CONTINGENCY PLANNING GUIDELINES FOR BANKS AND FINANCIAL INSTITUTIONS, 2022

BANK OF TANZANIA

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	PART I **PRELIMINARY**
Citation	1. These guidelines shall be cited as the Contingency Planning Guidelines for Banks and Financial Institutions, 2022.
Authorization	2. These guidelines are issued under Section 71 of the Banking and Financial Institutions Act, 2006
Application	3. These guidelines shall apply to all banks and financial institutions.
Interpretation	4. In these guidelines, unless the context otherwise requires: "Act" means the Banking and Financial Institutions Act, 2006; "Bank" means the Bank of Tanzania; "bank" has the same meaning ascribed to it in the Act; "financial institution" has the same meaning ascribed to it in the Act; "contingency plan" means a set of identified policies, actions and processes necessary for the prevention, management and containment of banking or financial system distress and crises; "stress events" means a situation or circumstance that may disrupt smooth operations of critical functions and services of a bank or financial institution that may consequently lead into financial crisis.
Objectives	5. (1) The main objective of these guidelines is to provide a framework to guide banks and financial institutions in developing and implementing contingency planning arrangements with a view to minimizing business disruptions ensuring continuity of critical functions, and instilling public confidence in a cost-effective manner, prior and during crises. (2) Specific objectives of these guidelines include: (a) providing guidance on establishing adequate contingency plans as part of preparedness to deal with crises in an orderly, timely, and cost-effective manner; (b) reducing the likelihood of occurrence of a crisis and its impact if it occurs; (c) identifying the types of actions that may have to be taken during a crisis as well as the policies, processes and people that would be required to support these actions; (d) restoring the solvency, liquidity, and profitability of a

	bank or financial institution in a timely manner; (e) protecting the interests of depositors; and (f) reducing the possibility of using Government funds in resolving a bank or financial institution in crisis.
Contingency plan	6. Every bank or financial institution shall establish a Contingency Plan that shall be approved by its Board of Directors. At a minimum, the plan shall cover the following: (a) Governance structure and oversight (b) Identification, assessment and impact of critical functions and shared services (c) Management Information System capabilities (d) Early Warning Indicators (e) Simulation and Impact Analysis of contingency actions (f) Communication and coordination strategies (g) Cross-border considerations
	PART II **GOVERNANCE STRUCTURE AND OVERSIGHT**
Governance structure and oversight	7. A bank or financial institution shall establish sound governance arrangements to oversee and manage the contingency planning process, which at minimum, shall establish: - (a) well-defined roles, responsibilities and accountabilities of the board, senior management, business units and control functions; and (b) robust policies, procedures and management information systems to support informed decision making across the institution in order to ensure that the contingency plan is capable of being executed in an effective and efficient manner
Board of Directors' responsibilities	8. The Board shall exercise effective oversight on all aspects of the development and implementation of the contingency plan and shall, at a minimum: (a) Review and approve the Contingency Plan; (b) Review and approve the contingency planning policies and strategies developed by Senior Management; (c) Designate a senior officer or committee responsible for driving the overall contingency planning process; (d) Ensure sufficient resources are allocated to support the development and implementation of the Contingency

	Plan; (e) ensure that the contingency plan is integrated with existing risk appetite and risk management frameworks and is complementary and closely linked to the institution’s strategic plan; and (f) receive and review assurance reports of the contingency plan from internal, external or independent party.
Senior Management Responsibilities	9. The responsibilities of the senior management of a bank or financial institution shall include; (a) preparing contingency planning policies, procedures, and strategies for managing crisis events; (b) developing contingency plans necessary for the continuity of critical functions and shared services; (c) developing detailed action plans for specific events identified in the contingency plan; (d) ensure that the contingency planning process is undertaken with the appropriate level of involvement of key personnel across core operational areas of the institution; (e) ensure the robust and credible application of expert judgement and critical scrutiny in the development of the risk modelling and quantitative risk methodologies used in the contingent plan framework and scenario analysis; (f) ensure that well-defined processes and management information systems are developed to provide good quality and granular data for timely risk communication and reporting to the Board; (g) regularly update the Board on material developments relating to contingency planning, including the early warning indicators and triggers, breaches of regulatory requirements thresholds, activation of the contingency plan, implementation of contingent plan and its progress, and preparatory measures to be undertaken; (h) ensuring that all levels of staff are trained and are fully aware of their roles in the implementation of contingency plan; (i) conducting Contingency Plan simulations, analyze results and report to the Board on regular basis; (j) keeping the Contingency plan up to date and reviewing it at least annually; (k) ensuring review of the adequacy and effectives of

