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THESIS

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Option: Accounting and Audit

INTERNAL AUDIT AS A TOOL FOR RISK MANAGEMENT

Case study: BMT SPA

THEME:

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DEDICATION

I dedicate this work to God Almighty - the I AM THAT I AM, the King of Kings, my El Roi, my Redeemer, my Protector, the One who has never left me nor forsaken me. Thank You, ABBA Father. To my mother, my backbone, my strength, and my prayer warrior. Your love, encouragement, and unwavering support have shaped the woman I am today. Thank you, and may God bless you forever, Iyome. To my father, your words of affirmation, your praise, your prayers, and timely calls kept me going during difficult moments. Thank you, sir. God bless you. To my siblings, Emmanuel, Christopher, and Peace, thank you for all the fun video calls. They kept my soul alive and happy. To my dissertation partner, Marvin, thank you for your commitment to this work. All those hours spent in the library and during our commutes were lighter because of your presence. And her dear Mom for taking time out to choose our theme, thank you ma and God bless you. And to my dearest friend, Pleasant, thank you for being a safe space and a constant source of calm and kindness.

Okoyomoh Christiana Nkeme

DEDICATION

I firstly dedicate this work to my Lord Jesus Christ, who has been my strength throughout this journey (Philippians 4:13). Secondly, I dedicate my thesis to my lovely mother, Kemeri Jenipher, for her unwavering support throughout my life especially in helping choose the theme for this study. I also thank my siblings Mercy, Moreen, George Gift, Joshua, Precious, and Leah who have been an inspiration and a source of drive throughout my academic experience. Thirdly, I dedicate this work to my dissertation partner, Christiana Nkeme Okoyomoh, who has worked with me tirelessly to bring this research to completion. We made a beautiful team. Additionally, I dedicate this work to my family away from home Living Hope for our prayers, ministry, encouragement, and fellowship through this journey. To my dear partner, Kiprop Emmanuel, thank you for being a constant source of support. Lastly, to my classmates, Kimani Grace Wangari and Muthoni Anne Makau, who have walked this journey with me as fine auditors and accountants from day one, thank you.

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LIST OF ABBREVIATIONS

A.D. – Anno Domini

AI – Artificial Intelligence

B.C. – Before Christ

BMT – Béjaïa Méditerranéen Terminal

CDN – Centre de Digitalisation et du Numérique

CFO – Chief Financial Officer

COSO – Committee of Sponsoring Organizations of the Trade way Commission

DFC – Direction des Finances et de Comptabilité

DG – Directeur General

DGA – Directeur General Adjoint

EPB – Entreprise Portuaire de Béjaïa

EPC – Engineering Procurement and Construction

EPE – Entreprises Publiques Économiques

ERM – Enterprise Risk Management

FRAP – Feuilles de Révélation et d'Analyse des Problèmes

GM – General Manager

HQ – Head Quarters

HR – Human Resource

IFACI – Institute Français de l'Audit et du Contrôle Interne

IIA – Institute of Internal Auditors

IMS – Integrated Management System

ISO – International Organization for Standardization

IT – Information Technology

KRIs – Key Risk Indicators

ONECCA – Ordre National des Experts-Comptables, des Commissaires aux Comptes et des Comptables Agréés

QHSE – Quality Health Safety and Environment

RACM – Risk and Control Matrix

REEFER – Refrigerated Container

RTGs – Rubber Tyred Gantry cranes

SPA – Société par Action

SWOT – Strength Weakness Opportunities Threats

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SUMMARY

GENERAL INTRODUCTION

GENERAL INTRODUCTION

Internal audit plays a crucial role in risk management within modern organizations. It acts as a strategic lever, ensuring compliance, improving efficiency, and contributing to risk control. As an independent and objective activity, internal audit aims to add value while strengthening management, control, and governance systems.

In an economic context marked by uncertainty and complexity, risk management has become a priority for companies. Exposed to financial, operational, strategic, and compliance risks, organizations must adopt robust approaches to identify, assess, and mitigate potential threats. Internal audit plays a key role in this process by applying a structured and systematic methodology. International frameworks, such as COSO (Committee of Sponsoring Organizations of the Treadway Commission) and ISO 31000, provide comprehensive guidelines for effectively integrating internal audit into overall risk management strategies.

