THE EXPLORERS
NEW ZEALAND OIL & GAS

RISK MANAGEMENT SYSTEM FRAMEWORK

VERSION	REV 4.0
OWNER	VP OPS AND ENG
EFFECTIVE DATE	MARCH 2014
REVIEW DATE	MARCH 2014

1. PURPOSE, APPLICATION AND SCOPE

This Risk Management System (**RMS**) Framework outlines the approach to risk management at New Zealand Oil & Gas (**NZOG**). It provides a framework on how to apply consistent and comprehensive risk management practices across all functional areas of NZOG's business.

Applying this consistently and comprehensively will:

- increase the likelihood of achieving our strategic and business objectives;
- clarify and drive accountability throughout the company;
- support sound decision making by providing a better understanding of exposures;
- create a cost efficient and effective mechanism for prioritization of resources and work to meet objectives; and
- meet compliance and good governance requirements.

This RMS applies to all sites and activities NZOG operationally controls.

The RMS has been developed to:

- align with *International Standard ISO 31000 Risk Management - Principles and Guidelines*; and
- meet the requirements of the *ASX Corporate Governance Principles and Recommendations, Principle 7: Recognise and Manage Risk.*

Note: this procedure does not cover the management of *issues*. An *issue* is a situation or risk that has eventuated, there is no remaining uncertainty and it may or may not be the result of actions taken within the organization; it may be a situation which is beyond the limits of influence of the organization to manage directly.

2. RISK MANAGEMENT PRINCIPLES

Risk is defined as "the effect of uncertainty on objectives."

Risks include, but are not limited to: operational, environmental, sustainability, compliance, strategic, ethical conduct, reputation (brand), technological, product or service quality, human capital, financial reporting and market related risks.

NZOG has adopted the first six principles of risk management in *ISO 31000 Risk Management*, which NZOG must comply with for risk management to be effective:

Principle 1: Risk Management creates and protects value.

Risk management contributes to the demonstrable achievement of objectives and improvement of performance in, for example, health and safety, environmental protection, public acceptance and reputation, efficiency in operations, legal and regulatory compliance, project management and governance.

Principle 2: Risk Management is an integral part of all processes.

Risk management is not a stand-alone activity, separate from the main activities and processes within NZOG. Risk management is part of the responsibilities of management and an integral part of all business processes, including strategic planning and all project and change management processes.

Principle 3: Risk Management is part of decision making.

Risk management helps decision makers make informed choices, prioritise actions and distinguish among alternative courses of action.

Principle 4: Risk Management explicitly addresses uncertainty.

Risk management explicitly takes account of uncertainty, the nature of that uncertainty and how it can be addressed.

Principle 5: Risk Management is systematic, structured and timely.

A systematic, timely and structured approach to risk management contributes to efficiency and to consistent, comparable and reliable results.

Principle 6: Risk Management is based on the best available information.

The inputs to the process of managing risk are based on information sources such as historic data, experience, stakeholder feedback, observation, forecasts and expert judgment. However, managers should inform themselves of, and should take into account, any limitations of the data or modelling used or the possibility of divergence amongst experts.

3. RISK MANAGEMENT RESPONSIBILITIES

Specific responsibilities for the management of risks are required to ensure that the Risk Management System (**RMS**) Framework is integrated and functions effectively.

The NZOG Board is accountable for:

- overseeing the effectiveness of the RMS;
- monitoring compliance with the requirements of the RMS and reviewing the adequacy of risk controls;
- reviewing the risk profile of the company and approving the policies and systems for the on-going identification and management of risks;
- reviewing the company's capacity to absorb risks and approving aggregate exposure limits; and
- requiring management to report on the performance of systems used to identify and manage risks and regularly reviewing these reports.

The NZOG board is responsible for:

- reviewing and approving the policies required to implement the risk management framework;
- approving NZOG's overall risk capacity and appetite;
- reviewing the material risks;
- reviewing and approving the allocation of exposure limits for different categories of risk;
- overseeing the effectiveness of the RMS;
- reviewing the risk register;
- allocating oversight of effective management of risks in relation to accounting standards and principles, compliance and reliability of financial statements and effectiveness of audit processes to the Audit Committee; and
- allocating oversight of effective management of risks in relation to HSE and the operations activities of the company to the HSE and Operational Risk Committee.