	Contingency Plan by internal or external auditor, or any other independent party; (l) ensuring that roles, responsibilities and authority to act, as well as succession plans are clearly articulated in the contingency plan to avoid confusion in the event of financial crisis; and (m) developing a monitoring mechanism for contingent events and report to the Board.
Financial Crisis Management Team	10. (1) A bank or financial institution shall establish a Financial Crisis Management Team, consisting of key executives and functional heads of critical operational areas, which shall be responsible for dealing with crisis management and business continuity during a crisis. Such Team may draw its membership from the following; (a) Managing Director or Chief Executive Officer who is the chairperson; (b) Senior Management; (c) Functional Departmental Heads for Treasury, Finance, Operations, Legal Services, Credit, Retail, Risk, Communications etc; (d) Line Managers; and (e) Any person responsible for critical function or services of the institution. (2) The roles and responsibilities of each individual member should be clearly defined (3) The roles and responsibilities of a Crisis Management Team shall include the following: (a) Ensuring the Contingency Plan is in place and taking all account of the requirements of implementing the Plan and any other emerging issues; (b) Identifying and assessing stress events and levels of severity and timing for activation of the Contingency Plan; (c) Identifying market-wide and institution-specific scenarios in developing contingency actions; (d) Describing communication channels for both internal and external stakeholders; (e) Establishing possible sources of funding and needs before and during crisis; (f) Identifying triggers that are appropriate for the bank's risk profile, critical business lines and critical functions and shared services; and (g) Monitoring the impact of contingency actions

	undertaken during the stress events.
Internal Control	11. (1) A bank or financial institution shall put in place internal controls including effective assurance functions for contingency planning such as internal audit, risk and compliance functions, governance policies and structures which are: (a) consistent with the risk profile of the institution and its business model, critical functions and services including those outsourced from third-party providers; (b) sufficient to ensure effective discharge of responsibilities for stewardship of resources, compliance with legislative and other requirements; (2) The internal audit function or other independent party shall conduct periodic reviews of the Contingency Plan to determine whether the plan is realistic and remains relevant and whether it adheres to the policies and standards established by the Board.
	PART III **CRITICAL FUNCTIONS AND SHARED SERVICES**
Overview	12. Continuity of a bank's or financial institution's critical functions and shared services is essential in preventing potential disruptions that could adversely impact its operations.
Critical functions	13. (1) A contingency plan shall provide an overview of a bank or financial institution's business model at a high-level, describing its activities, including significant business lines. (2) A bank or financial institution shall identify its critical functions on its operations, activities or services that are provided to the customers or any counterparty. In identifying critical functions, the bank or financial institution shall consider the following: (a) whether a failure or discontinuity of such functions would likely lead to the disruption of services that are essential for the functioning of the entity. (b) contribution of the business line to its profit, assets, capital, liabilities, or risk profile; (c) strategic significance of the business line in relation to: (i) customer base, geographic reach, and branch network; (ii) market potential and growth outlook; (iii) indicative value under the current operating environment, taking into account the provision of