Measuring the effectiveness of internal audit is essential to assess its actual impact on an organization's risk management framework. This evaluation not only reveals the strengths and weaknesses of audit processes but also identifies opportunities for improvement. In the case of BMT SPA, an in-depth assessment of internal audit effectiveness will provide valuable insights into its risk management strategies and highlight areas for improvement.

In Algeria, internal audit practices are governed by national and international regulations, such as those issued by the National Order of Chartered Accountants and Auditors. Public institutions must comply with state audit rules under **Cour des Comptes** (Court of Accounts). This study aims to analyse the contribution of internal audit to risk management at BMT SPA, while identifying challenges and proposing recommendations to maximize its effectiveness.

Context and Framework of the Study

Internal audit is a fundamental pillar in modern business activities. It ensures compliance, strengthens controls, and directly contributes to effective risk management. Its objectives include a rigorous evaluation of risk management, control, and governance systems, as well as the continuous improvement of their efficiency.

International frameworks such as COSO (2017) and ISO 31000 (2018) emphasize the importance of integrating internal audit into risk management strategies, highlighting its role in proactively identifying and mitigating potential threats. These frameworks reinforce the importance of a structured approach to address the multiple risks organizations face.

In the Algerian context, internal audit is influenced by both national and international directives. At BMT SPA, this tool contributes to regulatory compliance while identifying areas of vulnerability that could affect the company's strategic and financial objectives. Evaluating the effectiveness of internal audit will not only measure its current performance but also identify strategies to strengthen its role in risk management.

Statement of the Problem

Although internal audit is recognized as a key element of risk management, many companies face obstacles in its effective implementation. Factors such as audit independence, resource availability, and management support directly influence its contribution to risk management strategies.

At BMT SPA, it is crucial to understand how internal audit contributes to risk management and assess its alignment with international standards. The primary research question is thus: **How effective is internal audit as a risk management tool at BMT SPA?**

Objectives of the Study

- General Objective: Evaluate the role of internal audit in risk management at BMT SPA.
- Specific Objectives:
    1. Analyse internal audit processes at BMT SPA and their alignment with risk management strategies.
    2. Assess the effectiveness of tools and techniques used by internal audit to identify and mitigate risks.
    3. Determine the impact of internal audit on organizational performance and decision-making.
    4. Identify challenges faced by the internal audit department and propose recommendations to overcome them.
    5. Evaluate how well BMT SPA's internal audit function aligns with best practices and international frameworks.

Research Questions

The following questions arise from the central problem:

1. How does internal audit contribute to risk management?

2. What challenges does the internal audit function face in identifying and assessing risks?
3. How effective is the current internal audit process in identifying and mitigating risks?

Research Hypotheses

- H1: Independence and objectivity in internal audit positively influence risk management at BMT SPA.
- H2: Challenges faced by the internal audit function negatively impact the effectiveness of risk management at BMT SPA.
- H3: The adequacy of audit procedures, auditor expertise, resource allocation, and management support positively influence the effectiveness of internal audit in identifying and mitigating risks at BMT SPA.

Research Plan

The study is organized into two main chapters, each contributing uniquely to the understanding of the subject. It begins with a general introduction that outlines the problem statement, the research objectives, the research questions, and the hypotheses. This section also provides an overview of the document's structure to guide the reader through the different stages of the study. The first chapter focuses on a literature review, where key concepts such as internal audit and risk management are thoroughly analysed. It highlights their interdependence, drawing upon frameworks like COSO and ISO 31000 to establish a strong theoretical foundation. The second chapter is dedicated to the case study on the role of internal audit in enhancing risk management at BMT SPA. It presents a comprehensive report of how the internal audit process was conducted within the organization, offering practical insight into its real-world application. It also includes the analysis of audit findings, assessing the effectiveness of internal audit in identifying and mitigating risks. It ends with the general conclusion that examines the research hypotheses in light of the results and the implications of the observations are discussed in relation to internal control and organisational performance.