The Chief Executive Officer (CEO) is responsible for:

- providing leadership for the business to improve its risk management capability, culture and direction;
- integrating risk management into core business processes;

- identifying, documenting and managing NZOG's corporate strategic risks and opportunities;
- assigning risks to individual managers and allocating resources;
- regularly reviewing and accepting risk levels and approving the associated treatment plans as delegated in Table 1;
- regularly reviewing the Company's risk profile;
- making recommendations to the Board on risk appetite and capacity; and
- reporting on risks to the Board.

The VP Operations and Engineering is responsible for:

- the design, development and improvement of the Risk Management System Framework;
- actively challenging the assessment of company risks by managers;
- providing assurance that the RMS Framework is functioning as designed; and
- maintaining the Risk Register, with input from Managers and the CEO.

Managers are responsible for:

- identifying, analysing and evaluating risks and opportunities in relation to their roles;
- documenting risks in NZOG's Risk Register;
- regularly reviewing risks and accepting risk levels and approving treatment plans as delegated in Table 1;
- ensuring all risks and their associated treatment plans have been accepted and approved in line with delegations provided in Table 1;
- ensuring their teams are engaged in the risk management process; and
- regularly reviewing risks within their business role responsibilities and updating the Risk Register.

All employees are responsible for taking all reasonable and practicable steps to perform their responsibilities delegated under this RMS Framework.

Table 1: Approved Risk Acceptance Levels.

Level of Risk	Action Required	Escalation and approval of treatment plans	Acceptance authority
High	Risk treatment plans must be in place and steps taken to reduce the risk immediately. Risk reviewed weekly.	CEO and Board for review and approval of the treatment plan. Board review of treatment plan status each month.	Board
Medium	Risk treatment must be considered and if applicable steps taken to reduce risks within six months. Risk reviewed monthly by risk owner.	Manager (Delegated authority level 3)	CEO
Low	No further treatment required. Risk reviewed annually by owner.	Manager (delegated authority level 3)	CEO

