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CARTAC

Risk-based

Supervisory Framework

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Note: This draft Supervisory Framework is developed as a generic framework. It will need to be adjusted for use by a given supervisory agency in a country.

Prepared for the Caribbean Regional Technical Assistance Center by Naren Sheth, Regulatory and Supervisory Consultant, NAS Consulting Inc. Toronto Canada.

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1. INTRODUCTION

A supervisory agency's activities can be divided into two broad functions: regulation and supervision.

Regulation involves the development, consultation, introduction and enforcement of appropriate legislations, regulations and guidelines for institutions, including authorizing institutions to operate in and from the country.

Supervision involves dynamic assessments of the operations of supervised institutions to ensure they continue to operate in a safe and sound manner and comply with their governing statutes or supervisory requirements, and intervening effectively on a timely basis in cases where prudential issues or concerns are identified.

The supervisory framework is a principle- and risk-based structured methodology designed to facilitate pro active and dynamic assessment of supervised institutions. It is outcome focused with sufficient flexibility to enable supervisors to identify and respond to new and emerging risks through an integration of macro economic and industry perspectives in the assessment of individual institutions.

The framework provides a structured approach for understanding and assessing key risks inherent in an institution's activities, whether its risk management processes (i.e. identification, assessment, measurement, monitoring, controlling, mitigating and reporting of risks) are adequate in the context of the key risks and whether its earnings, capital and liquidity are sufficient to enable it to support its risk profile and withstand unexpected shocks.

2. SUPERVISORY APPROACH

The following are the key principles of the supervisory approach:

1. It is risk and principle based, forward-looking and outcome focused.

2. It recognizes that Board of Directors and Senior Management of institutions are primarily responsible for their financial soundness and prudent management.
3. It is intended to reduce the risk of failure or inappropriate behavior by institutions; but, it cannot prevent all failures as that would result in excessive regulatory burden for the industry and could negatively impact its efficiency.
4. Supervision of institutions is conducted on a consolidated basis, in coordination with other regulators and using information from them as appropriate. It includes an assessment of all material entities, both national and international.
5. The exercise of sound judgment in identifying and evaluating risks is central to the effectiveness of the supervisory approach.
6. Where appropriate, the agency leverages the work of the institution's Corporate Oversight and Governance functions to minimize duplication of effort.
7. Communication of assessments and recommendations to institutions are risk focused and timely.
8. The level and frequency of supervisory scrutiny and the degree of intervention depends on the risk profile of the institution. Institutions that are well managed relative to their risks will require less supervision. Not all areas within an institution need to be reviewed every year.
9. It enables the assessment of the risk profile of an institution to be maintained current and provides an objective basis for allocating supervisory resources across institutions and within an institution.
10. The agency relies on external auditors for the fairness of the financial statements and uses their work to modify the scope of its reviews to minimize duplication of effort. Similarly, the agency relies on actuaries for the adequacy of policy liabilities and uses their work to modify the scope of its review.

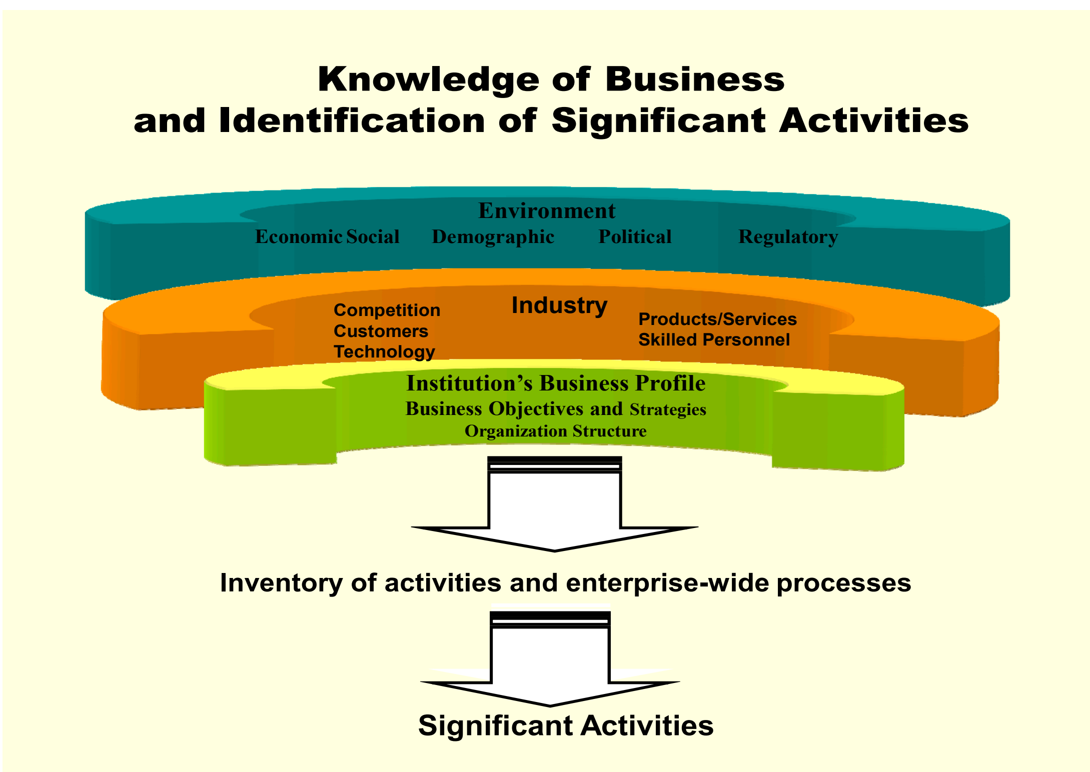
3. BENEFITS

The key benefits of the supervisory approach are:

- closer integration of macro and micro prudential supervision, with focus on early identification of emerging risks to facilitate timely interventions;
- assessments parallel how an institution is managed;

- better evaluation of risk through separate assessment of inherent risks and risk management processes resulting in a deeper understanding of an institution's operations, its risk appetite and the key drivers of its risk profile;
- early identification of institutions and areas in institutions with prudential issues and concerns;
- cost effective utilization of resources through prioritization of supervision based on risks;
- reporting risk focused assessments to institutions for desired outcomes;
- reducing regulatory burden on well managed institutions;
- encouraging a strong risk management culture in institutions; and
- providing flexibility for supervisors to use professional judgment within a structured approach.

4. INTIGRATING MACRO AND MICRO PRUDENTIAL SUPERVISION



The operations of financial institutions are increasingly more connected with each other and with other segments of the economy. Consequently, effective supervision of institutions require an understanding and an assessment of the broader economic and industry environment in which institutions operate.

The supervisory methodology looks beyond individual institutions. It adopts a stronger macro prudential perspective with a focus on specific areas of risk and supervisory themes, without detracting from the supervision of individual institutions. This enables it to identify, monitor and analyze, market, financial and other material environmental factors that could impact an institution and the financial sectors.

Methods of introducing macro prudential supervision factors include surveillance of the broader economic environment and the industry to identify emerging trends and vulnerabilities, as well as peer comparisons of individual institutions. It also includes regular exchange of information and assessments with other regulators as appropriate. .

Through this process, supervisors also engage management of financial institutions in a discussion of risks facing their institution as well as their views on risks in the industry and the broader operating environment.

The assessment aims at establishing a dynamic approach to identifying potential risks and vulnerabilities. It enables supervisors to link activities and risks of individual institutions to the industry and the wider financial system and visa versa. This assessment process in iterative.

Macro Prudential Risk Factors.

Identifying and monitoring macro prudential risk factors in an institution's operating environment requires monitoring of factors such as level of economic activity and gross domestic product, financial market indices, level of business failures, level of interest rates – current and projected, projected rates of inflation, health of the real estate sector, availability of investment products, introduction of new products, country risks, etc.

By monitoring the important macro prudential factors, supervisors are able to assess their probable impact on the industry as well as on individual institutions.

Industry Risk Factors.

Industry analysis involves research and assessments of the state of the industry with a view to identifying issues or emerging risks. Industry analysis is based on periodic information filed by institutions with the agency as well as on industry information available from other sources such as industry publications, rating agencies, etc. It provides supervisors with up-to-date information on industry developments and emerging issues and trends.

Supervisors consider factors such as trends and experience on products and services offered, nature and extent of competition, introduction of new products, trends in growth, profitability, capital levels and liquidity, availability of required skilled resources, investment trends, rate of return on investments, etc.

The analysis, done on a comparative basis, provides supervisors with a good understanding of industry experience and trends, as well as risks faced by the industry and system-wide vulnerabilities.

The analysis provides a macro industry level input into the supervisory process and equips supervisors to assess individual institutions in the context of the industry, supported through peer comparisons.

Agencies normally centralize macro economic and industry level analysis in a given group for efficiency and consistency, with the results of the analysis shared regularly with supervisors for them to consider in the assessment of their institutions.

Institution's Business Profile.

To understand the business profile of an institution, supervisors need to understand its business objectives, strategies to achieve its objectives, and organization and accountability structures used.