CHAPTER ONE:

LITERATURE REVIEW

CHAPTER ONE: LITERATURE REVIEW

INTRODUCTION

Auditing serves as a cornerstone of financial oversight, ensuring accuracy, compliance, and operational efficiency. Among its branches, Internal Audit plays a vital role, distinct from External Audit, by providing independent and objective assurance within organizations. This chapter establishes a comprehensive understanding of Internal Audit as a key component of risk management.

We begin by tracing the historical evolution of Internal Audit, highlighting its transformation from financial oversight to its strategic integration into governance and risk management. We then define Internal Audit, outlining its objectives, core principles of independence, objectivity, and compliance, and its relationship with risk management. Furthermore, we examine Internal Audit typologies, methodologies, and techniques applied by auditors.

Additionally, we explore the synergy between Internal Audit and Risk Management, demonstrating their interconnected roles in organizational resilience and performance. Through this analysis, we present Internal Audit as an essential tool for managing uncertainty, safeguarding assets, and driving continuous improvement.

Section One: General Concept of Internal Audit

Internal Audit serves as a fundamental function within organizations, assessing and enhancing governance, risk management, and internal control mechanisms. It provides assurance to stakeholders by ensuring transparency, efficiency, and ethical compliance. This section explores its historical roots, definition, objectives, typologies, and methodologies.

1. The historical evolution of internal audit

The term “audit” originates from the Latin word *audīre*, which means “to hear” or “to listen”. The demand for internal auditing is sourced in the need to have some means of independent verification to reduce record-keeping errors, asset misappropriation, and fraud within business and non-business organizations. The roots of auditing, in general, are intuitively described by accounting historian Richard Brown (1905, quoted in Mautz & Sharaf, 1961) as follows: *“The origin of auditing goes back to times scarcely less remote than that of accounting…Whenever the advance of civilization brought about the necessity of one man being entrusted to some extent with the property of another, the advisability of some kind of check upon the fidelity of the former would become apparent.”*

The history of internal auditing can be traced back to as early as 4000 B.C. when formal record-keeping systems were first implemented by governments and businesses in the Near East to ensure accurate financial transactions and tax collection. Similar practices developed in ancient China during the Zhao Dynasty (1122-256 B.C.), and across major civilizations such as Babylonia, Greece, the Roman Empire, and the Italian city-states. These governments recognized the need for checks and counterchecks to prevent errors and fraud committed by officials. Even biblical scriptures, dating from 1800 B.C. to A.D. 95, acknowledge the risks of financial misconduct and emphasize internal controls like dual custody of assets, competent and honest employees, restricted access, and segregation of duties. The introduction of double-entry bookkeeping in 1494 A.D. was a direct response to the growing need for financial accountability. Historical fraud cases, such as the South Sea Bubble of the 18th century and the tulip scandal, further underscored the necessity of financial oversight.

Over time, European bookkeeping and auditing systems were adopted in the United States during the 1929 economic crisis. Initially, auditing was solely focused on finance and accounting which was performed by independent external audit firms. Companies encountered the challenge of reducing corporate costs, therefore external auditors suggested assigning certain preparatory work to the company's internal staff which led to the birth of "internal auditors". Their role was to assist external auditors in assessing and reviewing company accounts. Businesses established internal audit departments to systematically verify financial and operational information, especially in industries like railroads, defence, and retail. In 1941, the **Institute of Internal Auditors (IIA)** was created, establishing and formalising the internal audit function. The IIA issued the Statement of Responsibilities of the Internal Auditor in 1947 which expanded the role of internal audit to include fraud investigation, internal control evaluation, and operational efficiency.

In France, the internal audit function began to take shape in the 1960s, marked by the establishment of the **French Institute of Internal Auditors and Controllers (IFACI)** in 1965. Despite these developments, internal auditing remained unknown to the broader public until the 1980s, when it gained wider recognition. Additionally, the internal audit function developed later in French-speaking Africa, particularly Chad from the early 2000s.

In Algeria, the internal audit function is majorly influenced by legislative and organisational reforms such as Law 88-01, enacted on January 12, 1988, which mandated Public Economic Enterprises (EPEs) to establish internal audit systems aimed at strengthening internal controls

and optimizing operational processes. Prior to this, internal audit practices were limited to accounting and finance.

