potential loss to income and to the capital fund are not significant. Changes in interest rates, exchange rates, and price of equity instruments have only a small effect on the financial institution's credit facilitation business, income and capital adequacy funds. The risk exposures of subsidiaries and related companies have only small effects on the financial institution's market risks.

Medium

Interest rate risk exposures are at manageable levels. Price risks are at medium levels. Assets which are sensitive to changes in interest rates include both fixed and floating rate assets, and are at manageable levels. The financial management departments have medium transaction levels. Currencies risks exist but do not adversely affect the capital adequacy fund. Hedging transactions are able to remove some risks. The financial institution is able to carry out hedge transactions at reasonable cost.

Mismatches in long-term risk exposures are manageable, while mismatches in cashflows are at medium levels and forecastable. There are long-term mismatches in currency positions, however, these have been effectively hedged at reasonable cost.

Income and the capital adequacy fund are somewhat sensitive to changes in interest rates or to the exercise of options instruments but the effects are not significant. Exposures to price risks are at medium levels, therefore significant potential loss to income and to the capital fund is limited. Changes in interest rates, exchange rates, and price of equity instruments do not have significant adverse effects on the financial institution's income and capital adequacy fund. The risk exposures of subsidiaries and related companies do not have significant effects on the financial institution's market risks.

High

Interest rate risk exposures and price risks are significant. Assets which are sensitive to changes in interest rates comprise mainly of long-term assets with fixed interest rates. The financial management departments have high transaction levels, involving volatile assets. Currencies risks have significant effects on the capital adequacy fund. Hedge transactions are unable to remove risks. Transactions to offset or hedge risk exposures are difficult and costly due to the size, maturity, complexity, or illiquidity of the market or the product/ instrument. Mismatches in long-term risk exposures are significant, and mismatches in cashflows are unhedged. There are long-term mismatches in currency positions with high hedging costs; said currency exposures are unhedged where some exposures are to illiquid currencies. Income and the capital adequacy fund are highly volatile to changes in interest rates or to the exercise of options instruments resulting in significant losses to income and the capital fund. Changes in interest rates, exchange rates, and price of equity instruments significantly affect the financial institution's credit facilitation business, the institution's income, and its capital adequacy fund. The risk exposures of subsidiaries and related companies significantly affect the financial institution's market risks.

Risk Management

Good

The management understand all types of market risk which affect the short-term income and the long-term market value of the business. There are sufficient and timely risk monitoring, measurement and controls able to quickly respond to market changes. Related personnel have a good knowledge and understanding of market risks.

Risk management systems and processes are effective and aggressive in measuring risks and cover both on- and off-balance sheet transactions. Risk measurement tools and methodologies are appropriate to the size and complexity of the financial institution. Risk models are reliable and tested. Supporting documentation is up-to-date and provide meaningful and timely information. The assumptions used are appropriate and regularly reviewed. Product business strategies are set out and the services provided are consistent with the competitive environment in the market with only small deficiencies or errors. Research analyses and documentation are prepared regarding the risks of each new product prior to providing a service. There is appropriate interest risk management, and good liquidity management and marketing of the product.

The information provided to various levels of management within the organisation is able to provide comprehensible results from evaluations of policy risks, strategic risks, and compliance with risk limits including any exceptions (if any). The data is accurate, complete, reliable, and timely. There are regular reviews of reports of items in non-compliance with normal policy and operational procedures. Set risk limit structures clearly illustrate acceptable levels of risk under both normal and crisis conditions, and are communicated to all related

parties. The objectives in hedging risks are reasonable and are also communicated to all related parties.

Parties responsible for the measurement, monitoring, and control of risks under set risk limits have the knowledge, skills and training, and are independent of risk generating divisions and of parties authorised to carry out decisions to undertake risks.

Adequate

The management understand the key aspects of market risks which affect the short-term income and the long-term market value of the business. There are appropriate and timely risk monitoring, measurement and controls able to respond to market changes. Related personnel have knowledge and understanding of market risks.