A supervisor needs to understand how the institution plans to achieve its objectives, and the activities it engages in or plans to engage in. It is also important to understand the institution's risk tolerance as well as the institution's track record in executing its strategies. The institution's organization and accountability structures need to be aligned with its strategies for successful execution.

Other factors that need to be considered include: growth strategies and the level of growth compared to peers and economic indicators, actual performance against plans, earnings and capital levels and trends, new products and activities being pursued, nature and stability of funding sources, nature and level of off balance sheet exposures, asset quality and concentrations, delinquencies compared to industry experience, liquidity, etc.

5. ASESSING RISK PROFILE OF AN INSTITUTION

An understanding and assessment of the broader economic and industry environments and the institution's business profile provides the supervisor with the necessary context for assessing the institution's risk profile.

Assessing the risk profile of an institution is a dynamic process comprising the following steps:

- Identifying Significant Activities;
- Assessing key risks inherent in each Significant Activity (including asset quality (**"A")**, loans/investments etc);
- Assessing Operational Management, Corporate Oversight and Governance for each Significant Activity **("M");**
- Assessing residual risk in each Significant Activity;
- Assessing Overall Residual Risk for all Significant Activities;
- Assessing Earnings **("E")**, Capital **("C")** and Liquidity **('L")**; and
- Assessing the Risk Profile of the institution.

The above steps are interrelated and operate in a dynamic manner. They represent building blocks for assessing the risk profile of an institution. The quality of assessment in each step can impact the quality of the assessments in the steps that follow, ultimately impacting the quality of the overall assessment. Hence, it is important that each step is carried out at an appropriate level of quality for a sound overall assessment of the institution's risk profile.

The above steps are discussed below.

A risk matrix (Appendix A) is used to summarize the assessments made through the supervisory process.

The risk matrix highlights the institution's Significant Activities, key risks inherent in those activities, how well the key risks are managed and overseen, residual risk for each Significant Activity, residual risk in all Significant Activities taken together, adequacy of its capital, earnings, and liquidity and the risk profile as well as direction and stability of the risk profile. The risk matrix provides a one page window into the institution's operations and facilitates visualization of the components that are the key drivers of the institution's risk profile.

Assessments recorded in the risk matrix are supported by supervisory documentation.

Identifying Significant Activities.

An institution's activities can include a line of business, business unit or an enterprise-wide process (such as information technology). Its activities can be identified from various sources of information, including its organization structure, strategic and business plans, capital allocations, internal and external financial reporting; etc.

Once an institution's activities are identified, sound judgement is applied in determining the significance or materiality of the activities. Materiality for this purpose is a measure of the relative significance of the activities to the attainment of the institution's objectives. It is multi-dimensional, current and prospective and considers both qualitative and quantitative factors.

The following are examples of criteria that may be used for determining materiality:

a. assets generated by the activity in relation to total assets;
b. revenue generated by the activity in relation to total revenue;
c. net income before tax for the activity in relation to total net income before tax;
d. risk-weighted assets generated by the activity in relation to total risk-weighted assets;
f. internal allocation of capital to the activity in relation to total capital, and
g. strategic importance.

Activities identified as significant would be those that are important to the achievement of the institution's business objectives and strategies. They would also generally parallel those considered significant by management and how they are organized and managed by the institution. It may be appropriate to group or sub-divide activities for efficient and effective assessment. However, in doing so, supervisors need to ensure that key risks in the activities are not masked and would be assessed at an appropriate level.

Once activities considered significant (i.e. Significant Activities) are identified, risks inherent in those activities are assessed.

Assessing Risks Inherent in Significant Activities.

Inherent risk is a risk which cannot be segregated from the activity. It is intrinsic to an activity and arises from exposure to and uncertainty from potential future events. Inherent risks are evaluated by considering the degree of probability and the potential size of an adverse impact on an institution's capital or earnings.

A thorough understanding of the environment in which an institution operates and its various business activities is essential to effectively identify and assess risks inherent in its activities. For assessment purposes, inherent risks are grouped in the following six categories:

- credit;
- market;
- insurance;
- operational;
- legal and regulatory; and
- strategic.

An institution's Significant Activities are likely to have a number of above risks. However, since the inherent risk assessments are in the context of assessing the risk profile (safety and soundness) of an institution, supervisory assessments are focused on risks that are likely to have a material impact on the institution's risk profile; i.e. key risks in its Significant Activities.

Key risks are assessed without regards to the size of the activity and without considering the impact of risk mitigation by the institution. The assessment is dynamic and forward looking. Size of the activity is considered separately in assessing Overall Residual Risk in all of the institution's Significant Activities taken together.

The levels of key inherent risks are assessed as **Low (L), Moderate (M), Above Average (AA) or High (H)**. The above risk categories and the rating definitions are described in Appendix B.

The assessment of the level of key risks inherent in an institution's Significant Activities enables a supervisor to build expectations of the type and rigour of risk management and controls that would be required by the institution to effectively manage the key risks down to acceptable levels. This, in turn, equips the supervisor to assess the quality of the institution's risk management and controls in the context of the key risks inherent in its activities. The higher the level of inherent risks, the more rigorous the day to day management and oversight are expected to be.

Assessing Operational Management, Corporate Oversight and Governance.

The quality of risk management and controls for each Significant Activity is assessed at two levels:

a. An assessment of the day to day management of the Significant Activity (Operational Management); and
b. An assessment of the Corporate Oversight and Governance for the Significant Activity.

Operational Management.

Operational Management is primarily responsible for the day to day management of a Significant Activity. This function ensures that policies, processes, control systems, staff levels and experience are sufficient and effective in managing and mitigating the key risks inherent in the Significant Activity. The organization structure and controls must be effective in preventing and detecting material errors and irregularities in a timely manner.

The degree to which an institution's Operational Management for a Significant Activity needs to be assessed directly depends on the assessment of the effectiveness of its Corporate Oversight and Governance functions. In cases where Corporate Oversight and Governance functions are assessed as effective, supervisors would be able to use the results of the work carried out by these functions in respect of the activity as input into the assessment of the effectiveness of Operational Management for the activity. Where institutions lack some or all of the Corporate Oversight and Governance functions (e.g. in case of branches), supervisors look to other functions, within or external to the institution, that handle these responsibilities.

Corporate Oversight and Governance.

The presence and nature of Corporate Oversight and Governance functions vary based on the size, structure and complexity of an institution.

Institutions incorporated in the country are required by legislation to have a Board of Directors and Senior Management. In branches of institutions incorporated outside the country, the principle officer generally carries out the role and responsibilities of Senior Management.

The Board of Directors is ultimately accountable for the management and oversight of an institution. The Board normally delegates management and oversight responsibilities to Senior Management. Depending on the size and complexity of an institution, Senior Management, in turn, may delegate some of its oversight responsibilities to other oversight functions. These oversight functions may include Risk Management, Internal Audit and Compliance.

Senior Management retains the responsibilities not delegated to oversight functions.

In smaller institutions, Senior Management sometimes performs responsibilities normally carried out by Operational Management. In these cases, the institution will need to demonstrate how independent oversight is provided over these responsibilities.

Operational Management, Corporate Oversight and Governance functions are assessed as **Strong (S), Acceptable (A), Needs Improvement (NI) or Weak (W).** These rating categories are described in Appendix C.

Assessing Residual Risk in each Significant Activity.

The assessment of the residual risk in each Significant Activity considers the extent to which the key risks inherent in the activity are effectively managed by Operational Management and independently overseen by Corporate Oversight and Governance functions. For each Significant Activity, the effectiveness and oversight of each key inherent risk is considered separately and then compiled into an assessment of the residual risk for the activity. Hence, these assessments are multi dimensional and are based on informed qualitative judgements.

For example, a corporate lending activity may be assessed as having a high credit risk, and a moderate level of operational risk. However, the residual risk for the activity may be assessed as moderate due to an acceptable level of risk management by Operational Management and a strong oversight by Internal Audit and Senior Management and an acceptable level of oversight by the Board.

Net residual risk for an activity is assessed as **Low (L), Moderate (M), Above Average (AA) or High (H).**

The following table is used to guide the residual risk assessments.

Quality of Risk Management	Level of Inherent Risk			
	Low	Moderate	Above	High

			Average	
Strong	**Low**	**Low**	**Moderate**	**Above Average**
Acceptable	**Low**	**Moderate**	**Above Average**	**High**
Needs Improvement	**Moderate**	**Above Average**	**High**	**High**
Weak	**Above Average**	**High**	**High**	**High**

Supervisors can also use indicators to assess the reasonableness of their residual risk assessments in Significant Activities. The following are some examples of the types of indicators that could be used:

- Asset quality and trends (NPLs, specific provisions, migration of risk ratings, etc);
- Growth (unusual and high rate of growth in activity, portfolio, products, customer segments, concentrations, new business, market share, etc.);
- Growth compared to peers;
- High degree of turnover;
- Early warning test failures;
- Profitability and trends;
- Actual experience vs. planned;
- Changes in risk weighted assets;
- Operational losses;
- Changes in capital allocation;
- Etc.