	market access or international linkages to the bank or financial institution; (iv) operational synergies with other business lines; (v) attractiveness to competitors as a potential acquisition target; and (vi) other factors that contribute to the business line's significance to the institution. (3) A bank or financial institution shall at minimum assess the criticality of functions as provided in **Appendix 1**, and identify any additional functions deemed critical. (4) Following identification of the critical functions, a bank or financial institution shall consider in its contingency plan the impact of disruptions on its operations and ability to continue providing services to customers and participation in financial markets infrastructure (local and foreign). (5) assess the impact of disruption of the critical function applying the indicators in **Appendix 2**. (6) A bank or financial institution shall, for each critical functions identified, include in the contingency plan, mitigation measures to ensure continuity of the services.
Critical shared services	14. (1) Critical shared services refer to the underlying operations, activities or services that are performed for one or more covered unit or entities, where the failure or discontinuance of such services would present a serious impediment or completely impair the performance of one or more critical functions. (2) A bank or financial institution shall identify critical shared services that are performed by an internal unit, a related entity and/or outsourced to external providers. (3) In identifying critical shared services, a bank or financial institution shall take into consideration the following criteria: (a) The impact of discontinuance is likely to have an adverse effect on one or more critical functions; and (b) substitutability of the service, i.e. availability and ease of which the provision of the service can be replaced by other substitute providers with similar quality, at comparable cost. (4) A bank or financial institution shall at minimum assess the significance of shared critical services as provided in Appendix 3, and identify any additional shared services deemed critical. (5) A bank or financial institution shall, for each shared critical services identified, include in the contingency plan, mitigation measures to minimize disruptions of its operations.

Interconnectedness	15. (1) A bank or financial institution shall identify material dependencies, assess key risk transmission channels and the extent of potential adverse effects arising from the disruption or failure of such dependencies which may be financial, operational or legal in nature and determine contingency options. In particular, a bank or financial institution shall identify and assess: (a) intra-group dependencies covering entities, and entities related to the bank or financial institution that, if disrupted, would significantly affect the funding or operations of the bank or financial institution and/or its performance of critical functions; and (b) external dependencies on third parties services by the bank or financial institution including management information systems and financial market infrastructures whereas if disrupted, would significantly affect the funding or operations of the bank or financial institution and/or its performance of critical functions. (2)To identify dependencies, a bank or financial institution shall, at minimum, consider the following:- (a) extent of reliance on intra-group capital, funding and liquidity arrangements, off-balance sheet exposures, capital, liquidity, funding, risk transfer, financial support agreements/ guarantees, cross-collateral and intra-group product netting arrangements; (b) extent of reliance on external non- related counterparties off-balance sheet exposure, capital, liquidity and funding as well as financial commitments, guarantees, netting arrangements and risk transfers; (c) significance of a bank or financial institution role in providing funding, liquidity or risk transfer to related or third parties; (d) extent of reliance on intra- group service providers, shared material operational services (including personnel, facilities and systems) and access to payment systems (local and foreign) as well as reliance on one entity which is a member of a central clearing counterparty; and (e) extent of reliance on external service providers including operational services that are outsourced.
	PART IV **EARLY WARNING MECHANISM**

Early warning	16. (1) A contingency plan shall include an early warning mechanism for receiving relevant and timely information in a systematic manner prior to a crisis to facilitate informed decisions and timely corrective actions to: (a) minimize disruptions of service to customers; (b) minimize financial losses due to business disruptions; and (c) ensure timely resumption of normal operations in the event of a realization of crisis. (2) A bank or financial institution shall establish Early Warning Indicators that sets out clearly defined criteria, and thresholds to facilitate timely monitoring, escalation, activation and implementation of the contingency plan. Such Indicators shall at minimum: (a) facilitate prompt identification and escalation of key vulnerabilities and stress events which could adversely affect the bank or financial institution; (b) enable risk monitoring and management across critical functions and mitigation levels in a cohesive manner; and (c) ensure timely decision and activation of potential management actions. (3)The Early warning indicators shall include, to the extent applicable, thresholds on key internal and external market indicators for monitoring liquidity, capital adequacy, asset quality, profitability, market risk, turnover of Board and Management as provided in Appendix 4 and any other indicators that facilitate continuity of the critical functions.
Quantitative and qualitative early warning indicators	17. (1) A bank or financial institution shall develop a suite of quantitative and qualitative early warning indicators that are:– (a) tailored to the size and complexity of its business model/operations, inherent risk drivers and strategy; (b) clearly defined, forward-looking and suitable for close monitoring of evolving stress events, taking into consideration the intrinsic characteristics and quality of indicators (e.g. reliability, sensitivity and ease of monitoring); (c) aligned with existing indicators used for risk monitoring, escalation and decision-making; and (d) diverse to capture an extensive range of stress scenarios of varying nature and severity. (2)A bank or financial institution shall establish early warning