Risk management systems and processes are adequate and cover key risks. Risk measurement tools and methodologies are adequate, and despite small deficiencies or weak points, are appropriate to the size and complexity of transactions both on- and off-balance sheet. Risk models are reliable and tested. The accuracy of risk exposures are reviewed by independent parties. The management consider the risks of each new product before marketing it. The information provided to various levels of management within the organisation is able to provide results from evaluations of policy risks, strategic risks, and compliance with risk limits including any exceptions. There is preparation of credit and market data for management from time to time on an ad-hoc basis. There are reviews of reports of items in non-compliance with normal policy and operational procedures, though these may not be timely. Set risk limit structures clearly illustrate acceptable levels of risk under both normal and crisis conditions, and are communicated to all related parties. The objectives in hedging risks are reasonable and are also communicated to all related parties.

Parties responsible for the measurement, monitoring, and control of risks under set risk limits have the appropriate qualifications, and are independent of risk generating divisions and of parties authorised to carry out decisions to undertake risks.

Weak

The management do not understand key aspects of market risks which affect the short-term income and the long-term market value of the business. Risk monitoring, measurement and controls are inadequate, and the institution is unable to respond to market changes in a timely manner. Some management executives lack knowledge and understanding of key aspects of market risks.

Risk measurement tools and methodologies are inadequate and inappropriate to the size and complexity of the financial institution's business operations and both on- and off-balance sheet transactions. Calculations of market values of risk exposures are carried out too infrequently and do not cover all key products. There is insufficient evaluation of the risks of new products prior to their release in the market.

The information prepared for various levels of management within the organisation is unable to provide accurate results of evaluations of policy risks, strategic risks, and compliance with risk limits including any exceptions. Further the information may not cover consolidated risks of all risk exposures. Credit and market data prepared for management is unreliable. There are no reports of items in non-compliance with normal policy and operational procedures. Risk limit structures are unclear and unreasonable, and are not communicated to all related parties. Further, risk limit structures do not reflect the risks which affect income and capital adequacy funds under both normal and crisis conditions. The objectives in hedging risks are unclear, unjustified and are not effectively communicated to all related parties.

Parties responsible for the measurement, monitoring, and control of risks under set risk limits do not have appropriate qualifications, and are not independent of risk generating divisions or of parties authorised to carry out decisions to undertake risks.

Liquidity Risk Ratings

Risk Levels

Low

The financial institution has sufficient liquidity to support future cash outflows with no difficulty.

The financial institution has no difficulty in obtaining capital funds even during adverse market changes. The effects of liquidity risks on income and the capital adequacy fund are small. Losses from subsidiaries and related businesses have a small effect on the organisation. Income is stable with continuous growth. Loans are of good quality and generate consistent cashflows. Sources of deposits and borrowings are not concentrated, with many stable main deposit funds. Cash inflows balance cash outflows in every period, with cash inflows exceeding outflows. Deposits are stable and there is market acceptance of the organisation's reputation which helps give the institution an advantage regarding the cost of funds when raising funds from the market allowing the institution to easily raise funds from both financial and capital markets under both normal and crisis conditions.

The management is able to choose the sources of funds and raise funds in accordance to their needs with no effects on the organisation's main business operations.

Medium

The financial institution has sufficient liquidity to support future cash outflows with little difficulty.

The financial institution has few difficulties in obtaining capital funds even during adverse market changes. The effects of liquidity risks on income and the capital adequacy fund are manageable. Losses from subsidiaries and related businesses do not have significant effects on the organisation.

Income may not be stable nor have continuous growth, but the institution is able to manage its income. Loans are of adequate quality and generate satisfactory cashflows. Sources of deposits and borrowings have appropriate diversification or only small concentrations. The volatility of funding sources are at medium levels. Cash outflows exceed cash outflows in some periods. Some funding sources may have the same objectives as the financial institution in making investments, or funding sources may be affected by economic conditions in a similar manner to the financial institution. The financial institution can easily raise funds only from financial capital markets.

Sources of funds are sufficient. On- and off-balance sheet transactions and cashflows are balanced resulting in stable levels of liquidity, and initial costs are reasonable with no effects on the organisation's main businesses.

High

The financial institution has insufficient liquidity to support future cash outflows. The financial institution's status does not facilitate the raising of capital funds during adverse market conditions. Losses from subsidiaries and related businesses significantly affect the organisation.