Should the indicators not be consistent with the residual risk assessed in a given activity, supervisors would need to reconsider their assessment of both level of inherent risks and the quality of risk management to understand the reasons for any inconsistencies.

Direction of residual risk.

The residual risk assessments include a determination of the direction of residual risk. Direction is assessed as **Decreasing (D), Stable (S), or Increasing (I)** over an appropriate time horizon for the institution; for example, generally the time horizon for a larger more complex institution may need to be longer than for a smaller institution.

Assessing Overall Residual Risk for all Significant Activities.

Overall Residual Risk of all Significant Activities taken together is a weighted aggregate of the residual risk of the individual Significant Activities. The assessment considers the residual risk in each activity and its relative materiality in developing the overall assessment. The overall assessment is a qualitative assessment of the institution's susceptibility to adverse events that might impact its earnings or capital in the foreseeable future.

Overall Residual Risk is rated as **Low (L), Moderate (M), Above Average (AA) or High (H)**. Definitions of these rating levels are included in Appendix D.

The direction of Overall Residual Risk is assessed as **Decreasing (D), Stable (S), or Increasing (I).**

Assessing Earnings, Capital and Liquidity.

After assessing the Overall Residual Risk in an institution's Significant Activities, supervisors assess Earnings, Capital and Liquidity in the context of the Overall Residual Risk. Under the methodology, Earnings and Capital are first assessed separately to understand how they individually contribute to the safety and soundness of the institution, and then considered together to assess their adequacy in the context of the Overall Residual Risk in the institution's Significant Activities.

Earnings, Capital and Liquidity are assessed as **Strong (S), Acceptable (A), Needs Improvement (NI) or Weak (W).** Definitions for these rating levels are included in Appendix E. The criteria used to assess Earnings, Capital and Liquidity are summarized below:

Earnings.

Earnings are intended to provide for an institution’s expected losses, generate an adequate return for the shareholders and contribute to capital.

The assessment of earnings considers the quality, quantity, volatility, composition and sustainability in the context of the institution’s business objectives and its Overall Residual Risk. It also considers historical trends and future outlook, both under normal and stressed conditions, as well as reliability of its contribution to capital.

Capital.

Capital represents resources of an institution to enable it to withstand unexpected losses and shocks (i.e. it is an institution’s safety net.).

The assessment of capital considers the adequacy of capital (quality and quantity) both at present and prospectively and under normal and stressed conditions in the context of the institution’s Overall Residual Risk. It also considers capital management processes, access to capital in the context of the institution’s Overall Residual Risk and planned business activities. It is not sufficient for an institution to merely meet minimum regulatory requirements. Capital has to be sufficient to support the risk profile of the institution as well as its planned activities. Also, no matter how substantial an institution’s capital is, it cannot be considered a substitute for appropriate risk management and oversight of the institution’s activities.

Assessment of a bank’s ICAAP is integral to the assessment of the adequacy of its capital in the context of its risk profile.

Capital planning and management needs to be effectively overseen by Senior Management and the Board.

Liquidity

Adequate level of liquidity is critical for the overall safety and soundness of an institution.

Assessment of liquidity considers the current level and prospective sources of liquidity compared to funding needs (both under normal and stressed conditions) as well as the adequacy of liquidity management practices in the context of the size, complexity, and risk profile of the institution. The assessment, for example, considers:

- The availability of assets readily convertible to cash without undue loss;
- Access to various sources of funding;
- The level of diversification of funding sources;
- The degree of reliance on short-term and volatile sources of funds;
- The trend and stability of deposits;
- The capabilities of management to identify, measure, monitor and control the institutions liquidity position, including the effectiveness of fund management strategies, liquidity policies, management information systems and contingency funding plans.

Liquidity management needs to be effectively overseen by Senior Management and the Board.

Assessing the Risk Profile of the Institution.

The assessment of the risk profile is an overall assessment of the institution after considering the adequacy of its capital supported by earnings, and its liquidity in the context of the Overall Residual Risks in its Significant Activities. It is an assessment of the safety and soundness of the institution.

The risk profile is assessed as **Low (L), Moderate (M), Above Average (AA) or High (H)**. Definitions of these rating levels are included in Appendix F.

The assessment also includes an assessment of the direction of the institution's risk profile. Direction is assessed as **Decreasing (D), Stable (S) or Increasing (I).**

The stability of the assessment is indicated in terms of a time frame. For example, a shorter time frame is assigned in cases where the risk profile is likely to be more volatile and a longer time frame in cases where the risk profile is expected to be more stable.

The supervisory methodology provides for a baseline level of activity to assess the risk profile of each institution. It provides the basis to determine risk based priorities and the level of intervention considered necessary in individual cases. Once an institution's risk profile has been assessed it is refreshed through a dynamic assessment of the impact of any material changes for the institution. Accordingly, beyond this dynamic monitoring and up-dating of an institution's risk profile; most of the supervisory resources are invested in institutions that require attention based on their risk profile and the prudential issues that need to be addressed.

6. GUIDE TO INTERVENTIONS

The supervisory methodology includes an intervention system that triggers appropriate supervisory actions when prudential concerns of an institution become elevated. The objective being to ensure these concerns are addressed on a timely basis.

A Guide to Intervention is included as Appendix G. It outlines the types of actions that supervisors consider, depending on the institution's risk profile and the nature and significance of prudential concerns.

The intervention process is not rigid and every situation cannot necessarily be addressed with a predetermined set of actions. Accordingly, the actions indicated in the guide are for a range of ratings; for example, Low to Moderate, Moderate to Above Average, etc. Circumstances may vary significantly from case to case. The guide should not be interpreted as limiting the actions that can be taken in dealing with specific concerns.

The guide aims to outline at which level an intervention would typically occur. The actions indicated are cumulative; i.e. actions indicated at the lower level of risk are implicitly included in actions that could be considered for institutions with a higher risk profile. Also, if circumstances warrant, actions can be taken at a risk level lower than that indicated in the guide.

7. OVERALL ASSESSMENT OF CORPORATE OVERSIGHT AND GOVERANCE FUNCTIONS

The methodology facilitates the development of an overall assessment of the effectiveness of the Corporate Oversight and Governance functions. The overall assessment combines an assessment of the characteristics of the functions (how they have been set-up to provide the oversight) and an assessment of their effectiveness (how well they carry out their oversight roles) across all Significant Activities of the institution.

Corporate Oversight and Governance functions are rated as **Strong (S), Acceptable (A), Needs Improvement (NI) or Weak (W).**

Rating definitions, criteria for assessing the characteristics and examples of performance indicators are summarized in Appendix H. Performance assessment, which is the major part of the overall assessment, is derived from the effectiveness assessments for the function across the institution's Significant Activities.

8. CONSOLIDATED SUPERVISION

Consolidated supervision is an essential tool for supervising financial groups. It involves a comprehensive approach that seeks to evaluate the strength of an entire group, taking into account all the risks which may affect the group, regardless of whether the risks are carried by the institution or related entities.

In the case of financial groups, the methodology is applied at the level of the top regulated entity in the group (either operating or non-operating) to ensure that all risks incurred by the group, no matter where they are located or booked, are evaluated and controlled across the group on an enterprise-wide basis. All assessments are made and documented on a consolidated basis. Various regulatory requirements (e.g. concentration limits, large exposure limits, liquidity, capital, intra-group exposures, off-balance sheet exposures, etc.) are monitored and assessed on a consolidated and on a solo basis to ensure compliance.

The assessments consider the implications of, and relationship with, other regulated and non-regulated down-stream entities in the group, as well as potential impact of up-stream or other related entities outside the supervised group. The latter are assessed for any contagion risks likely to emanate from them for the supervised group.

Not all regulated entities in a group require separate standalone assessments. Separate or standalone assessments may be necessary in the following circumstances:

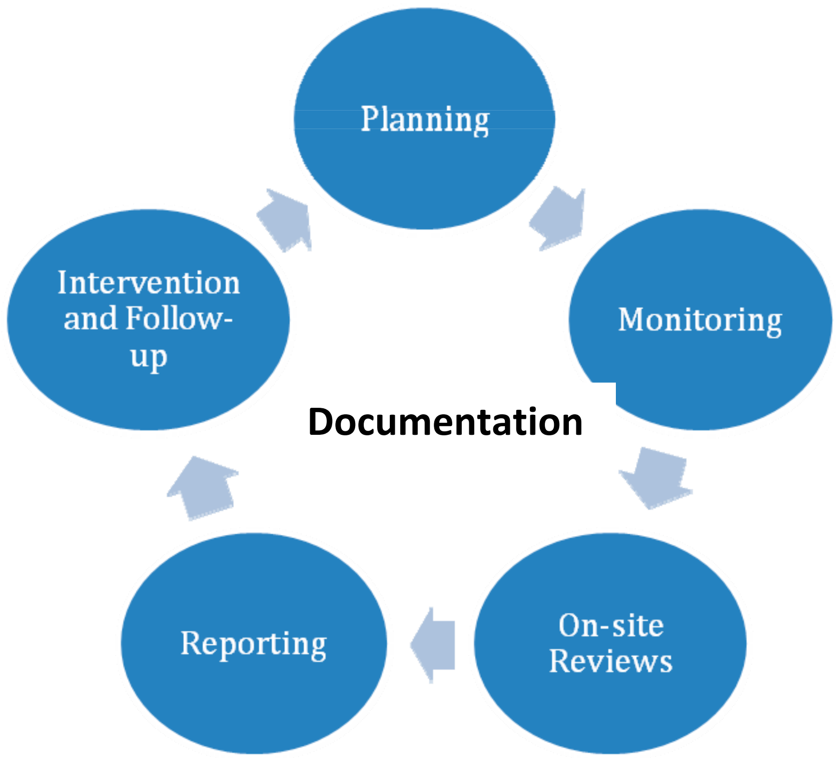
a. Where the regulated subsidiary represents a significant part of the consolidated entity and is operated independently of the group.
b. Where a regulated subsidiary requires a more in-depth review to adequately assess the subsidiary's impact on the consolidated entity than would be possible at the consolidated level.
c. Where a regulated subsidiary's risk management and control practices are distinct from those of the group, and
d. Where regulated entity's risk profile is materially different from that of the group.