4.   RISK MANAGEMENT FRAMEWORK

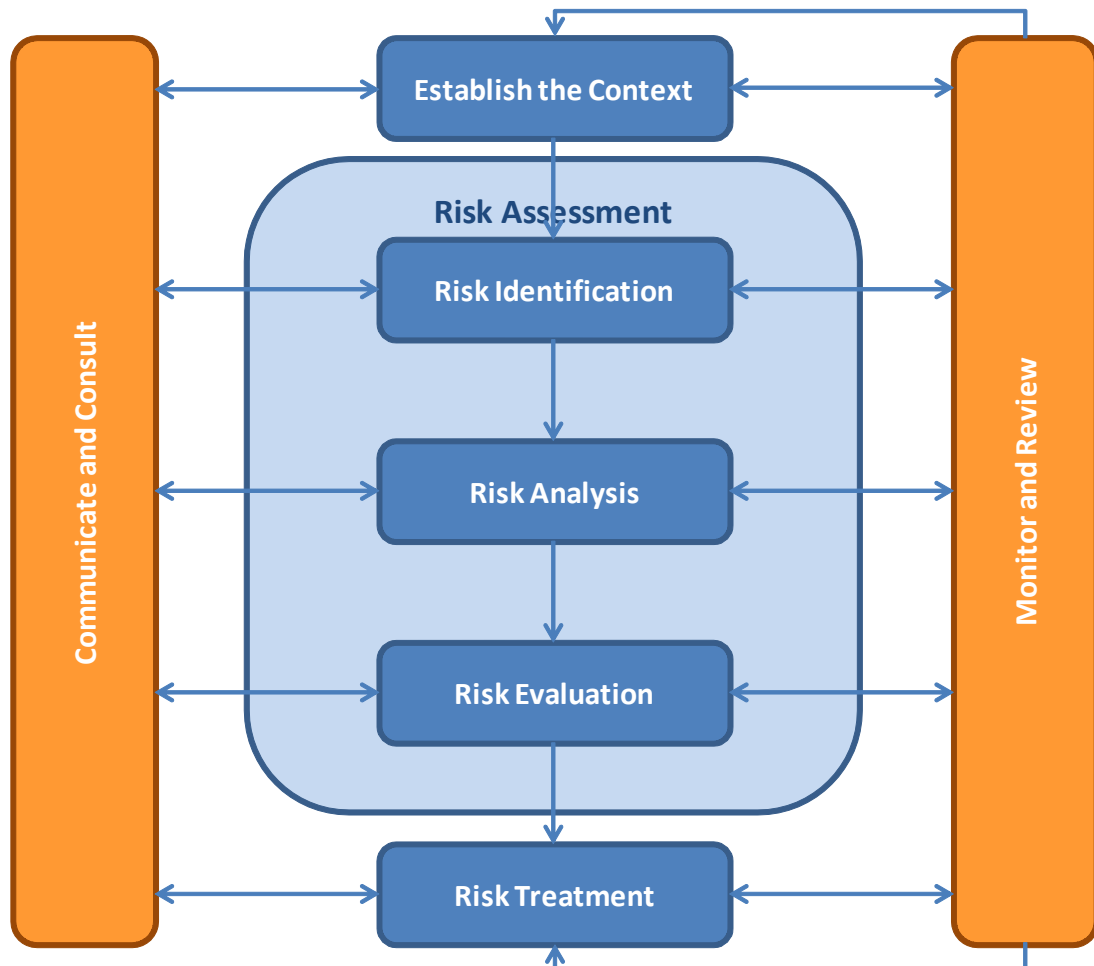# Risk Management System Framework
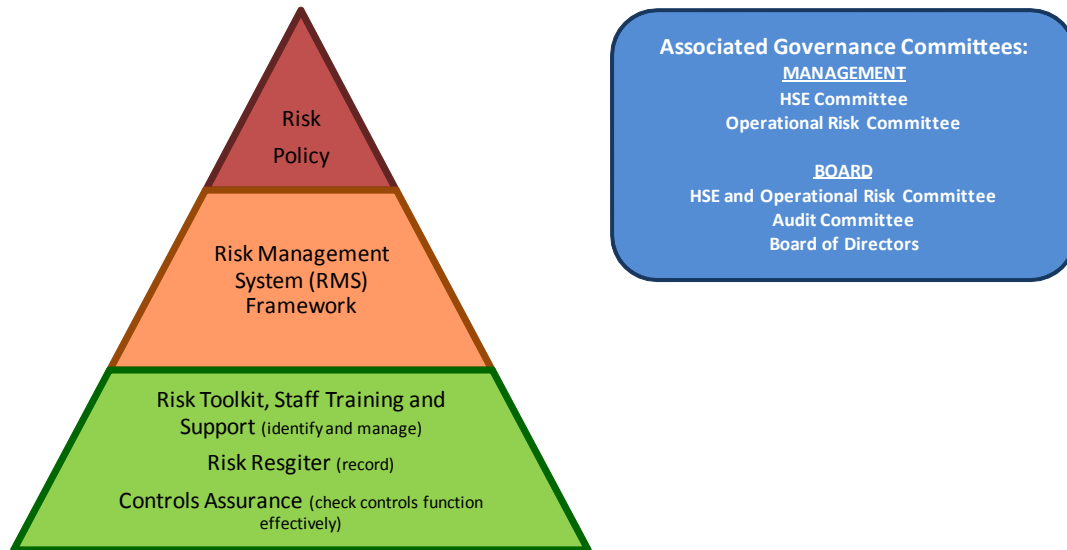
4.1   When to Risk Manage

Risk management is not a stand-alone discipline and needs to be integrated with existing business processes:

- Strategic & Business Planning: The strategic plan needs to be articulated clearly and accompanied by a strategic risk assessment.
- Budgeting and Forecasting: Budgets must identify key risks and opportunities related to achieving budget objectives. Any risk management action must be costed and included in the budget.
- Project Delivery Process: Every project must establish the risks relating to the project delivery and a plan for managing these.
- Contracts management: Risks relating to the full life cycle of a contract need to be identified, costed and managed.

4.2 The Risk Management Process

Risk Management is a continual process that involves following well defined steps. International Standard ISO 31000: Risk Management defines the process in the following diagram:

Risk Management Process

Communicate and Consult

Monitor and Review

Establish the Context

Risk Assessment

Risk Identification

Risk Analysis

Risk Evaluation

Risk Treatment

4.3 Risk Assurance

Risk assurance is provided through a prioritised programme of audits of primary risk controls.