Today, internal audit has moved towards higher levels of management. This shift reflects company's awareness of the importance of a structured and independent internal control system, capable of addressing the growing complexity of economic and administrative phenomena as well as challenges related to the ever-evolving delegations of responsibility. Brink & Witt (1982) notes that *"the internal auditing group has moved to very high levels in all operational areas and has established itself as a valued and respected part of the top management effort."*

Internal audit therefore plays a vital role in improvement of the effectiveness of governance, risk management, and control process thereby preserving value and improving organisational performance.

2. The definition and objectives of Internal Audit.

2.1 The definition of Internal Audit.

The definition of internal audit has evolved over time, reflecting its changing role. In the mid-20th century, it was primarily associated with verifying accounting and financial information within an internal control system and assisting external auditors. This limited its scope and resulted in minimal involvement in broader managerial activities.

Over time, internal audit has significantly expanded. It now encompasses fraud investigations, risk management, and advisory services for senior management.

The **Institute of Internal Auditors (IIA)** defines internal auditing as: *"an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes."*

The **French Institute of Internal Auditors and Controllers (IFACI)** describes it as: *"an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by evaluating, through a systematic and methodical approach, its risk management, control, and governance processes, and by making proposals to strengthen their effectiveness."*

Both definitions emphasize internal auditing as an independent, objective, and systematic function aimed at enhancing organizational performance. While both highlight its role in evaluating risk management, control, and governance, the IIA's definition adopts a broader, globally focused perspective with an emphasis on strategic improvement. The IFACI version, on the other hand, is more compliance-oriented, focusing on tailored risk assessments within a French or European operational context.

Given the continuous evolution of internal audit, it is likely that its definition will continue to expand in the coming decades, incorporating new aspects of governance and risk management.

2.2 Objectives and main functions of internal audit.

Internal audit objectives are established by organizations to evaluate and enhance the effectiveness of governance, risk management, and control processes (Suddaby et al., 2006). Its primary objectives include:

- **Supporting risk management**: Identifying potential risks and assessing whether they are properly managed.
- **Ensuring compliance with laws and regulations**: Verifying adherence to legal and regulatory requirements, internal policies, plans, and ethics.
- **Detecting and preventing fraud**: Unlike external auditors, internal auditors focus on detecting and reducing fraud effectively within organizations.
- **Enhancing operational efficiency**: Assessing business processes to identify inefficiencies, improve cost-effectiveness, and optimize resource allocation.
- **Providing advisory services**: Internal auditors now play a consultative role, offering recommendations that contribute to strategic decision-making and risk management.
- **Delivering assurance**: Ensuring that internal control systems align with organizational goals and shareholder expectations.
- **Evaluating financial and data reliability**: Reviewing the accuracy and reliability of accounting and operational data.
- **Assessing internal control mechanisms**: Examining the adequacy and application of financial, operational, and governance controls.

3. Typology of Internal Audit in Relation to Risk Management

Internal audit has evolved into a key partner in helping organizations navigate uncertainty. As businesses face a wide range of risks from financial to reputational, environmental to technological internal auditors must provide more than traditional checks and balances. Today, they help organizations understand where risks exist, how they are managed, and potential areas of oversight.

The main types of internal audit related to risk management include:

- **Compliance Audit**: Ensures that organizations comply with internal policies, legal regulations, industry standards, and ethical guidelines. Failing to adhere to these rules creates exposure to legal and regulatory risks, leading to fines or sanctions.
- **Financial Audit**: Goes beyond verifying financial figures by analysing processes such as payroll, budgeting, and reporting. Poor financial controls can lead to fraud, misstatements, or uninformed decision-making.
- **Operational Audit**: Evaluates how efficiently resources are utilized and whether processes are optimized. Poor operational management can negatively affect productivity and profitability.
- **IT and Cybersecurity Audit**: Examines system controls, data protection, and vulnerability to cyber threats. A security breach can result in financial loss and reputational damage.
- **Fraud Risk Audit**: Protects organizations from unethical behaviour, financial manipulation, or conflicts of interest. It assesses internal control effectiveness and the existence of whistleblower policies.
- **Risk Management Process Audit**: Evaluates how an organization identifies, analyses, and mitigates risks. It ensures that decision-makers are informed and responsive to emerging threats.
- **Governance Audit**: Assesses how leadership and oversight bodies, such as the board of directors or audit committees, contribute to risk management. Strong governance structures enhance transparency and accountability.