For groups operating across boarders, supervisors will need to deal with home/host considerations. These would include establishing memorandum of understandings, regular and timely exchange of information, co-ordination of supervisory activities, co-ordination of supervisory intervention as appropriate, establishment of colleges of supervisors, etc.

9. THE SUPERVISORY PROCESS

The agency appoints a Relationship Manager (RM) for each institution. The RM is the key contact for the institution at the agency and is responsible for the on-going supervision of the institution and ensuring that supervisory processes are completed effectively and on a timely basis.

The main steps of the supervisory process are illustrated below. Although the steps are described sequentially, updating of the risk assessment is a dynamic, iterative and a continuous process requiring frequent reassessments at various stages.



Planning

Supervisory planning involves developing/updating a supervisory strategy for an institution and developing an annual supervisory plan.

A supervisory strategy is a multi-year plan for supervising an institution, taking into account the nature, size, complexity and risk profile of the institution. It outlines the supervisory work planned for three to four years, with an overall objective of reviewing all material areas of the institution at least once during the cycle. Supervisory work on significant activities is planned and prioritized after considering their residual risks, when they were last reviewed, the volatility of the activity, and the importance of the activity in the context of the risk profile of the institution. Not all activities of an institution need to be reviewed each year; but, higher risk or more volatile activities may need to be reviewed more frequently.

Similarly, supervisory work for each relevant oversight function is planned and prioritized based on the assessment of the quality of its oversight, timing of its last review and the level of changes in the function.

The supervisory strategy is the basis for a more detailed annual supervisory plan, which indicates work planned for the year and the required resources.

In addition to institution specific supervisory planning, planning also includes comparing allocation of supervisory resources across institutions. Not all institutions need to be reviewed each year. Reviews of institutions are prioritized taking into account their systemic importance, their risk profiles, their volatility, material changes in strategies, any significant changes in management or corporate governance, etc. This is to ensure that available supervisory resources are allocated effectively across institutions based on risk.

Monitoring

Institution specific monitoring includes a review of company information (including regulatory returns) and comparative analysis (both historical and against peers) of the results of early warning tests and ratios and the material changes in the industry and its operating environment that are likely to impact the institution in order to assess the probable impact of these changes on the institution’s risk profile. Monitoring also includes meeting with key individuals at the institution to discuss trends and emerging issues.

The frequency and scope of monitoring depends on the size, complexity and risk profile of the institution; but, each institution should be monitored at least quarterly. Higher risk institutions will require to be monitored more frequently. Results of monitoring are used to update the risk profile of the institution and provide the context for the on-site reviews.

Where there are shifts in the risk assessment of the institution, supervisory strategy and plan are adjusted in the context of the changes. These adjustments are dynamic and help ensure effective utilization of resources across institutions as well as for an institution.

On-site Reviews

On-site reviews are a critical part of the supervisory process. The scope of on-site reviews depends on the size, complexity and risk profile of the institution and the nature of prudential concerns, if any. These reviews and interactions with the institution's management and oversight functions are critical to effective supervision of an institution and deepen the supervisor's understanding of the institution and its risk profile.

Documentation

Effective supervision requires a sufficiently deep understanding of an institution. This understanding is acquired over time through monitoring and on-site reviews as well as through interactions with management and oversight functions of the institution. Hence, it is critical that knowledge acquired through the supervisory process be captured and build over time. Utility of this knowledge across the agency will increase if it is captured using a standard structure.

Once the initial assessments of Significant Activities and Corporate Oversight and Governance functions are captured, future changes are incorporated by updating the original documents which makes the process more efficient.

Reporting

Supervisors prepare a Management Report, at least annually, to institutions to communicate their overall assessment of the institution's risk profile, any prudential concerns identified and recommendations for addressing them. It is the key written document sent to the institution. Key findings and recommendations emanating from the Supervisory Review Process (ICAAP) assessment for institutions in scope for Basel II, can also be incorporated in this report to avoid duplication and redundancies. In the case of on-site reviews, the final stage of the process includes issuing a Management Report.

Assessments, findings and recommendations are first discussed with appropriate senior managers in the institution. This is followed by reporting to the Board/Board Audit Committee and the Chief Executive Officer (CEO).

Management Reports to companies incorporated in the country are addressed to the Board and CEO and copied to the Chair of the Audit Committee. Management Reports to foreign institutions operating branches in the country are addressed to the Principal Officer of the branch. Where there are significant issues with a branch, a copy of the Management Report may be sent to the CEO and the Chair of the Audit Committee at the home office. In all cases, the covering letter requests that a copy of the Management Report be provided to the external auditors and to the actuary, where applicable.

Follow-up

Once a supervisory letter is issued, supervisors need to ensure that a satisfactory response is received from the institution on a timely basis, including actions planned to address prudential issues reported.

Any unsatisfactory responses or significant disagreements will require further action by the supervisor. It may require further meetings with management and the Board, as well as intervention actions depending on the severity of the prudential issues.

Supervisors need to make sure that any material prudential concerns are addressed on a timely basis before they impact the risk profile of the institution.

APPENDIX A

RISK MATRIX.

Risk Assessment

<table>
<tr><td colspan="7">RISK MATRIX</td></tr>
<tr><td>Significant Activities</td><td>Materiality</td><td>Inherent Risks</td><td colspan="2">Quality of Risk Management</td><td>Residual Risk</td><td>Direction of Risk</td></tr>
<tr><td>Activity 1

Activity 2

Etc…</td><td></td><td>☐ Credit
☐ Market
☐ Insurance
☐ Operational
☐ Legal & Regulatory
☐ Strategic</td><td>Operational Management</td><td>Oversight
☐ Compliance
☐ Internal Audit
☐ Risk Management
☐ Senior Management
☐ Board Oversight</td><td></td><td></td></tr>
<tr><td>Overall Rating</td><td colspan="3"></td><td>Overall Assessment</td><td></td><td></td></tr>
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<tr><td>Capital</td><td></td><td>Earnings</td><td></td><td>Liquidity</td><td></td></tr>
<tr><td>Composite Risk</td><td></td><td>Direction of Risk</td><td></td><td>Time Frame</td><td></td></tr>
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APPENDIX B

CATEGORIES OF INHERENT RISKS AND RATING DEFINATIONS.

Inherent Risk Categories.

Following are descriptions of the six inherent risk categories for assessment purposes. These descriptions should be read within the context of the definition of inherent risk contained in the Supervisory Framework.

Credit Risk

Credit risk arises from a counterparty's inability or unwillingness to fully meet its on- and/or off-balance sheet contractual obligations. Exposure to this risk results from financial transactions with a counterparty including issuer, debtor, borrower, broker, or guarantor.

Market Risk

Market risk arises from changes in market rates or prices. Exposure to this risk can result from market-making, dealing, and position-taking activities in markets such as interest rate, foreign exchange, equity, commodity and real estate.

Interest rate risk and foreign exchange risk are described further below:

a. Interest Rate Risk

Interest rate risk arises from movements in interest rates. Exposure to this risk primarily results from timing differences in the repricing of assets and liabilities, both on- and off-balance sheet, as they either mature (fixed rate instruments) or are contractually repriced (floating rate instruments).

b. Foreign Exchange Risk

Foreign exchange risk arises from movements in foreign exchange rates. Exposure to this risk

mainly occurs during a period in which the institution has an open position, both on- and off balance sheet, and/or in spot and forward markets.

APPENDIX B (cont.)

Insurance Risk

Insurance risk arises from claims and/or policy benefits exceeding the pure premiums charged for the products.

Product Design and Pricing Risk

Product design and pricing risk arises from the exposure to financial loss from transacting insurance and/or annuity business where costs and liabilities assumed in respect of a product line exceed the expectation in pricing the product line.