Income and/ or growth is volatile. There are problems regarding the quality of loans quality generating low levels of cashflows. Sources of deposits and borrowings have significant

levels of concentration, and funding sources may be considerably volatile. Cash outflows exceed cash inflows. Some funding sources may have the same objectives as the financial institution in making investments, or funding sources may be affected by economic conditions in a similar manner to the financial institution. The financial institution does not have market acceptance, which may limit the raising of capital funds from financial and capital markets. Short-term liquidity needs may increase while medium-term and long-term liquidity fall. The financial institution's source of funds and financial structure may be obstacles in maintaining liquidity under reasonable costs. Income and capital adequacy funds may decrease due to higher funding costs, assets may increase without forward planning, or the quality of assets may depreciate significantly. The institution may have to implement contingency plans to increase liquidity, which may involve the sale or suspension of some of the institution's main businesses.

Risk Management

Good

The financial institution has comprehensively set out all the key liquidity risks in its risk management policies, also covering the forecasting and responses to market changes in a timely manner. The management has set out clear and appropriate policies and operational guidelines regarding the acceptance and management of risks. Internal control systems are effective, include the forecasting and responses to market changes in a timely manner, and liquidity planning is carried out as part of strategic planning, financial statement preparation, and financial management.

The tools and methodologies for measuring liquidity risks are appropriate to the size and complexity of the organisation, and are able to report all significant capital inflows and outflows. Liquidity models and methodologies are reviewed, tested, documented, and developed and up-dated by independent parties. Said models and methodologies help provide useful and timely information to management for use in decision-making, based on reasonable assumptions which have been evaluated and approved. The management is attentive regarding the efficient management of the balance sheet, cashflows, and cost of funds. Further, shareholders are supportive regarding the evaluation and selection of funding sources.

Information used by management is timely, complete, and reliable; and may be used to clearly evaluate policy and strategic risks, and transactions in non-compliance with policies and normal operational guidelines. Set limits regarding loan structure, deposits, concentration of funds, and net capital flows help to clearly illustrate the risks to income and capital funds both in normal and crisis conditions. Further, said limits are communicated to all related parties.

Contingency plans regarding the raising of capital funds are comprehensive and are linked to risks management systems to enable the financial institution to respond to changes during crisis periods in an efficient and timely manner. Personnel who are responsible for the monitoring and control of liquidity levels have appropriate qualifications and sufficient training, and are independent of the risk generating divisions.

Adequate

The financial institution has adequately set out the key liquidity risks and policies to manage liquidity, and sufficient internal control to respond to market changes. The management has carried out sufficient planning regarding liquidity risk management, implementation, and internal controls. Liquidity planning is carried out as part of strategic planning, financial statement preparation, and financial management.

The tools and methodologies for measuring liquidity risks are appropriate to the size and complexity of the organisation, and are able report sources of significant capital inflows and outflows though tools and methodologies may have minor deficiencies. Liquidity models and methodologies are tested and reviewed. There is documentation and development of models and methodologies to be up-to-date. Liquidity models and methodologies help provide useful and timely information to management for use in decision-making. The management is attentive regarding the efficient management of the balance sheet, cash flows, and cost of funds. There are deficiencies regarding cash flow management, however, and shareholders show no interest in capital support issues.

Information used by management is timely, complete, and reliable; and may be used to help evaluate policy and strategic risks, and transactions in non-compliance with policies and normal operational guidelines. There are clear and reasonable limits regarding loan structure, deposits, concentration of funds, and net capital flows, which are communicated to related parties throughout the institution. Further, said limits have been adequately applied to control risks which may affect income and capital funds under both normal and crisis conditions. Contingency plans regarding the raising of capital funds support liquidity risk management, and may be implemented under crisis conditions. Personnel who are responsible for the monitoring and control of liquidity levels have appropriate qualifications, and are independent of the risk generating divisions.

Weak

The financial institution has not adequately set out the key liquidity risks and liquidity management guidelines to respond to market changes. Liquidity management policies, operational guidelines, and internal controls are insufficient. Liquidity planning is not adequately integrated into strategic planning, financial statement preparation, and financial management.