Internal audit has expanded beyond merely reviewing past transactions or ensuring policy compliance. It has become an essential pillar of risk management, helping organizations build resilience, strengthen decision-making, and align activities with strategic objectives.

Far from being a simple control mechanism, internal audit plays an active role in value creation helping organizations transform risks into opportunities for improvement and sustainable growth.

4. The Internal Audit techniques

Internal audit techniques encompass a variety of methods used by auditors to collect, analyse, evaluate, and improve an organization's internal controls, risk management, and governance processes. According to Pickett (2010), internal auditors employ structured methodologies to ensure reliable findings and enhance organizational effectiveness. These techniques are typically combined to provide well-supported evidence, ensuring that audit conclusions are accurate, efficient, and applicable across the organization. Key techniques include:

4.1 Data Collection Techniques

- **Interviews/Inquiries:** Auditors conduct formal or informal interviews with employees and other personnel, using carefully prepared questions to gather relevant information. Proper preparation—defining objectives and formulating questions is essential to maximize effectiveness. Interviews help identify potential internal control weaknesses, risks, and challenges, as well as clarify ambiguous documentation. Due to their subjective nature, interview findings require validation through other audit methods.
- **Observations:** Auditors observe employees performing tasks (e.g., cash handling, data entry) to verify documentation accuracy, detect irregularities, assess compliance with procedures, and identify improvement opportunities. Observations should be conducted discreetly to avoid influencing employee behaviour.
- **Document Reviews:** Auditors examine various documents such as reports, contracts, policies, invoices, and records to ensure compliance with regulatory requirements and company policies. Data analysis tools and techniques may be employed to enhance the efficiency and thoroughness of document reviews.

4.2 Data Analysis Techniques

- **Analytical procedures:** This technique involves comparing financial or operational data over time or against benchmarks to identify unusual trends or variances that may indicate risks, errors, or fraud. Examples include analysing financial ratios and key

performance indicators. Analytical procedures help ensure consistency, efficiency, and effectiveness in organizational processes.

- **Substantive Procedures:** These procedures consist of detailed examinations of financial data and assets to provide strong evidence verifying the accuracy, completeness, and validity of records, as well as the existence of assets. Substantive procedures may include detailed tests and reconciliation analyses, reducing the risk of errors and misstatements.
- **Sampling:** Auditors select a representative sample from a larger population to gather evidence supporting audit conclusions. Various sampling methods such as random or stratified sampling are chosen based on audit objectives. Sampling enhances audit efficiency and effectiveness while optimizing time and resource use.

4.3 Process Modelling

- **Process Mapping:** Auditors create visual diagrams, such as flowcharts, to illustrate the sequence of activities and operational workflows. This technique simplifies complex information, improving organizational efficiency and performance. Process mapping also helps identify risks and control points within processes.

By employing a combination of these techniques, internal auditors gather reliable evidence to thoroughly evaluate internal controls, risk management, and governance. Together, these methods contribute significantly to enhancing organizational transparency, operational efficiency, and ethical compliance.

5. Methodology of Internal Audit

Internal audit follows a structured and systematic approach aimed at evaluating and improving risk management, internal control, and governance processes. According to the **Institute of Internal Auditors (2017),** internal audit plays a crucial role in assurance and strategic advisory, enabling organizations to enhance their efficiency and achieve their objectives through a rigorous methodology. This methodology generally consists of the following key phases:

5.1 Planning (Preparation Phase): During this phase, auditors gain a comprehensive understanding of the audited entity by analysing its environment, organizational structure, key processes, objectives, and by performing a preliminary assessment of existing controls and potential risks. Auditors then define the audit scope, objectives, timeline, and required resources, and develop a tailored audit program or checklist to guide the engagement.