Assurance methods should be appropriate to the level of importance and dependency on the risk control. Assurance methods include the following in increasing level of *rigor*:

- Competent employees
- Management oversight
- Peer/management challenge process
- Internal review/audit
- External review/audit

5. ACTION, ESCALATION AND ACCEPTANCE OF RISK

All risks identified within the organization need to be assessed and reported to the management team. No employee has the authority to accept a risk without first reporting it.

All risks must have a treatment (or mitigation) plan to manage (mitigate) the risk to a level acceptable to the Board, and in accordance with the Approved Risk Acceptance Levels in Section 3.

The CEO has risk acceptance authority for risks rated Medium or Low.

The Board has risk acceptance authority for risks rated High.

5.1 Recording Risks

A central Risk Register shall be maintained by NZOG.

The Risk Register is a management tool and provides a mechanism to be used to ensure a common and consistent approach is applied to:

- Assignment of risk ownership;
- Risk Assessment – the identification, analysis and evaluation of risks to determine risk level and exposure; and
- Risk Treatment – consideration of control effectiveness, development of mitigation plans and monitoring of treatment plans.

All new projects/ventures shall have a separate risk register prepared and incorporated into the central Risk Register upon successful investment by the Company.

5.2 Monitoring and Reviewing Risks

Risks will be formally reviewed by risk owners. The review must include a review of all dimensions of the risk – causes, consequences, control effectiveness and likelihood - with progress reported on implementation of agreed treatment plan.

Management will regularly review the company Risk Register.

The Board will regularly review the company risk register and results of the audit programme relating to risk controls.

5.3 Reporting Risks

The CEO will report to the Board regularly on the risks in the business and must report the Board any changes in the risk matrix that result in the Risk Acceptance Levels being breached.

6. DEFINITIONS

Term	Definition
Consequence	Outcome of an event affecting objectives.
Control	Measure (e.g. process) that is modifying risk.
Control effectiveness	A relative assessment of actual level of control that is currently present and effective compared with that which is reasonably achievable for a particular risk.
Event	Occurrence or change of a particular set of circumstances.
Level of risk	Magnitude of a risk or a combination of risks expressed in terms of the combination of consequences and their likelihood.
Likelihood	Chance of something happening.
Material risks	Risks with potential exposure of Critical or catastrophic, or a level of risk of severe or extreme.
Monitoring	Continual checking, supervising, critically observing or determining the status in order to identify change from the performance level required or expected.
Potential exposure	Maximum credible impact on NZOG arising from a risk without regards to controls.
Residual risk	Risk remaining after treatment.
Risk	The effect of uncertainty on our objectives.
Risk acceptance	The informed and formal decision to take a particular risk.
Risk analysis	Process of developing an understanding of the risk through consideration of causes and sources and of determining the level of risk through assessment of the consequences and likelihood.
Risk assessment	Risk assessment is the overall process of risk identification, analysis and risk evaluation.
Risk evaluation	Process of comparing the results of risk analysis with risk criteria to determine whether the risk magnitude is acceptable.
Risk exposure	The extent to which an organization is subject to an event.
Risk	Process of finding, recognizing and describing risks.

identification	
Risk management	Coordinated activities to direct and control an organization with regard to risk.
Risk management framework	Set of components that provide the foundations and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organization.
Risk management process	Systematic application of policies, procedures and practices to the activities of communicating, consulting, establishing the context and identifying, analyzing, evaluating, treating, monitoring and reviewing risk.
Risk Matrix	Tool for ranking and displaying risks by defining ranges for consequence and likelihood.
Risk Owner	Person with the accountability and authority to manage a risk.
Risk Profile	A description of any set of risks.
Risk Register	A record of information about identified risks.
Risk review	A process to determine the suitability, adequacy and effectiveness of the subject matter to achieve established objectives.
Risk treatment	A process to modify risk.
Target risk	Aspiration level of risk to be achieved once treatment is complete.

7. REFERENCES

AS/NZ ISO 31000:2009 Risk Management – Principles and Guidelines.

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