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Test Company

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RISK MANAGEMENT FRAMEWORK

PART 1: EXECUTIVE SUMMARY OF THE RISK MANAGEMENT FRAMEWORK

1.1. GENERAL DETAILS

This Risk Management Framework (RMF) has been developed to help identify all potential threats to the organization and to define the strategy for eliminating or minimizing the impact of these risks, as well as the mechanisms to effectively monitor and evaluate this strategy. This section outlines the general summary of the Risk Management Framework:

Description	KEMRI RISK MANAGEMENT FRAMEWORK	Last Revision Date	06/04/2015 00:00:00
External Document No	KASNEB/RMF/001	Default Risk Likelihood Rating Scale ID	LRS0000000001
Organization Name	Test Company	Default Risk Impact Rating Scale ID	IRS000000001
Primary Purpose	The strategic imperative of KRMF is to implement risk management as a core capability and assist the Board and Management determine the appetite for risk and opportunities (choice of strategies and actions) and tolerance to risk (economic and operati	Default Overall Risk Rating Scale ID	ORS000000001
Overall Responsibility	BOARD	Default Risk Appetite Rating Scale ID	RAS000000001

1.2. RISK MANAGEMENT FRAMEWORK OVERVIEW

This section provides a summarized overview of the RMF:

Description

RMF will be applied during the development and implementation of KEMRI's Corporate Strategic Plan and Operational plans and in the day-to-day running of the organization.

RMF has been designed to continuously identify and maximize potential opportunities whilst minimizing threats that may affect the achievement of organization's mandate.

RMF will enable the organisation manage potential events (opportunities and threats) to be within the risk appetite established by the Board.

The framework shall also provide a reasonable assurance regarding the achievement of the organization's objectives.

The Board, Management and Staff shall be required to participate fully in the risk management processes and are required to familiarise themselves with the contents of the organization's Risk Management Policy (Risk Policy) and Risk Management Frame

The Institutional Risk Management (IRM) Process shall be an on-going activity as the internal and external environment in which kasneb operates continues to change and likewise the events it faces.

1.3. RISK MANAGEMENT FRAMEWORK PURPOSE

The importance of implementing this Risk Management Framework is summarized as follows:

Description

- (i) Align Organization's strategy to its risk appetite: KRMF shall enable the Board and Management to evaluate the objectives that Organization is pursuing after factoring in the level of risk acceptable to the Board and Management.
- (ii) Enhance risk response decisions: the Framework shall provide structured guidance on how Organization selects risk management responses across the Organization.
- (iii) Seize opportunities: by considering potential events during the identification of risks, Organization shall also identify opportunities which the Organisation can maximize on.
- (iv) Reduce operational surprises and losses: KRMF shall ensure that the Board and Management can anticipate events and put in place measures to minimize threats related to those events and continuously monitor the effectiveness of the risk managemen
- (v) Identify and manage multiple and cross-organisational risks: the Framework shall enable Organization to deal with risks that cut across the organization. Such risks may not be effectively managed if each division or unit decides to manage their r
- (vi) Improve deployment of Organisation resource: with a robust organizational-wide risk management process in place, Organization shall have more reliable information on how to deploy its resources towards the achievement of its Mandate, Vision, Mis

1.4. RISK MANAGEMENT GUIDING PRINCIPLES

For us to implement institutional risk management effectively and efficiently, the following principles shall be complied with in the process of developing and implementing the Risk Management Framework:

Description	Guiding Principle Statement
Creating and protecting value	Organization risk management process shall support the achievement of Organization's Mandate, Vision, Mission, Strategic Objectives and Operational Objectives and ensure continuous improvement of the Organisation's performance as assessed through the
Integration with processes	Risk management shall not be implemented as a stand-alone activity that is separate from the main activities and processes of the Organization but shall be part of Management's responsibilities and be an integral part of the Organisation's strategic
Decision making	Risk Management shall assist the Board and Management make informed choices, prioritise actions, distinguish among alternative courses of action and allocate resources.
Address uncertainty	Risk Management shall explicitly take account of uncertainties, their nature (both threats and opportunities), and how they can be addressed.
Alignment	Risk Management shall ensure the activities that the Board and Management pursue are within the risk appetite approved by the Board.
Systematic, structured and timely	The governance model shall provide a forum for risks to be appropriately considered, discussed, debated and factored into corporate decisions. The Board and Management shall ensure: the risk management process is systematic across different Divisions
Best available information	The input to the risk management processes shall be based on information sources such as historical data, management experience, key stakeholders' feedback, observation, forecasts, research and professional judgement. However, Board and Management sh
Stakeholder involvement	Enterprise risk management process shall recognise the capabilities, perceptions and intentions of external and internal stakeholders that can facilitate or hinder achievement of organizations's Mandate, Strategic Plan and Operational Plans. The risk
Continous improvement	Enterprise risk management shall continuously sense and respond to changes in the environment (internal and external) in which the Organization operates. Given that this environment is continuously changing there will be: new risks emerging; and exis
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1.5. STAKEHOLDER INVOLVEMENT

Please take note of the following:

- 1. The risk management process recognises the capabilities, perceptions and intentions of external and internal stakeholders that can facilitate or hinder achievement of the Mandate, Strategic Plan and Operational Plans.
- 2. The risk management process shall also ensure there is appropriate and timely involvement of stakeholders and, in particular, decision makers in all functional areas.
- 3. The section below summarizes some of the key stakeholders that we shall involve in the implementation of this Risk Management Framework:

1.5.1. External Stakeholders

Code	Description
ACADEMIC	Academic/Learning Institutions
BOARD	Board
COMMUNITY	Community
CONTRACTOR-STAFF	Contractor Staff
COUNTY-GOV	County Governments
CUSTOMERS	Customers
FINANCIAL	Financial Institutions such as Banks
LICENSING	Licensing Institutions
MEDIA	Media
NATIONAL-GOV	National Government
NGO	Non-Geovernmental Organizations/Lobby Groups
POLITICIANS	Politicians
PROFESSIONAL	Professional Bodies
PUBLIC	General Public
PUBLIC-UTILITY	Public Utility Organizations
SHAREHOLDER	Shareholder
SUPPLIERS	Suppliers
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1.5.1. Internal Stakeholders

Code	Description
EMPLOYEES	Employees
GM	Grants Management Office
I-PI	Principal Investigators
I-PRJACC	Project Accountant
I-QAO	Quality Assurance Officer
MANAGEMENT	Management
PROJECT TEAM	Project Team
PTC	Project Technical Committee
SPONSOR	Project Sponsor
STEERING-CO	Steering Committee

PART 2: RISK IDENTIFICATION AND ANALYSIS

The development of our corporate strategic plans, annual work plans, functional work plans, and project plans requires a detailed identification and analysis of the internal and external events that may affect their successful execution. Therefore, our risk management framework includes a comprehensive risk taxonomy/classification that outlines the set of risk sources and risk types/categories that shall be adopted within the organization.

2.1. RISK SOURCES

Identification of risk sources provides a basis for systematically examining changing situations over time to uncover circumstances that impact the ability of the Organization to meet its objectives. This Risk Management Framework has identified the following key risk sources:

Source ID	Description	No. of Risk Categories	No Of Risks
EXTERNAL	External Risk Sources (Risks arising from outside the organization or project and generally outside of the team's control)	0	3
INTERNAL	Internal Risk Sources (Risks arising from within the organization)	0	9
INTERNAL 1	Internal	0	0

2.2. RISK CATEGORIES

Establishing categories for risks provides a mechanism for collecting and organizing risks as well as ensuring appropriate scrutiny and management attention for those risks that can have serious consequences on organization and project objectives. Risk categories further facilitate aggregation of risks from across the organization to achieve comparative analysis of an organization's risks over time. The following risk categories shall be adopted under this Risk Management Framework:

Code	Description	Risk Source ID	Addditional Comments	No. of Risk Triggers
COMPLIANCE	Compliance Risks	INTERNAL	Risks related to compliance with laws, regulations and policies.	0
CONTARCTOR- CAPACITY	Contractor Capacity risks	EXTERNAL	Risks related to the capacity of the contractor	0
ECONOMIC	Economic risks	EXTERNAL	Risks related to economic instability	0
FINANCIAL	Financial Risks	INTERNAL	These are risks that lead to financial losses, lost revenue & strained cashflow issues	0
FRAUD	Security and Fraud Risks	INTERNAL	Risks related to security breaches, fraud losses etc	0
GOVERNANCE	Governance risks	INTERNAL	Governance risk relates to board and management performance with regard to ethics, community stewardship, and company reputation.	0
HEALTH&SAFETY	Health & safety risks	INTERNAL	Health and safety risks	0

LEGAL	Legal/Legislative risks	EXTERNAL	Legal risks arise from legal and regulatory obligations, including contract risks and litigation brought against the organization.	0
MARKET	Market risks	EXTERNAL	Market risks include competition, foreign exchange, commodity markets, and interest rate risk, as well as liquidity and credit risks.	0
NATURAL-HAZ	Natural Hazards/Disasters	EXTERNAL	External hazards include major events that are difficult to predict or prevent, such as natural disasters, global pandemics, labor strikes, or crime.	0
PERFORMANCE	Performance/Delivery risks	INTERNAL	Risk that the project will fail to produce results consistent with project specifications.	0
POLITICAL	Political risks	EXTERNAL	Risks related to political instability	0
PR-FUNDING	Project funding risks	EXTERNAL	Risks related to lack of or inadequate project funding	0
PR-STATUTORY	Statutory Consent Risks	EXTERNAL	Risks related to statutory consents for project works	0
PR- SUBCONTRACTOR	Subcontractor (3rd party supplier) risks	EXTERNAL	Risks related to the contractor having to subcontract some supplies and services to 3rd parties	0
REPUTATION	Reputation risks	INTERNAL	Risks that affect the Company's brand reputation (e.g. negative publicity, lawsuits, unhappy clients etc)	0
SCHEDULE	Schedule risks	INTERNAL	Risk that activities will take longer than expected.	0
SCOPE	Project Scope risks	INTERNAL	Risks related to scope changes/scope creep	0
TECHNOLOGY	Technological risks	INTERNAL	Risks related to unavailable or changing technology	0
TEST	Test Category	INTERNAL 1	Risk Test	0
WORKFORCE	Workforce risks	INTERNAL	Employee resourcing risks	0

2.3. RISK IDENTIFICATION METHODS

This section summarizes some of the approaches, tools and techniques that shall be adopted during identification of risks, under this Risk Management Framework:

Code	Description
INTERVIEWS	Discussions with stakeholders to identify/explore risk areas and detailed or sensitive information about the risk.
KNOWLEDGE-REVIEW	Risk information based on analysis of historical data and company knowledge (Both documented and experiential knowledge sources)
ONLINE	Online Meeting
PESTLE	"Risk identification based on analysis of an organization's external environment (political, economic, social, technological, legal, environmental) "
PROCESS-REVIEW	Risk identification during review of business processes
ROOT-CAUSE	Root causes are determined for the identified risks. These root causes are further used to identify additional risks.
SCENARIO-ANALYSIS	Uses possible (often extreme) future events to anticipate how threats and opportunities might develop.
STAKEHOLDER-ANALYSIS	Stakeholder identification and analysis to determine their power, interest and communication strategies
SURVEYS	Gathering of risk information using Surveys/Questionnaires
SWOT	"Risk identification based on analysis of an organization's Strength, Weakness, Opportunities and Threats"
WORKINGGROUP	"Working Groups that provide detailed information about the risks i.e. source, causes, consequences, stakeholder impacted, existing controls "
WORKSHOP	Workshops with staff, stakeholders and risk management teams

PART 3: RISK EVALUATION

3.1. RISK ASSESSMENT

This Risk Management Framework requires that all risks identified be assessed qualitatively and quantitatively on a regular basis, based on their likelihood and consequence of occurrence.