5.2 Execution Phase: This core phase includes three main steps:

- **Opening Meeting:** Auditors meet with key stakeholders, including senior management, to present the audit plan and clarify the engagement's logistics, objectives, and procedures.
- **Audit Program (Verification Plan):** This internal document outlines the audit team's responsibilities, tools (such as the Internal Control Questionnaire), and serves as a roadmap to monitor audit progress.
- **On-Site Work:** Auditors perform tests and observations using both routine and targeted procedures. Tools like FRAP (Problem Detection and Analysis Sheets) assist in identifying and analysing issues in high-risk areas, ensuring a thorough evaluation of internal controls and operations.

5.3 Conclusion Phase: Auditors draft a preliminary report based on findings documented in the FRAPs, which remains provisional until management's responses are incorporated. A closing meeting with the same participants as the opening meeting is held to discuss and validate key findings.

This phase follows several guiding principles to ensure effectiveness:

- **Timely Communication:** Findings are promptly shared with auditees.
- **Prioritization:** Recommendations are ranked according to their severity and impact.
- **Prompt Action:** Corrective measures are encouraged without delay.

After final validation, the audit report is submitted to top management and the board, highlighting critical issues and assessing the organization's capacity to achieve its objectives.

Follow-up ensures that corrective actions are implemented and monitored over time, often including post-implementation audits. This reflects the evolution of internal audit from a simple asset protection role to a strategic function focused on improving organizational performance and compliance with standards.

Internal audit and risk management are closely interconnected, as both play a crucial role in ensuring an organization's stability, transparency, and long-term success. While internal audit focuses on evaluating controls, compliance, and operational efficiency, risk management takes a proactive approach to identifying, assessing, and mitigating potential threats. In essence, internal audit acts as a key monitoring and assurance mechanism within the broader

risk management framework, providing independent assessments that enhance governance and decision-making. This relationship is particularly significant in industries with complex risk exposure, such as maritime logistics, where companies like BMT SPA must continuously adapt to financial, operational, and regulatory challenges. Building on the foundation of internal audit, the following section explores the key concepts and practices of risk management, including risk identification, mapping, mitigation strategies, and internationally recognized frameworks.

Section Two: Concept and Practices of Risk Management

Risk management is a fundamental aspect of corporate governance, ensuring stability, resilience, and long-term success for businesses. With effective risk management, it allows organizations to anticipate uncertainties, minimize disruptions, meet compliance requirements, reduce operational inefficiencies and improve decision-making. It is particularly essential in industries like maritime logistics, where companies such as BMT SPA face financial, operational, and regulatory risks among others. This section therefore covers the definition of risk management, risk identification, risk mapping, the risk management process and the standards and frameworks that companies have adopted with the risk management function.

1. The Definition of Risk Management

Risk management is defined as a systematic process of identifying, assessing, and mitigating risks that could affect an organization's ability to achieve its strategic and operational objectives. Some authors like Williams et al. (1995) *describe risk management as a general function that aims to identify, assess, and address the causes and effects of uncertainty within an organization. They further state that its ultimate goal is to enable an organization to progress toward its objectives in the most direct, efficient, and effective manner.*

A strategic approach to risk management, as discussed by CFO Research Services (2002) and Johnson and Scholes (2002), aligns risk management with corporate strategy, ensuring that it is not treated as an independent function but rather as an inseparable aspect of business operations. This is particularly relevant for BMT SPA, where internal audit serves as a key risk management tool.

2. **Risk Identification**

Risk identification is the foundational step in the risk management process, aiming to detect potential threats that could impact an organization's stability. Risks can be categorized into:

- Financial Risks – Market fluctuations, liquidity concerns, fraud, and credit risks.
- Operational Risks – Supply chain disruptions, equipment failures, workplace hazards.
- Strategic Risks – Changes in consumer demand, competition, regulatory shifts.
- Compliance Risks – Legal and tax compliance, governmental regulations.
- Technological Risks – Cybersecurity threats, IT failures, digital transformation challenges.