	indicators which are above the regulatory thresholds. (3)A bank or financial institution shall supplement the early warning indicators developed at the consolidated level with entity-level indicators specific to subsidiaries, where such indicators serve to capture specific key vulnerabilities faced by the group or subsidiaries.
Triggers for actions	18. (1) A bank or financial institution shall establish thresholds which trigger contingency actions, and at a minimum shall: (a) not breach statutory requirements; (b) be at a level before the point of non-viability and able to provide reasonable time based on realistic assumptions: (i) to implement and realize the benefits of contingency actions; and (ii) to intensify monitoring implementation of contingency actions. (2) A bank or financial institution shall take contingency actions based on its established procedures. (3) A bank or financial institution shall ensure in implementing the contingency actions will not negatively affect the continuity of its critical functions and shared services.

Preparatory measures	19. A bank or financial institution shall identify preparatory measures to improve the overall efficacy of the contingency plan which shall at a minimum include: (a) measures aimed at overcoming the barriers to the efficacy of identified contingency options and preferred strategies; and (b) the implementation timeline, target completion dates, resources, and key personnel responsible for the implementation of these measures.
	PART V **MANAGEMENT INFORMATION SYSTEM CAPABILITIES**

Access and Availability	20. A bank or financial institution shall ensure that: (a) Its Management Information Systems (MIS) are capable of supporting business continuity for core business lines, critical functions and essential services to its customers and are in compliance with regulatory requirements; (b) Its Contingency Plan explicitly provides details on mitigation measures on how the MIS will continue to support all critical and essential services needed by the bank or financial institution that depend on MIS prior to, during and after crisis; (c) Its Contingency Plan identifies and/or explicitly provides for: (i) necessary contingency arrangements to ensure its continuity of participation in interbank payment, clearing and settlement systems and provide an analysis of the potential impact of discontinued or degraded access. (ii) necessary contingency arrangements are established for effective business continuity for outsourced and/or third party information technology providers. This shall include- a. A list of providers or the critical and essential MIS of the institution including payment, clearing and settlement systems in which it participates; b. Analysis of potential impact of discontinued or degraded access that impair its ability to undertake its critical function or access to shared services; and c. Analysis of the measures that these outsourced and/or third party information technology providers should take in order to ensure business continuity. d. The Contingency Plan explicitly provides and covers for its MIS capabilities when the parent or group is located in another jurisdiction to ensure that it's critical and shared services are not disrupted due to the interconnectedness within the group.

		The local MIS contingency arrangements should ensure maintaining access prior to, during and after crisis.

System support	21. A bank or financial institution shall ensure that MIS is capable of: - (a) providing functionalities to be invoked for effective crisis management; (b) supporting the preparation of regulatory reports and compliance to key financial health indicators by maintaining detailed granular information on proprietary and client exposures/positions and delivery obligations on a daily basis; (c) Maintaining a record of, and is able to provide, information prior to or upon entry into financial crisis with regard to: (i) The collateral pledged, distinguishing collateral that supports proprietary and client activities, by: type, aggregate values, from the payment, clearing and settlement systems and/or other financial markets infrastructure intermediaries in which it participates. (ii) The collateral pledged to a jurisdiction in which the security interest of the collateral is enforceable against the bank or financial institution. (iii) A list of the types of collateral and the haircuts accepted by a payment, clearing and settlement systems and/or other financial markets infrastructure intermediaries in which it participates. (iv) A list of upcoming settlement and delivery obligations, by value and type of asset, for a specified upcoming period to and/or via the payment, clearing and settlement systems and/or other financial markets infrastructure intermediaries in which it participates. (d) Facilitating compliance reporting as required by the Bank in respect to the above information or other information generated by the bank or financial institution incidental to the critical and essential services including real-time reporting; and (e) Facilitating analysis of the liquidity needs that the bank or financial institution requires to comply with, including any additional collateral requirements, related to the use of payment, clearing and settlement systems services (including on an intraday basis) for all financial markets infrastructure service providers and for each provider individually, which contribute