Underwriting and Liability Risk

Underwriting and liability risk is the exposure to financial loss resulting from the selection and approval of risks to be insured, the reduction, retention and transfer of risk, the reserving and adjudication of claims, and the management of contractual and non-contractual product options.

Operational Risk

Operational risk arises from problems in the performance of business functions or processes. Exposure to this risk can result from deficiencies or breakdowns in internal controls or processes, technology failures, human errors or dishonesty and natural catastrophes.

(Factors that are likely to impact the level of operational risk include: nature and complexity of activities; delivery channels required; skills required, number and diversity of jurisdictions served; etc.)

Legal and Regulatory Risk

Legal and regulatory risk arises from an institution’s non-conformance with laws, rules, regulations, prescribed practices, or ethical standards in any jurisdiction in which the institution operates.

APPENDIX B (cont.)

Strategic Risk

Strategic risk arises from an institution’s inability to implement appropriate business plans, strategies, decision-making, resource allocation and its inability to adapt to changes in its business environment.

Factors that are likely to impact the level of inherent risks in a Significant Activity include the following:

- General economic environment (rate of growth, inflation, interest rates, business failures, unemployment, etc.);
- Volatility in asset prices (including real estate);
- Material changes in the industry and the institution’s position in the industry;
- Markets, industries and jurisdictions served, their diversity and cyclical nature;
- Nature and complexity of activities;
- Nature of products offered and product features;
- Delivery channels required;
- Financial condition and resources of counterparties;
- Concentrations;
- Foreign exchange exposures;
- Extent of asset liability mismatch;
- Extent and complexity of compliance requirements;
- Anti-money laundering exposures;
- Level of skills required to manage the business;
- Extent of changes planned for current activities;
- New initiative contemplated;
- Etc.

APPENDIX B (cont.)

Definitions of Inherent Risk Ratings.

Low Inherent Risk:

Low inherent risk exists when there is a lower than average probability of a material adverse impact on an institution's capital or earnings due to exposure and uncertainty from potential future events.

Moderate Inherent Risk:

Moderate inherent risk exists when there is an average probability of a material adverse impact on an institution's capital or earnings due to exposure and uncertainty from potential future events.

Above Average Inherent Risk.

Above Average inherent risk exists when there is a higher than average probability of a material adverse impact on an institution's capital or earnings due to exposure and uncertainty from potential future events.

High Inherent Risk:

High inherent risk exists when there is a higher than above average probability of a material adverse impact on an institution's capital or earnings due to exposure and uncertainty from potential future events.

APPENDIX C

OPERATIONAL MANAGEMENT, CORPORATE OVERSIGHT AND GOVERNANCE FUNCTIONS RATING CATEGORIES.

The following ratings categories are used for assessing the effectiveness of Operational Management, Corporate Oversight and Governance functions at the Significant Activity level:

Strong.

Strong means the function consistently demonstrates highly effective performance in the context of the key risks inherent in the Significant Activity.

Acceptable.

Acceptable means the function demonstrates effective performance in the context of the key risks inherent in the Significant Activity.

Needs Improvement.

Needs improvement means the function may generally demonstrate effective performance, but there are some areas where effectiveness needs to be improved in the context of the key risks inherent in the Significant Activity.

Weak.

Weak means the function has demonstrated serious instances where effectiveness needs to be improved in the context of the key risks inherent in the Significant Activity.

APPENDIX D

OVERALL RESIDUAL RISK IN SIGNIFICANT ACTIVITIES.

The following rating categories are used to assess the Overall Residual Risk in an institution's Significant Activities taken together.

Low.

The institution has risk management that substantially mitigates risks inherent in its Significant Activities down to levels that collectively have lower-than-average probability of a material adverse impact on its capital and earnings in the foreseeable future.

Institutions in this category will have a predominance of Significant Activities rated as low residual risk. Other combinations may be possible depending on the circumstances of the institution.

Moderate.

The institution has risk management that sufficiently mitigates risks inherent in its Significant Activities down to levels that collectively have an average probability of a material adverse impact on its capital and earnings in the foreseeable future.

Institutions in this category will have a significant number of their Significant Activities rated as moderate residual risk, or a few of their Significant Activities rated as high residual risk with others rated as low residual risk. Other combinations may be possible depending on the circumstances of the institution.

Above Average.

The institution has weaknesses in its risk management that, although not serious enough to present an immediate threat to solvency, give rise to high residual risk in a number of its Significant Activities. As a result, residual risks in its Significant Activities collectively have an above average probability of a material adverse impact on its capital and earnings in the

APPENDIX D (cont.)

foreseeable future.

Institutions in this category will have a number of their Significant Activities rated as high residual risk with others mainly rated as moderate residual risk. Other combinations may be possible depending on the circumstances of the institution.

High.

The institution has weaknesses in its risk management that may pose a serious threat to its financial viability or solvency and give rise to high residual risk in a number of its Significant Activities. As a result, residual risks in its Significant Activities collectively have a high probability of a material adverse impact on its capital and earnings in the foreseeable future.

Institutions in this category will have the majority of their Significant Activities rated as high residual risk, or will have rated as high residual risk one or more Significant Activities that have a pervasive impact on its operations. The weaknesses in risk management lead to considerable doubt about the institution's capability and/or willingness to apply prompt and effective corrective measures to sufficiently mitigate high residual risks in its Significant Activities. Other combinations may be possible depending on the circumstances of the institution.

APPENDIX E

EARNINGS, CAPITAL AND LIQUIDITY DEFINITIONS.

The following rating definitions are used for assessing Earnings, Capital and Liquidity.

Earnings.

Strong.

The institution has consistent earnings performance, producing returns that significantly contribute to its long term viability, and there is no undue reliance on non-recurring sources of income to enhance earnings. The earnings outlook for the next 12 months continues to be positive.

Acceptable.

The institution has satisfactory earnings performance, producing returns needed to ensure its long term viability, and there is no undue reliance on non-recurring sources of income to enhance earnings. Although there is some exposure to earnings volatility, the outlook for the next 12 months remains positive.

Needs Improvement.

The institution has inconsistent earnings performance, with returns that may, at times, be inadequate to ensure its long term viability. It may occasionally depend on non-recurring sources of income to show a profit. The earnings outlook for the next 12 months is uncertain.

APPENDIX E (Cont.)

Weak.

The institution has consistently recorded operating losses or earnings that are insufficient to ensure its long term viability. It may be heavily dependent on non-recurring sources of income to show a profit. The earnings outlook for the next 12 months is expected to remain negative.

Capital

Strong.

Capital adequacy is strong for the nature, scope, complexity, and risk profile of the institution, and meets regulatory and internal target levels. The trend in capital adequacy over the next 12 months is expected to remain positive. Capital management policies and practices are superior to generally accepted industry practices.

Acceptable.

Capital adequacy is appropriate for the nature, scope, complexity, and risk profile of the institution and meets regulatory and internal target levels. The trend in capital adequacy over the next 12 months is expected to remain positive. Capital management policies and practices meet generally accepted industry practices.

Needs Improvement.

Capital adequacy is not always appropriate for the nature, scope, complexity, and risk profile of the institution and, although meeting minimum regulatory requirements, may not meet, or is trending below, regulatory and internal target levels. The trend in capital adequacy over the next 12 months is expected to remain uncertain.

Capital management policies and practices may not meet generally accepted industry practices.

APPENDIX E (Cont.)

Weak.

Capital adequacy is inappropriate for the nature, scope, complexity, and risk profile of the institution and does not meet, or marginally meets, regulatory requirements. The trend in capital adequacy over the next 12 months is expected to remain negative. Capital management policies and practices do not meet generally accepted industry practices.

Liquidity.

Strong.

The institution has strong liquidity levels and well developed liquidity management practices. The institution has reliable access to sufficient sources of funds on favorable terms to meet present and anticipated liquidity needs.

Acceptable.

The institution has satisfactory liquidity levels and liquidity management practices. The institution has access to sufficient sources of funds on acceptable terms to meet present and anticipated liquidity needs. Modest weaknesses may be evident in liquidity management practices.

Needs Improvement.

The institution has liquidity levels or liquidity management practices that need improvement. It lacks ready access to funds on reasonable terms or has significant weaknesses in liquidity management practices.

APPENDIX E (Cont.)

Weak.

The institution has liquidity levels or liquidity management practices that are inadequate. It does not have or is able to obtain sufficient funds at reasonable terms to meet its near term liquidity needs and may require external financial assistance.

APPENDIX F

RISK PROFILE RATING DEFINITIONS.

The following rating categories are used to assess the risk profile of an institution.

Low Risk

A strong, well-managed institution. The combination of its Overall Residual Risk and its capital supported by earnings, and its liquidity makes the institution resilient to most adverse business and economic conditions without materially affecting its risk profile. Its performance has been consistently good, with most key indicators in excess of industry norms, allowing it ready access to additional capital. Any supervisory concerns have a minor effect on its risk profile and can be addressed in a routine manner.

An institution in this category would have a low Overall Residual Risk coupled with acceptable capital, earning, and liquidity, or a moderate Overall Residual Risk coupled with strong capital, earnings, and liquidity. Other combinations may be possible depending on the circumstances of the institution.