3. **Risk mapping**

One of the key tools in risk identification is risk mapping, also known as risk cartography, which provides a structured framework for assessing and visualizing potential risks. Risk mapping improves decision-making, aids risk prioritization, and ensures that mitigation strategies are properly aligned with business objectives. Organisations employ risk mapping techniques such as risk matrices, SWOT analysis, and historical data analysis to categorize risks effectively.

Risk mapping is a strategic method used to identify, assess, and visualize the risks an organisation faces. It helps evaluate both the likelihood and impact of risks, allowing companies to prioritize them and plan effective responses. This process improves decision-making and encourages risk awareness across all levels of the organization.

The key objectives of risk mapping are to detect all potential risks, assess their severity and probability, and prioritize them based on their effect on corporate goals. It also aims to provide a clear visual of the risk environment, support proactive mitigation efforts, and strengthen coordination between internal audit and risk management functions.

The process starts with identifying risks across various categories like financial, operational, or technological. These risks are then assessed, categorized, and ranked using tools like risk matrices. A heat map is usually created to visualize risk levels, after which mitigation strategies are applied. The map is regularly updated to reflect new risks and business changes.

Common tools include heat maps for visual ranking, SWOT analysis for internal and external evaluation, and bowtie analysis for mapping causes and effects. Key Risk Indicators (KRIs)

and internal audit data are also used to track and predict risks. Together, these tools ensure a clearer, more effective risk management strategy.

4. Risk Management Process

The risk management process involves structured steps of understanding what risks are present, how they could affect an organisation, and how to respond to them. Here are the five essential steps of a risk management process;

4.1 Risk Identification: This is the initial step in the risk management process to identify and review all the possible risks internal or external whether operational, financial, or strategic that could affect the organization and recording them on a risk management plan for risk mapping. This can be done with the help of various tools stated earlier such as SWOT analysis, historical data analysis, stakeholder interviews, expert consultations and Risk and Control Matrix RACM to categorize risk by business areas or functions.

4.2 Risk Analysis: The next step after identification of risks is the assessment of these risks according to their likelihood of occurrence, potential impact and consequences on the organization. This can be through qualitative and quantitative methods including risk scoring and Monte Carlo simulations, risk matrix and register, advanced data analytics, AI to visualize the severity and priority of identified risks, enabling the organization to gain more insight on potential threats leading to well-informed decision-making processes.

4.3 Risk Prioritization: Based on the prioritization due to severity, risks with greater impact on the organization are addressed and resources are allocated to effectively minimize and mitigate the impact of these risks on the organization.

4.4 Risk Mitigation: At this stage, strategies are developed and implemented to address identified risks, with the aim of reducing the likelihood of occurrence or lessening the impact. It's crucial to align mitigation strategies with organizational objectives to ensure a balanced approach. Generally, there are five accepted risk treatment strategies.

These include;

- Risk acceptance**:** This is when an organization decides to accept that it is not worth the cost and effort to mitigate the risks that may come with a particular situation.
- Risk transference**:** The financial burden of certain risks is transferred to another party often in the form of insurance or contractual arrangements.
- Risk avoidance: The Company makes conscious efforts to avoid or prevent the occurrence of certain risks.
- Risk reduction and loss prevention: The company implements controls to minimize likelihood and impact of the occurrence of the risks.
- Risk sharing: Distributing risk responsibilities within the entire organization or departments. It acts as a form of support and control measure.

4.5 Risk Monitoring and Review: This is a continuous process of tracking and reviewing the identified risks and ensuring the effectiveness of the mitigation strategies adopted. This is essential because it prepares the organization for any potential change in the risk profile overtime. Effective risk monitoring includes regular reporting, reviewing, and updating the risk management plan to ensure it remains relevant and effective in the current business environment. Monitoring can be done through various methods such as; risk dashboards, regular audits, periodic risk assessments, incident reporting systems, and engaging with stakeholders.