The tools and methodologies for measuring liquidity risks are inadequate and inappropriate to the size and complexity of the organisation, and are unable report significant capital inflows and outflows. The institution has no liquidity models, or liquidity models and methodologies are not tested and reviewed. There is no documentation and development of models and methodologies to be up-to-date by independent parties, and liquidity models and methodologies are unable to provide useful information for management decision-making. The management give insufficient attention to cashflow statements, or there is no cashflow management at all. Shareholders are leary of providing capital support, management has not realistically evaluated the institution's ability to raise capital from capital markets, or management has given insufficient attention to the diversification of risks or have given only little consideration to the existing large funding sources and related risks. Information used by management may contain errors. Limits regarding loan structure, deposits, concentration of funds, and net capital flows are unclear and unreasonable, and have not been effectively communicated to related parties. Further, said limits do not reflect an understanding of the effects of liquidity risks on income and capital funds. There are deficiencies in contingency plans to raise capital funds resulting in management inability to resolve liquidity problems under crisis conditions. Personnel who are responsible for the monitoring and control of liquidity levels do not have appropriate qualifications, and are not independent of the risk generating divisions.

Operational Risk Ratings **Risk Levels**

Low

Changes in personnel, products, or major businesses have only small effects on the financial institution. The organisational structure and hierarchy is clear, compact, and encompasses major businesses and/ or subsidiary businesses. Managerial authority is not limited to senior executives, nor is managerial authority unlimited. There is little non-compliance with decision-making authority nor set guidelines. Internal controls cover all major businesses with regular examinations by the middle office or by internal examiners. The management fully endorses monitoring of compliance with observation results from said examinations. The financial institution has good contingency plans to support business operations under crisis conditions including backup plans, emergency plans, and recovery plans. Changes in external auditors do not have adverse effects on the organisation. The amount and complexity of new and existing products and services may result in a low level of risk due to possible fraud, errors, suspension of operations, internal control failure, or deficiencies in system development.

The amount of aggregate transactions, the complexity of operational processes and system development have a small effect on the ability to generate income, capital adequacy funds, and the institution's reputation. The initiation of new strategic plans, the introduction of new technologies, or overseas operational expansions result in small operational risks and do not affect the financial institution's reputation. Information systems have been partially replaced, or upgraded, or small repairs have been carried out. No business under the financial institution has shown profits or growth which are higher than the norm. The amount of wrongdoing, legal prosecution, client-issued claims, and losses are small and have no effect on the financial institution's reputation, value, ability to generate income, capital adequacy funds, nor on the institution's business opportunities.

No significant errors were found regarding business operations carried out between departments, business lines, and subsidiary businesses to indicate problems regarding the financial institution's operational systems. The features and scope regarding the implementation of transactions is able to limit risks from disregarding or breaking rules or regulations. The likelihood of loss due to changes in the market or public perception is low as the market and the public have a good opinion of the financial institution. Employee turnover or leaving rate is low, there is no appointment of new employees to key positions, and increases or decreases in staff are small in the period following the previous examination.

Medium

The effects of changes in personnel, products, or major businesses do not materially affect the financial institution. The organisational structure and hierarchy is unclear and does not encompass some secondary businesses and/ or subsidiary businesses which are not main business operations. Some management executives have high levels or unlimited authority, however not in such a way as to cause problems to the financial institution. There is non-compliance with decision-making authority or set guidelines, but with no significant effects. Internal controls sufficiently cover major businesses and regular examinations are carried out by the middle office or by internal examiners. The management endorses compliance with observation results from said examinations.

The financial institution has contingency plans to support business operations under crisis conditions including backup plans, emergency plans, and recovery plans for main businesses which are sufficient to resolve potential operational problems. Changes in external auditors do not have adverse effects on the organisation.

The amount and complexity of new and existing products and services may increase risks from possible fraud, errors, suspension of operations, internal control failure, or deficiencies in system development.

The amount of aggregate transactions, the complexity of operational processes and system development have impacts on risks, reputation, income and capital adequacy funds. There are risks from setting and implementing new strategic plans, however risks are at manageable levels. The initiation of new technologies, or overseas operational expansions do not result in overly high operational risks. Information systems have been partially replaced, upgraded, or repaired. The financial institution has businesses which have shown very high profits or fast growth, but are not cause for concern.