Moderate Risk

A sound, generally well-managed institution. The combination of its Overall Residual Risk and its capital supported by earnings, and its liquidity makes the institution resilient to normal adverse business and economic conditions without materially affecting its risk profile. The institution's performance is satisfactory, with key indicators generally comparable to industry norms, allowing it reasonable access to additional capital. Supervisory concerns are within the institution's ability to address.

An institution in this category would have moderate Overall Residual Risk coupled with acceptable capital, earnings, and liquidity. Other combinations may be possible depending on the circumstances of the institution.

APPENDIX F (Cont.)

Above Average Risk

The institution has issues that indicate an early warning or that could lead to a risk to its financial viability. One or more of the following conditions are present. The combination of its Overall Residual Risk and its capital supported by earnings, and its liquidity makes the institution vulnerable to adverse business and economic conditions. Its performance is unsatisfactory or deteriorating, with some key indicators at or marginally below industry norms, impairing its ability to raise additional capital. The institution has issues in its risk management that, although not serious enough to present an immediate threat to financial viability or solvency, could deteriorate into serious problems if not addressed promptly.

An institution in this category would have moderate Overall Residual Risk coupled with capital, earnings, and liquidity that need improvement. Other combinations may be possible depending on the circumstances of the institution.

High Risk

The institution has serious safety and soundness concerns. One or more of the following conditions are present. The combination of its Overall Residual Risk and its capital supported by earnings, and its liquidity is such that the institution is vulnerable to most adverse business and economic conditions, posing a serious threat to its financial viability or solvency unless effective corrective action is implemented promptly. Its performance is poor, with most key indicators below industry norms, seriously impairing its ability to access additional capital.

An institution in this category would have above average Overall Residual Risk with capital, earnings, and liquidity that need improvement. Other combinations may be possible depending on the circumstances of the institution.

APPENDIX G

GUIDE TO INTERVENTION

The intervention guide outlines the types of actions that supervisors consider depending on the risk profile of the institution and the nature and significance of prudential concerns. It is important that interventions are proportionate to the desired outcomes. The actions indicated below are for a range of ratings as the intervention process needs to be flexible to enable supervisors to use interventions that are likely to be most effective in individual cases.

The actions indicated below are cumulative; i.e. actions indicated at lower levels of risk are implicitly included in actions that could be considered for institutions with a higher risk profile. Also, if circumstances warrant, actions can be taken at risk levels lower than that indicated in the guide.

LOW TO MODERATE RISK PROFILE

- Continue dynamic up-dating of the institution’s risk profile (financial condition and operating performance) through review of information obtained from regulatory filings and other sources, including discussions with the institution, and through periodic on-site reviews.
- Meet annually with the institution to discuss its risk profile and related findings and recommendations and communicate these in writing.
- Monitor timely implementation of the material recommendations by the institution.

MODERATE TO ABOVE AVERAGE RISK PROFILE.

- Meet with management and Board of Directors (or a Board committee) to discuss prudential concerns and remedial actions required. These meetings may include external auditors and/or actuaries as appropriate.

- Notify in writing management and Board of Directors of the prudential concerns and remedial actions required.

APPENDIX G (Cont.)

- Require submission of Board approved action plans by the institution indicating the time frame in which the deficiencies will be addressed.
- Escalate monitoring of the institution as warranted, including expanding the scope, level and frequency of information to be reported to ensure concerns are being addressed on a timely basis.
- Increase the frequency, depth and scope of on-site supervisory reviews as warranted.
- Impose operating conditions on the institution and/or issue directive of compliance if warranted.
- Require the institution to increase capital.

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ABOVE AVERAGE TO HIGH RISK PROFILE.

- Require the institution to submit a Board approved business plan which incorporates appropriate remedial measures to address identified prudential concerns within specified time-frames.
- Require the external auditor and/or actuary of the institution to carry out examination of specific areas and report there on.
- Require the institution to arrange for a special audit by an auditor, other then the institution's regular auditor.
- Consider further operating conditions on the institution.
- Inform the institution's home/host regulators of the circumstances and the status of the supervisory actions taken, and
- Commence contingency planning.

HIGH RISK PROFILE.

- Require the institution to retain external specialist to assess specific areas such as quality and valuation of assets, liquidity, etc.
- Further enhance the conditions already imposed on the institution, including for example restricting lending, investments, level of deposits, expansion of operations, payment of interest

APPENDIX G (Cont.)

on subordinated debt, payment of dividends, and other such restrictions warranted by the circumstances.

- Locate supervisory staff at the institution to interact with management and monitor developments on an ongoing basis.
- Put pressure on management and Board of Directors to restructure or sell part or whole of the company's operations.
- Ensure home regulators are kept abreast of the circumstances and the intervention measures taken.
- Develop plans to take control of assets of the company or the company if the circumstances warrant.

HIGH RISK PROFILE WITH AN INCREASING TREND:

- Meet with management and the Board of Directors to communicate the likely regulatory actions if prudential concerns are not addressed quickly.
- Advise home/host regulators (national and foreign) of the impending regulatory action.
- Take control of assets of the company or the company, if the situation warrants such action.
- In conjunction with the Attorney General, commence action to obtain the necessary Court order to liquidate the institution.

APPENDIX H

OVERALL ASSESSMENT OF CORPORATE OVERSIGHT AND GOVERNANCE FUNCTIONS.

The following rating categories are used to assess the Corporate Oversight and Governance functions:

Strong.

Characteristics of the function meet or exceed what is considered necessary for the nature, scope, complexity and risk profile of the institution, and the function has demonstrated highly effective performance on a consistent basis.

Acceptable.

Characteristics of the function meet what is considered necessary for the nature, scope, complexity and risk profile of the institution, and the function has demonstrated effective performance.

Needs Improvement.

Characteristics of the function generally meet what is considered necessary for the nature, scope, complexity and risk profile of the institution; but, there are some significant areas that require improvement. Performance has generally been effective; but, there are some significant areas where effectiveness needs to be improved. These areas are not likely to cause serious prudential concerns if addressed on a timely basis.

Weak.

Characteristics are not, in a material way, what is considered necessary given the nature, scope, complexity and risk profile of the institution. Performance has demonstrated serious instances where effectiveness needs to be improved through immediate action.

APPENDIX H (Cont.)

Role, Characteristics and Examples of Performance Indicators

The following criteria for characteristics (how a function is set-up to oversee) and examples of performance indicators (how well the function carries out its responsibilities) are used to assess the overall performance of the functions. The assessments are made in the context of the nature, scope and complexity of the institution. The assessment of performance is derived from the assessments of Significant Activities. In developing an overall assessment of a function, it is important to bear in mind that while characteristics are generally predictive of performance, they in themselves do not ensure effective performance. Accordingly, the function's performance across the institution's Significant Activities (taking their materiality into account) is the key driver of the overall assessment of the function.

Compliance

Role:

Compliance is an independent function within an institution that ensures that the institution meets the legal and regulatory obligations by 1) ensuring the institution has adequate policies and practices for adhering to the requirements; 2) monitoring adherence to those policies and practices and 3) reporting on compliance matters to Senior Management and the Board of Directors.

Characteristics.

1. An enterprise-wide authority to independently oversee compliance, including periodic reporting to Senior Management and the Board, and follow-up of identified issues for satisfactory resolution.
2. Appropriateness of the organization structure and reporting relationships, including an appropriate level of seniority of the head of the function.
3. Adequacy of resources to carry out its mandate, including staffing levels and required skills.

4. Adequacy of its methodologies and practices for effective execution of its enterprise-wide mandate.
5. Extent of Senior Management and Board oversight of the function.

APPENDIX H (Cont.)

Examples of Performance Indicators.

1. Develops and communicates new and revised compliance policies and legal and regulatory requirements to all impacted areas of the institution on a timely basis, including assisting management in integrating the requirements into business activities.
2. Actively monitors adherence to compliance requirements across the institution's operations, and follows-up on significant breaches for timely resolution.
3. Escalates significant breaches of compliance requirements to Senior Management and the Board.
4. Periodically monitors compliance practices for continued effectiveness.

Internal Audit.

Role.

Internal audit is an independent function within an institution that assesses adherence to and effectiveness of operational and organizational controls and governance practices. In addition, internal audit may also assess adherence to and effectiveness of compliance and risk management policies and practices.

Characteristics.

1. Independent enterprise-wide mandate to oversee the institution's operations.
2. Appropriateness of the organization structure and reporting, including seniority of the head of the function and direct reporting to the Board.
3. Adequacy of resources to carry out its mandate, including the level of staffing and availability of required skills.

4. Adequacy of its risk based audit methodologies and practices.
5. Adequacy of its planning, coverage cycle and reporting and follow-up practices.
6. Extent of Senior Management and Board oversight.

APPENDIX H (Cont.)

Examples of Performance Indicators.