	to the bank's preparedness for a potential resolution.
	PART VI **SIMULATION**
Simulation and impact analysis of actions	22. A bank or financial institution shall conduct a simulation of its contingency plan in order to assess the bank's readiness to respond, in doing so, at a minimum shall: (a) Test the viability of the Contingency Plan before its Board's approval; (b) Conduct annual tests of the Contingency Plan to ensure that emergency management capabilities are consistent with the plans, procedures and policies; (c) Require its provider(s) of critical services to participate in the testing process. (d) Apply the outcome of the testing in reviewing: (i) the Contingency Plan to ensure that the plan remains relevant. (ii) the effectiveness of third-party service providers (e) Assess the impact of the outcome of the testing provided in subsection (d) above, on its critical functions and core business lines, and devise appropriate remedial actions with specified implementation time frames.
	PART VII **COMMUNICATION AND COORDINATION**

Communication and Coordination	23. (1) A bank and financial institution shall include communication and coordination strategies in the Contingency Plan to ensure relevant stakeholders are adequately informed throughout the activation of the Plan (2) In developing communication and coordination strategies, a bank or financial institution shall consider: (a) Communication needs of different stakeholders; (b) Communication needs specific to individual contingency actions; and (c) Applicable disclosure requirements (such as legal provisions, regulations, or listing rules) in relation to unpublished information (3) A communication strategy of a bank or financial institution shall include at a minimum: (a) Identification of key stakeholders, comprising: (i) Internal stakeholders including staff, key (domestic and foreign), branches and subsidiaries; and (ii) External stakeholders including shareholders, Bank, other authorities, customers, counterparties, general public where necessary. (b) Stakeholder engagement strategies to support the implementation of the Contingency Plan, providing: (i) Medium of communication (ii) Level of detail, timing and frequency of information to be provided; and (iii)The parties identified to lead such engagements. (c) plans to mitigate or prevent potential adverse market reactions and maintain public confidence. (4) A coordination strategy of a bank or financial institution shall include at a minimum: (a) a plan for coordinating actions for activating and executing the contingency plan; and (b) resources including personnel responsible for ensuring effective coordination of contingency plan.
	PART VIII **CROSS BORDER AND OTHER CONSIDERATIONS**

Cross-border contingency plan	24. A bank or financial institution shall include in its contingency plan, comprehensive procedures, in relation to cross-border operations which include at a minimum: - (a) communication strategy for financial regulatory authorities and institutions in other jurisdictions; and (b) comprehensive procedures for handling disruptions in its MIS or participation in the financial market infrastructures.
Other Considerations	25. A bank or financial institution shall ensure that its contingency plan outlines mitigation measures for other risks, which at a minimum shall include: (a) fraud risk as the risk to the current or projected financial condition and resilience arising from inadequate or failed internal processes or systems, human errors or misconduct or adverse external events; (b) emerging technological risks emanating from technological innovations for financial services (FinTech) offered by non-traditional players which may disrupt the bank's or financial institution's business model to effectively deliver its critical functions and shared services; (c) climate-related financial risks that may require enhanced compliance, adjustments of its service provisions to carter for physical and transition risks including costs of compliance to Environmental, Social and Governance (ESG) risk and adjustment of its services and products to comply with climate-friendly financial services and products (e.g. increase of credit to green and low carbon sectors); and (d) Political risks that may emanate from abrupt and drastic policy and regulatory changes, political instability leading to social unrests, fragility, geopolitical tensions, wars and global macro-financial crisis.
	PART IX **MISCELLANEOUS**