The amount of wrongdoing, legal prosecution, client-issued claims, and losses are not at significant levels and do not have impacts on the financial institution's reputation, income, capital adequacy funds, or business opportunities. The financial institution does not have a past history of serious filings for prosecution or legal action. There are some errors regarding business operations carried out between departments, business lines, and subsidiary businesses which may cause problems to the financial institution's operational systems. However, said errors were discovered in time. The features and scope regarding the implementation of transactions may result in risks from disregarding or breaking rules or regulations. The likelihood of loss due to changes in market or public perception is not at significant levels, as may be evaluated from the level of prosecution cases, losses, claims, and client perception.

Employee turnover or leaving rate is at medium levels, there are appointments of new employees to a few key positions, and there are not significant increases or decreases in staff since the previous examination.

High

Changes in personnel, products, or major businesses have material effects on the financial institution. The organisational structure and hierarchy is unclear and does not encompass main business lines and/ or subsidiary businesses. Many management executives have high levels of personal authority or unlimited authority. There is non-compliance with decision-making authority or set guidelines. Internal controls are insufficient and lack regular examination by the middle office or internal examiners. The management gives no support regarding compliance with observation results from examinations.

The financial institution has contingency plans to support business operations under crisis conditions including backup plans, emergency plans, and recovery plans but these are insufficient and do not cover major departments within the organisation. Changes in external auditors have adverse effects on the organisation.

The amount and complexity of new and existing products and services may increase risks from errors or deficiencies. Operational processes are not systematic, inefficiencies in system development, the amount of aggregate transactions, the complexity of operations, and system development have impacts on reputation, income and the capital adequacy fund. The initiation of new technologies, or overseas operational expansions have sizeable impacts on operational risks. There are significant changes to Information systems. The financial institution has businesses which have shown excessively high profits or growth levels.

The amount of wrongdoing, legal prosecution, client-issued claims, and losses are high and have material significance having impacts on the financial institution's reputation, income, capital adequacy funds, or business opportunities. The financial institution has a past history of client claims and serious filings for prosecution. There are significant deficiencies in business operations carried out between departments, business lines, and subsidiary businesses causing problems to the financial institution's operational systems. The features and scope regarding the implementation of transactions may significantly increase risks from

the disregard or breaking of rules and regulations. The likelihood of loss due to changes in market or public perception is high, due to prosecution cases, losses, and claims. Employee turnover or leaving rate is at high levels, there are appointments of new employees to many key positions, and there are large increases or decreases in staff since the previous examination.

Risk Management

Good

The financial institution has set out risk management policies and acceptable risk levels which have been approved by the financial institution's board of directors.

Policies and operational procedures for major new products and services have been considered and approved by the institution's board prior to their release, where said policies support the achievement of strategic targets and are regularly reviewed and evaluated. Communications throughout the organisation are efficient. There is delegation of authority to approve items/ transactions which are not compliant with normal policies and operational procedures.

The financial institution's board of directors have given the responsibilities of risk management to working group independent from divisions whose operations are risk-generating. Audit committees are independent. The management forecasts potential risks and is able to, efficiently and in a timely manner, manage risks arisen from changes in the operational procedures, development of operational systems, or by bringing in new technologies, changes in the market or from government regulations which may impact the financial institution's reputation.

There are efficient amendments to deficiencies regarding policies, operational processes, personnel, and internal controls. Regular risk evaluations are carried out for all products and services, including transaction risks, risks of non-compliance with rules and regulations, and reputation risks. The management endorses operational procedures which are consistent with the organisational culture, and supports the operations of all its departments until success is achieved.

The financial institution is able to carry out its operations and control the risks from its products and services within acceptable levels, following the organisation's operational rules and following the rules and regulations of the supervisory authorities. It is able to carry out the monitoring, controlling and auditing extensively. The institution has handbooks for all business operations and carries out independent examinations of all its operations. The institution takes care to prevent conflicts of interest, and allocates resources to enable timely operations. The institution tests the accuracy and reconciliation of data and various reports. There is monitoring and reporting of transactions/ items not in compliance with normal policies and operational guidelines to management at appropriate times. Internal examinations encompass all key risk operations. Database and information systems are efficient. Reports to management may have minor deficiencies but provide sufficient information that is accurate and timely for management decision-making.

Senior management and executive management of main departments have the knowledge and management expertise. There are appropriate hiring or employment processes, and staff training to improve the aptitude of personnel. Assessments of performance and remuneration are appropriate and are not dependent on the ability to generate short-term profits, or profits from trading without taking account of the quality of management and risk controls. Personnel receive sufficient training, have managerial expertise, and possess an understanding

and knowledge of operations to achieve success following given strategies and within acceptable risk levels.