1. Actively seeks relevant information from others (e.g. Compliance, Risk Management, Senior Management, external auditors, etc) in developing risk based supervisory strategies and plans.
2. Reviews business plans and strategies to identify activities that could materially impact the institution and ensures that they will be effectively managed and overseen.
3. Effective and timely execution of its risk based audit plans, including timely reporting and follow-up of identified issues for satisfactory resolution.
4. Considers pervasiveness and significance of its findings both at the Significant Activity level and in aggregate across the institution's activities.
5. Proactively communicates significant findings to the Board (Audit Committee) and regularly engages the Board (Audit Committee) in discussions on the appropriateness of its audit strategies and adequacy of its resources.

Risk Management.

Risk management is an independent function responsible for planning, directing and controlling the impact on the institution of the risks arising from its operations. The function may address the following:

- Identify current and emerging risks in the institution's operations,
- Develop measurement systems for risks,
- Establish policies and practices for managing risks,
- Develop risk tolerance limits and periodically stress test limits,
- Monitor positions against approved limits, and
- Report on risk monitoring to senior management and the Board.

APPENDIX H (Cont.)

Characteristics.

1. Independent enterprise-wide mandate to oversee risks in the institution's operations.
2. Appropriateness of the organization structure and reporting, including seniority of the head of the function and direct reporting to the Board.
3. Adequacy of resources to carry out its mandate, including the level of staffing and availability of required skills.
4. Adequacy of practices to periodically review and update risk management policies and practices, including periodically assessing their appropriateness.
5. Extent to which risk management policies and practices are coordinated with strategic, capital and liquidity planning.
6. Adequacy of policies and practices to monitor positions against approved limits and for timely follow up of material variances.
7. Adequacy of policies and practices to monitor trends and identify emerging risks, and to effectively respond to unexpected significant events.
8. Adequacy of policies and practices to report and follow-up on identified issues for timely resolution.
9. Extent of Senior Management and Board oversight..

Examples of Performance Indicators.

1. Proactively updates policies, practices and limits in response to changes in the institution or externally.
2. Integrates policies, practices and limits in to day to day business activities, and with the institution's strategic, capital and liquidity planning.
3. Regularly monitors risk positions against approved limits and ensures that material breaches are addressed on a timely basis.
4. Actively participates in the development of new initiatives to ensure processes are in place to identify and mitigate risks prior to implementation.

APPENDIX H (Cont.)

5. Provides regular, comprehensive reports to the Board and Senior Management on the effectiveness of the institution's risk management policies and practices and recommends changes for approval, as appropriate.

Senior Management.

Role.

Senior Management is responsible for directing and overseeing the effective management of the institution's operations. Its key responsibilities include:

- Developing business objectives, strategies, policies (including policies for risk management and risk appetite), organizational structure and controls for Board approval;
- Effectively overseeing the operations of the institution to ensure day to day operations are carried out in accordance with Board approved business objectives, strategies and policies.
- Developing and promoting sound corporate governance practices; and
- Providing the Board with sufficient and timely information to enable it to carry out its responsibilities, including monitoring and reviewing performance and risk exposures of the institution.

Characteristics

1. Extent to which the Board has delegated responsibilities for developing and implementing policies and practices for the effective management of the institution's operations, including business objectives, strategies and plans and a risk management framework.
2. Adequacy of Senior Management organization structure and reporting lines and appropriate delegation of responsibilities from the CEO to other senior management positions and Corporate Oversight functions.
3. Appropriateness of the committee structure used by Senior Management.
4. Adequacy of Senior Management resources and expertise.

5. Adequacy of Senior Management policies and practices for effective execution of its mandate.

APPENDIX H (Cont.)

6. Extent of Board oversight of Senior Management.

Examples of Performance Indicators.

1. Develops appropriate strategies and plans to attain business objectives for approval by the Board of Directors, including risk policies, limits, practices and reporting systems.
2. Actively monitors execution of Board approved strategies, plans, policies, etc for effective implementation.
3. Proactively reviews business objectives, strategies, plans, policies and limits in response to significant changes and adverse trends in the external environment.
4. Sets appropriate tone from the top through the manner in which it carries out its duties.
5. Is successful in building an effective organization by attracting, developing and retaining high caliber staff.
6. Keeps the Board of Directors and its Committees fully appraised on a timely basis.

Board of Directors.

Role.

The Board of Directors is responsible for establishing and implementing a corporate governance framework for a sound and prudent management of the institution. Its key responsibilities include:

- Reviewing and approving organizational structure, including clearly defining roles and responsibilities of its committees, management and heads of oversight functions.
- Regularly reviewing, approving and overseeing the implementation of the institution's business objectives, strategies to achieve the objectives and policies for major activities, including risk strategies and appetites.
- Ensuring that management and heads of oversight functions are qualified and

competent.

- Providing oversight over the design and effective implementation of sound risk management and internal control systems.
- Providing for an independent assessment of, and reporting on, effectiveness of the institutions

APPENDIX H (Cont.)

operations.

- Approving remuneration policies and practices.
- Monitoring performance against business objectives, strategies and plans and requiring timely corrective actions were warranted; and
- Providing effective oversight over management and oversight functions.

Characteristics

1. Adequacy of Board size, range of Director qualifications, knowledge, skills and experience.
2. Adequacy of roles and responsibilities of the Board, including the composition, role and responsibilities of Board committees and committee reporting requirements to the Board.
3. Adequacy of Board policies and practices for:
   a. Nomination, selection and removal of Directors
   b. Orienting new Directors and periodically up-dating other Directors on the institution's business and related risks.
   c. The role of independent directors
   d. Ensuring the Board is provided with timely, relevant, accurate and complete information. and, where required, the Board requests additional information.
   e. Establishing and monitoring work plans for Board goals and responsibilities.
   f. Promoting independent, effective and timely decision making, including practices for setting Board agenda and priorities.
   g. Ensuring Directors' compensation promotes prudent decision making and self assessment of Board performance on an annual basis.

Examples of Performance Indicators.

1. Active involvement in the selection and performance evaluation of the CEO and other members of Senior Management as appropriate
2. Performs a regular independent in-depth review and evaluation of the institution's business objectives and strategies and risk tolerance limits.
3. Regularly reviews the institution's corporate governance and risk management structures,
4. **APPENDIX H (Cont.)**

   policies and practices
5. Clearly sets out the type and quality of information it requires and related frequency.
6. Actively engages in the review of information provided by Senior Management for Board

   approval, including challenging management's assumption.
7. Requires effective and timely resolution of issues identified by others, including Compliance, Internal Audit, Risk Management, actuary, external auditors, etc.

APPENDIX I

Risk-based Supervisory (RBS) Framework.

Frequently Asked Questions.

This list of questions and answers have been developed in anticipation that some persons may not be familiar with the methodology described in the RBS framework and this will raise questions for them related to the methodology and its implementation.

The questions and answers have been developed to address the issues that are likely to arise. If the answers do not address, or fully address, a particular issue, please do not hesitate to contact CARTAC for more information/explanations. Also, CARTAC will be glad to arrange for a more detailed discussion of the methodology and its implementation in the context of a given country. The methodology is applicable to both banking and insurance supervision.

Q. 1. What is risk-based supervision?

Risk-based supervision is a structured but flexible approach to supervision aimed at identifying, understanding and assessing the key risks in an institution's activities from a safety and soundness perspective. This includes understanding an institution's activities, in the context of the broader economic and industry environments, identifying the levels of key risks inherent in those activities, assessing the quality of risk management for those risks, and assessing the adequacy of its earning, capital and liquidity to support the residual risks in all of its activities taken together to arrive at its risk profile and the drivers if its risk profile. These assessments are forward looking and outcome focused.

A sufficiently deep understanding of an institution and the drivers of its risk profile enables supervisors to focus available resources on the highest areas of risk that are likely to impact an institution's safety and soundness and thereby enabling agencies to do more with less.

Q. 2. How is the risk-based supervisory methodology structured?

The supervisory methodology described in the RBS framework is an integrated process with a number of steps, with each subsequent step building on the previous steps. The steps are summarized on page 8 and are discussed in the methodology in the order they need to be completed.

Q. 3. How is the methodology described in the paper different from a methodology that is compliance based?

A compliance based supervisory approach is geared to ensuring that an institution is operating in compliance with regulatory requirements and limits applicable to it under its governing legislation, regulations and guidelines.

This process was used by regulators when financial institutions' operations were relatively simple and there were specific requirements they were expected to operate under to ensure their safety and soundness. However, with the increase in the complexity of institutions and the scope of their operations, regulators have had to move to supervisory models that focus on developing a deeper understanding of institutions with a view to early identification of prudential issues. Although compliance is also considered under the approach based on risk, the primary onus for compliance is placed on management and Boards of institutions.

The skill sets required for methodologies focused on prudential supervision are higher than those required for a compliance based approach to supervision.

Q. 4. What are the differences between traditional and risk-based supervision?

Traditional supervision is characterized by transaction based testing and a point in time assessments based on historical data.

Risk-based supervision is characterized by its focus on understanding and assessing risks in an institution's activities and assessing the quality of risk management and oversight in the context of these risks. It is a continuous and a dynamic process driven by material changes in an institution and their potential impact on its risk profile. Since the assessments are prospective, it facilitates early identification of prudential issues.