Regulatory Sanctions and Penalties	26. Without prejudice to penalties and actions prescribed by the Act, the Bank may impose on any bank or financial institution any of the following sanctions for non-compliance: - (a) a penalty of the amount to be determined by the Bank; (b) prohibition from declaring or paying dividends; (c) suspension of the privilege to issue letters of credit or guarantee; (d) suspension of lending and investment operations; (e) suspension of capital expenditure; (f) revocation of banking license; and (g) disqualification of any officer or director from holding any position or office in any bank or a financial institution under the supervision of the Bank
Compliance with legal and regulatory requirements	27. In preparing Contingency Plan, a bank or financial institution shall consider relevant laws, regulations, directives, guidelines, or circulars including: (a) The Banking and Financial Institutions (Liquidity Management) Regulations, 2014; (b) The Banking and Financial Institutions (Prompt Corrective Action) Regulations, 2014; (c) The Banking and Financial Institutions ((d) Adequacy) Regulations, 2014; (e) The Banking and Financial Institutions (Corporate Governance) Regulations, 2021 (f) Business Continuity Guidelines for Banks and Financial Institutions, 2009; (g) Risk Management Guidelines for Banks and Financial Institutions, 2010; (h) Stress Testing Guidelines for Banks and financial Institutions, 2022; and (i) Any other relevant regulations, directives, guidelines or circulars that may be issued by the Bank, from time to time.
	PART X **AMENDMENTS OF THE GUIDELINES**

Review	28. The Bank may at any time amend, delete, vary, add or change any provision of these Guidelines and such amendments, division, variations or change shall become effective from the date of notification to banks and financial institutions by the Bank. 29. Such notification may be effected through a circular, directive, notice, letter or other means communicating the amendments to banks or financial institutions generally.

APPENDICES

Appendix 1: List of Potential Critical Functions

Critical Function	**Details**
Deposit-taking and savings	(a) Customers demand and savings deposits (b) Fixed or short term customer term deposits (c) Demand and saving deposits from Corporates (d) Term deposits from corporates
Lending and loan servicing	(a) Secured lending to individuals (b) Unsecured lending to individuals (c) Secured lending to SMEs (d) Unsecured lending to SMEs (e) Secured lending to private Corporates (f) Unsecured lending to private companies (g) Secured and unsecured lending to Government and public institutions (h) Trade finance (i) Leasing (j) Project financing
Payment, clearing and settlements	(a) Payment infrastructure through TISS, TACH, Internet, ATMs, Central Depositories, Mobile Money, Cross-boarder transactions such as EAPS, SIPS, Money Gram, Western Union (b) Payment and Settlement of Foreign Currency (c) Remittances
Financial and Capital markets	(a) Money market (b) Treasury bills and bond market (c) Equity market (d) Coperate bond market
Wholesale Funding Market	(a) REPO market (b) Reverse REPO market (c) Interbank cash markets (d) Borrowing and lending among institutions

Appendix 2: Impact Assessment Criteria for Disruption of Critical Function

Areas	**Analysis Required**
Impact of discontinuance	1. Impact on customers and relevant stakeholders including counterparties related to main customers, service providers, suppliers, utilities, public services, government which are affected by the function, taking into account – (a) Impact and speed of disruption to financial health, customer business, and short-term liquidity needs of customer base and relevant stakeholders; and (b) Capacity and speed of counterparties, customers and the public to react to the disruption; 2. Impact on other financial institutions, financial markets and payment system infrastructures, taking into account (a) the impact and speed at which a disruption of the function would affect market participants or market functioning such as liquidity, operations and structure of other financial institutions, financial market and payment system infrastructure.
Substitutability of services received or functions offered	1. Availability of substitute providers, taking into account – (a) number of available substitute providers; (b) presence of alternative products or markets that conduct activities that are broadly equivalent to the function; (c) Number of customers that rely on the bank or financial institution as the only or principal banking service provider; and (d) Ease of customers to move to substitute providers, time required, process involved, and costs to be incurred by customers. 2. Necessary requirements to assume the functions, including: - (a) capacity of and expected time needed for substitute provider to assume all or a large share of activities or customers; (b) organizational arrangements, infrastructure, expertise, regulatory approvals required; (c) willingness of substitute providers to take on all or a large share of activities or customers, taking into consideration attractiveness of the function, e.g. economies of scale, margins, complements overall business; (d) importance of brand, market positioning or reputation; (e) costs for substitute provider(s) to assume all or a large share of activities and customers; (f) Interoperability between providers of the function, presence of common standards, procedures and interfaces; and (g) significance and form of any other barriers to substitutability.
Interconnected	Interactions with other functions of the financial institution or of the market,

ness	including the relevance of the market for this function to the functioning of other markets as well as the role in influencing the availability of other functions or products which are tied with the function.