Adequate

The financial institution has set out adequate risk management policies and acceptable risk levels which have been approved by the financial institution's board of directors. Policies and operational procedures for major new products and services have been considered and approved by the institution's board prior to their release. The policies may deviate from set strategies, but policies are adequately reviewed and evaluated by the board of directors. Communications within the organisation are good. The approval of items/ transactions which are not compliant with normal policies and operational procedures is carried out by authorized personnel at senior levels.

The financial institution's board of directors have given the responsibilities of risk management to working group independent from divisions whose operations are risk-generating. Examination committees are independent. There is responsiveness to risks associated with changes in operational procedures, development of operational systems, the introduction of new technologies, and changes in the market or government regulations which may impact the financial institution's reputation.

There are amendments to deficiencies regarding policies, operational processes, personnel, and internal controls. There is sufficient evaluation of risks for all products and services, and risks of non-compliance with rules and regulations.

The management provides for tools to control and lower risks from new products and services in a satisfactory manner, and monitors operational procedures to ensure they are consistent with the strategies, policies, acceptable risk levels, and the regulations of the Bank of Thailand.

There are systems to comprehensively and independently monitor, control, and examine operational procedures. There are sufficient handbooks which are regularly reviewed. The management is able to carry out monitoring to prevent conflicts of interest, and allocates resources to enable timely operations. Support is provided for divisions carrying internal control functions.

There are examination processes to adequately test accuracy and reconciliation of data, and report transactions/ items not in compliance with normal policies and operational guidelines to management at appropriate times. Internal examinations are carried out for some divisions. Database and information systems are satisfactory, though they may not be as efficient as they should. Management reports used for decision-making are provided from time to time according to management needs, but are not provided on a regular basis.

Senior management and executive management of main departments have sufficient knowledge and management skills. There are appropriate hiring or employment processes, and adequate staff training. Assessments of performance and remuneration are based on quality management and risk control abilities. Personnel possess management skills, receive sufficient training, and have an understanding and knowledge of operations to achieve success.

Weak

The financial institution has not set out sufficient risk management policies and acceptable risk levels, and said policies and risks have not been approved by the institution's board of directors. Policies and operational procedures for major new products and services have not been sufficiently reviewed nor approved by the board of directors prior to their release.

Policies do not support the financial institution's strategies, and policies are not adequately reviewed and evaluated by the board of directors.

\Communications within the organisation are not efficient enough. There is often non-compliance with policies and operational procedures.

The risk management committee's operations are not carried out efficiently nor independently of risk-generating divisions. Examination committees are not independent. The management do not forecast potential risks, and is unable to respond to risks associated with changes in operational procedures, development of operational systems, the introduction of new technologies, and changes in the market or government regulations which may impact the financial institution's reputation.

Deficiencies regarding policies, operational processes, personnel, and internal controls are not amended. There is insufficient evaluation of risks for all products and services. There are transactions risks, risks of non-compliance with rules and regulations, and reputational risks, and weaknesses in key operations.

There is insufficient planning for new products and services. There is insufficient monitoring of operational procedures to ensure achievement of strategic targets under acceptable risk limits, and with compliance with the policies and regulations of the Bank of Thailand. Monitoring, internal control, and examination systems are inadequate, do not cover all key departments, and are not independent. Operational handbooks are not complete and lack regular reviews. There are weaknesses in management, conflicts of interest, and clear non-compliance with rules and regulations. Management is unable to appropriately allocate resources, there is a lack of support for divisions carrying internal control functions. Examination processes to verify the accuracy of data and carry out account reconciliation are inadequate. There is insufficient reporting of transactions/ items not in compliance with policies and operational guidelines to management. Internal examinations are not carried out for all divisions with key risks. Management systems have weaknesses and management reports are inadequate for use in decision-making.

Senior management and executive management lack sufficient knowledge and management skills. Hiring or employment processes and staff training to improve personnel aptitude are inefficient. Assessment procedures for performance and remuneration are inappropriate. Personnel lack knowledge and management skills, lack sufficient training, and lack an understanding and knowledge of operations to achieve set strategies under acceptable risk levels.