Q. 5. How is the methodology different from the CAMELS methodology used by some of the regulators in the Caribbean region?

A number of countries in the Caribbean region continue to use the CAMELS assessment methodology. This methodology includes assessment of the individual components of CAMELS (C = Capital; A = Assets; M = Management; E = Earnings; L = Liquidity; and S = Sensitivity to market risk) as well as a composite rating using a five level rating system where 1 = best and 5 = worst.

The CAMELS approach to supervision is focused largely on determining the current financial condition of an institution based on historical financial data. Accordingly, supervisory recommendations resulting from the process are generally aimed at addressing the problems, rather than the causes of the problems. This increases the chances of the problems reoccurring.

Some regulators who use the CAMELS methodology have also introduced the use of the risk matrix (part of RBS methodology). However, since these two methodologies are generally not fully integrated and aligned, they result in two separate processes with duplications between them.

Under risk-based supervision, supervisory focus is on developing a more holistic understanding of an entity, risks in its activities, and quality of its risk management. This results in a deeper understanding of an institution and a better ability to identify and address causes of prudential issues on a more pro-active basis.

The following compares the CAMELS assessments to the assessments under the risk-based supervisory methodology described in the RBS framework.

	CAMELS	Risk-Based Supervision.
Capital	Assessment of capital is comparable under the two methodologies.	Assessment of capital is comparable under the two methodologies.
Assets	Quality of assets is assessed separately.	Assessment of quality of assets is integral to the broader assessment of the residual risk in all of the institution's activities taken together.

Management	Senior management and Board are assessed together and not necessarily tied to their performance in the management of the institution's activities.	Assessment of the Board, Senior management and oversight functions is integral to the assessment of the residual risk in the institution's activities, and hence, integral to the assessment of the risk profile of the institution. Separate overall assessments for Board, Senior management and oversight functions are also developed for information purposes.
Earnings	Assessment of earnings is comparable between the two methodologies.	Assessment of earnings is comparable between the two methodologies.
Liquidity	Assessment of liquidity is comparable between the two methodologies.	Assessment of liquidity is comparable between the two methodologies.
Sensitivity to market risk	Sensitivity to market risk is assessed separately.	Assessment of sensitivity to market risk is integral to the assessment of the residual risk in all of the institution's activities taken together.
Composite Risk	Composite risk assessment is developed based on the assessment of the components of CAMELS and is not fully integrated.	Assessment of composite risk is fully integrated.

Q. 6. How widely is the risk-based supervisory methodology used by countries? Is it used by countries in the Caribbean?

Countries started to move to risk-based supervision in the 1990s. Prior to that time, the CAMELS methodology was generally used to assess banks and other deposit taking institutions. The CAMELS methodology continues to be used in the USA, as it is a legislative requirement in that country, as well as by some other countries who have not yet adopted risk-based supervision.

In the 1990s, countries had recognized that in order to identify and intervene on prudential issues on a more timely basis, their methodologies had to be more forward looking than was the case with the CAMELS methodology. This led to the development of alternative methodologies. Over the years, these different methodologies have tended to converge and have become more similar to each other than different.

Countries currently using methodologies similar to that described in the draft paper include Australia, Canada, UK, Malaysia, and Singapore. In the Caribbean, similar methodologies are used by Bahamas, Cayman, Barbados, and Trinidad and Tobago. More and more countries seem to be moving to risk-based supervision, especially with the introduction of Basel II.

Q. 7. Is the methodology described consistent with the requirements of Basel II, Pillar 2?

As countries have implemented the supervisory review requirements of Basel II, Pillar 2, some of them have realized that not all requirements are met by their current supervisory methodology and have had to develop processes and practices to bridge those gaps.

The methodology described in the RBS framework is seamless with the requirements of Pillar 2, requiring minimal additional supervisory effort in the review of an institution`s ICAAP. This, in turn, enhances the efficiency of the supervisory process.

Q. 8. Can the methodology be used to assess conglomerates or is it applicable for supervision of individual institutions only?

As indicated under the key principles, the methodology is to be applied on a consolidated basis to a group of companies. It is sufficiently flexible to be applied on a consolidated as well as on a solo basis, eliminating the need to have separate methodologies for solo and consolidated supervision.

When applying the methodology on a consolidated basis, down-stream entities are also examined for compliance and, based on certain circumstances (discussed in the paper), on a solo basis as well. Upstream entities are also assessed for their source of strength for the regulated institution or group as well as for any contagion risk that could emanate from the upstream companies and could impact the regulated entities.

This approach to consolidated supervision is used by all supervisors who use methodologies similar to that described in the RBS framework.

Q. 9. What are the benefits of implementing the methodology?

Benefits of implementing the methodology are listed under Section 3 of the draft paper.

Overall, using the methodology supervisors are able to develop a deeper understanding of their institutions and the drivers of their risk profiles, resulting in early identification of prudential issues.

Also, since institutions manage their activities similarly, use of the methodology makes communications with management of institutions that much more effective. It also helps increase the efficiency and effectiveness of the supervisory process enabling agencies to do more with less.

Over time, as supervisors display a deeper understanding of their institutions in their dealings with management and Boards of institutions, this will help increasing the credibility and confidence institutions have in the results of the process.

The methodology also promotes strong risk management culture in supervised institutions.

Q. 10. Should the methodology be implemented in stages or all at once?

In view of the integrated nature of the methodology, it would be most effective to implement the entire process for an institution at the same time. However, countries adopting the methodology may want to prioritize institutions for application of the methodology and accordingly, phase it in for all supervised institutions over time. Some countries may wish to pilot test the methodology on a couple of institutions to better understand its implications on a more informed basis.

In deciding on an appropriate approach to implementing the methodology for a given country, a number of factors (such as, current methodology, extent of change, resources and implementation support available, etc.) would need to be considered.

It also needs to be recognized that since this is a knowledge based process, its effectiveness and efficiency will increase over time as supervisors develop a deeper understanding of their institutions.

Q. 11. Does the methodology need to be implemented as described or would a country be able to make changes in the context of their own individual circumstances?

The methodology described in the draft paper is built on the following fundamental concepts:

1. Identifying and assessing an institutions activities;
2. Assessing the level of key risks inherent in the institutions activities;
3. Assessing the quality of the institution's risk management; and
4. Assessing earnings, capital and liquidity to support the residual risk in all of its activities taken together.

Any changes being considered by a country to the draft methodology would need to ensure that the above fundamental concepts are intact; otherwise, the methodology can be adjusted to meet the requirements of a given country.

Q. 12. Would there be impact of adopting the methodology on how supervisory groups are organized?

Over the years, supervisors, who have adopted the RBS methodology, have found that it is more efficient to adopt a portfolio approach to supervision. This enables better integration of off-site and on-site work in this knowledge based process.

Under the portfolio approach, the overall accountability for supervising an institution is given to a single individual (generally known as a Relationship Manager for the institution). The relationship manager is the key contact for the institution at the supervisory agency. The individual is also fully accountable for supervising the institution, assessing its safety and soundness, and intervening, as required.

The traditional off-site and on-site split between supervisory groups can also work. However, under this structure, strong practices for exchanging information and knowledge of the institution between the two groups are essential.

If specialist groups, such as credit and market risk, are to be part of supervision, then consideration would also need to be given to how they should be organized.

Q. 13. How would implementation of the methodology impact the level of resources and the qualifications required?

Under the methodology, since supervisors need to develop a sufficiently deep understanding of an institution, implementation of the methodology in the early stages tends to require more effort and resources. But, once the knowledge is acquired, the process, with its sharper focus on risk, becomes much more efficient enabling an agency to be able to do more with less.

Q. 14. What would be the impact on off-site and on-site work?

Under the methodology, once a sufficiently deep understanding of an institution has been acquired, supervisory work, whether on-site or off-site, needs to be focused on identifying material changes occurring in the institution and assessing their impact on the risk profile of the institution. This would result in the supervisory work being more focused whether it is carried out by off-site or the on-site group.

Q. 15. Would specialist groups, such as credit, market and IT risk, be required to implement the methodology?

Financial institutions have increased considerably in complexity and continue to do so. Supervisors have recognized that in order to be effective in identifying and addressing prudential issues on a timely basis they need access to the requisite skills. Supervisors are generally in a position of identifying areas of concerns based on normal supervision; but, they need access to technical skills to address some of these more technical areas. Use of this expertise will result in increased credibility in the findings in the eyes of the supervised institutions. Depending on the level of need, the expertise could be on staff or be contracted. The need for the expertise exists irrespective of the supervisory methodology used by the agency.

Q. 16. What would be the benefits of implementing the methodology across the Caribbean region?

Conglomerates are an important part of financial institutions operating in the Caribbean region. In view of the size of the individual countries in the region, conglomerates generally operate in a number of countries. Supervising them effectively requires a high level of co-operation and coordination between supervisory authorities in different countries in the region. This becomes easier if supervisors are all using similar methodologies to assess institutions.