Appendix 3: Critical Shared Services

Description	Operational services
Treasury services	(a) Treasury Activities (b) Booking arrangements (c) Collateral management
Risk management and valuation	(a) Centralised risk management (b) Risk management units, by business line and risk type (c) Embedded risk managers (d) Risk report generation (e) Risk IT infrastructure and personnel
Accounting	(a) Statutory reporting (b) Regulatory reporting (c) Valuation activities for market positions (d) Management reporting
Physical operations	(a) Cash handling (b) Access control (c) Security
Human resource support	(a) Payroll (b) Staff administration(contracts) (c) Communication for human resources
Information Technology	(a) Data storage and processing (b) IT infrastructure, workstations, servers, data centres and related services (c) Software licenses and applications (d) Access to external providers (e.g. Bloomberg, stock exchanges) (e) Application maintenance (software application maintenance and related data flows, to be limited to corrective maintenance during stress) (f) User support (g) Disaster recovery solution
Legal services and compliance	(a) Corporate legal support (b) Business/transactional legal services (c) Compliance support

Appendix 4: Examples of Early warning indicators

Parameter	**Indicator**	**Statutory and Institutional Limits**
Liquidity	*Liquidity Ratio*	(a) Statutory requirement: *Eg. 20%* (b) Institutional limit ratios etc. : *Eg. > 20%*
	Liquidity coverage ratio	*Based on institutional approved limits*
	Core deposit/total deposits	*Based on institutional approved limits*

Parameter	Indicator	Statutory and Institutional Limits
	Other indicators- (a) *Core corporate/retail deposit volumes falling below projected levels* (b) *Unexpected and significant levels of withdrawals of retail deposits,* (c) *A shortening of deposit maturities and a rise in requests to break fixed-term deposits,* (d) *Concentrations in either assets or liabilities,* (e) *Larger than expected drawdown of committed facilities,* (f) *A significant rise in undrawn committed facilities,* (g) *A decline in earnings performance or projections,* (h) *Rapid asset growth funded by volatile wholesale liabilities or borrowed deposits,* (i) *Prepayments of loan facilities falling below historic behavioral norms,* (j) *Significant and prolonged contraction of the Bank's funding market,* (k) *Excess borrowing from Interbank* (l) *Cashflow projections,* (m) *Etc*	• *Based on institutional approved limits*
Statutory Minimum Reserve (SMR)	SMR Ratio	(a) Statutory requirement: *Eg. 7%* (b) Institutional limit, ratios etc.: *Eg. > 7%*

Parameter	Indicator	Statutory and Institutional Limits
Core capital/risk weighted assets and of balance sheet exposures	Capital Adequacy Ratio	(a) Statutory requirement: *Eg. 10 %* (b) Institutional limits, ratios etc.: *Eg. > 10%*
Interbank Limits	Counterparty Risk	*Based on institutional approved limits*
Loan to Deposits	Loan to Deposits Ratio	*Based on institutional approved limits*
Earnings	Profitability ratios/trends	*(a) Industry average (+/-)* *(b) Institutional projection*
Management	Continuity of board, top management and personnel protection	*Industry turnover rate (+/-)*
Asset Quality	NPL Ratio	*(a) Industry average* *(b) Acceptable level of 5%*
MIS Capability	MIS Availability, Integrity and Robustness	*(a) Down-time rate* *(b) ISO Certification*
Market Risks	(a) NOP ratio (b) Fx income/total income (c) Interest rate sensitive assets/interest rate sensitive liabilities (d) Excess shot-term liabilities/long-term assets	*(a) NOP ratio statutory requirement: +/- 7.5%* *(b) Based on institutional approved limits*