3.1.1. RISK LIKELIHOOD RATING SCALE (LRS000000001)

This section outlines the rating codes that shall be used for assessing risk likelihood (Probability of occurrence):

Likelihood Code	Description	Min Probability Percentage	Max Probability Percentage	Rating Score
1-VERYLOW	Very Low-Up to 10% chance of occurrence	0	10	1
2-LOW	Low-More than 10% and up to 30% chance of occurrence	10.1	30	2
3-MEDIUM	Medium-More than 30% and up to 60% chance of occurrence	30.1	60	3
4-HIGH	Highly -More than 60% and up to 90% chance of occurrence	60.1	90	4
5-VERYHIGH	Very High-More than 90% chance of occurrence	90.1	100	5

3.1.2. RISK IMPACT RATING SCALE (IRS0000000001)

This section outlines the rating codes that shall be used for assessing risk impact (Consequence of occurrence):

Impact Code	Description	Rating Score
1-INSIGNIFICANT	Very Low-Noticeable disruption to achievement of objective	1
2-MINOR	Low-Material deterioration	2
3-MODERATE	Moderate-Significant deterioration	3
4-SERIOUS	High-Fundamental threat	4
5-VERY SERIOUS	Critical-Survival of the organization is threatened	5

3.2. RISK RANKING

The risk ranking process enables the Organization to prioritize the risk events identified based on either overall risk rating or risk appetite.

3.2.1. OVERALL RISK LEVEL RATING SCALE (ORS000000001)

Overall risk level is calculated from the values assigned to the risk's likelihood and consequence of occurrence. This section outlines the rating codes that shall be used for assessing overall risk levels of each event.

Risk Level Code	Description	Min Overall Rating	Max Overall Rating	Default Risk Response Strategy	Risk Heat Zone
1-VERYLOW	Very Low Risk	1	5	ACCEPTANCE	Green
2-LOW	Low Risk	6	10	MITIGATION	Green
3-MEDIUM	Medium Risk	11	15	MITIGATION	Yellow
4-HIGH	High Risk	16	20	TRANSFER	Red
5-VERYHIGH	Very high risk	21	25	AVOIDANCE	Red

3.2.1. RISK APPETITE RATING SCALE (RAS0000000001)

and value for money.

Risk appetite is the amount and type of risk that the Organization is willing to pursue or retain (seek, accept or tolerate) as it pursues its objectives that will ensure it achieves its Mandate, Vision and Mission. This section outlines the rating codes that shall be used for assessing risk appetite levels of each event:

Code	Description	Rating Score	Risk Taking Philosophy	Tolerance	Choice	Trade Off
1-AVERSE	Avoidance of risk and uncertainty is a key organization objective.	1	Sacred (risk avoidance is a core objective)	Extremely low	Only selects lowest risk option	Never
2-MINIMALIST	Preference for ultra-safe options that are low risk and only have a potential for limited reward	2	Extremely conservative	Low	Fully accept risk but manage impact	With extreme reluctance
3-CAUTIOUS	Preference for safe options that have a low degree of risk and may only have limited potential for reward.	3	Preference for safe delivery	Limited	Accept if risk is limited & benefits outweigh risks	Prefer to avoid
4-FLEXIBLE	Willing to consider all potential options and choose the one most likely to result in successful delivery, while also providing an acceptable level of reward	4	Will take strong justified risks	Expect some	Fully accept risk but manage impact	Willing under certain conditions

5-OPEN	Eager to be innovative and to choose options offering potentially higher business rewards, despite greater inherent risk.	5	Will take justified risks	Fully anticipated	Always select option with highest return	Willing
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