5. Standards and Frameworks (COSO, ISO 31000, etc.)

Risk management must align with international frameworks to ensure effectiveness and consistency. Key standards include:

- **ISO 31000**: This is a globally recognized standard developed by the Internal Organization for Standardization offering a comprehensive approach to risk management. ISO 31000 emphasizes integrating risk management into all activities of an organisation such as governance, strategy, reporting and planning. It encourages the creation of a risk-aware culture where everyone from the top executives to frontline employees understands their role in managing risks.
- **COSO Enterprise Risk Management (ERM) framework**: Developed by the Committee of Sponsoring Organisations of the Treadway Commission, COSO ERM is designed to help businesses improve their performance by managing risks effectively.

This framework takes a holistic view of risk management with an emphasis on the importance of considering risk in the context of an organisation's strategy and performance goals.

Both the ISO 31000 and COSO ERM frameworks are widely recognized frameworks that provide guidance on how organisations can effectively manage risks. While both frame works aim to help organisations identify, assess, and mitigate risks, they have some key differences in their approach and scope. ISO 31000 is an international standard that provides a principles-based approach to risk management, focusing on the integration of risk management into the overall management system of an organisation. On the other hand, the COSO ERM framework is a comprehensive framework that provides a holistic approach to enterprise risk management, taking into account the different components of an organisation. By adopting these frameworks, companies can enhance resilience, improve compliance, and create opportunities for growth.

After examining the fundamental concepts and practices of risk management, it is essential to explore the synergy between internal audit and risk management to understand how these complementary functions work together to strengthen the organization's control over uncertainties.

Section Three: Synergy between Internal Audit and Risk Management.

1. Complementarity and interdependence

The complementarity and the interdependence of internal audit and risk management are crucial for effective organizational governance.

1.1. Complementarity

- Internal audit provides independent checks on the effectiveness of internal controls and risk management processes while risk management processes related to financial, operational, compliance and strategic risks, while risk management focuses on identifying, assessing, and mitigating risks to meet organizational goals. Both functions in their distinctive roles aim to ensure that controls are effective and to prevent or minimize negative consequences of risks respectively.

- Internal audit uses risk-related data, such as potential financial misstatements, regulatory compliance gaps, or operational inefficiencies to guide audit planning and identify the high-risk areas that need to be prioritised. Likewise risk management uses internal audit recommendations to refine strategies for addressing key organizational risks.

1.2. Interdependence

- Internal audit relies on risk management insights to understand the potential internal and external risks, such as fraud, regulatory breaches, supply chain disruptions or market shifts. Risk management depends on internal audit feedback and assurance to validate the effectiveness of risk controls.
- When both functions collaborate, they are align on organisational objectives which promotes a comprehensive and proactive approach to managing these identified categories of risk.
- The interdependence between internal audit and risk management provides stakeholders with assurance that specific risks (financial, compliance-related, or strategic) are being managed effectively which increases their trust in organisational processes.

2. Impact of Internal Audit and Risk Management on Organizational Performance.

Building on the exploration of the synergy between internal audit and risk management, it is crucial to understand how this collaboration directly influences organizational performance. By working together, these functions not only enhance risk identification and control but also drive improvements in efficiency, governance, and strategic decision-making. The following points highlight the tangible benefits of effectively integrating internal audit and risk management within organizations:

- Internal audit provides assurance on the effectiveness of risk management, identifying gaps in controls, compliance, and operational efficiency, while risk management focuses on identifying, assessing, and mitigating risks, thereby enhancing governance and decision-making processes.
- Both functions promote a structured approach to managing uncertainties, which helps reduce financial losses and fraud.

- They foster increased transparency and a risk-aware culture, thereby boosting stakeholder confidence.
- Efficient resource allocation is encouraged, with prioritization of critical risks ensuring that organizational efforts are focused where they matter most.
- Continuous monitoring of risks and internal controls enables organizations to adapt swiftly to changes in the business environment, supporting sustainable growth.
- Together, they strengthen the organization's competitive position by securing better risk outcomes and improving operational efficiency.

CONCLUSION

In conclusion, this chapter of the literature review has addressed the theoretical foundations surrounding the concepts and roles of internal audit, the practices of risk management, and the synergy between these two functions. It has demonstrated that the integration of internal audit and risk management significantly contributes to risk reduction and ensures the effectiveness of internal controls within organizations. Through the identification, analysis, and evaluation of potential risks, coupled with the implementation of robust internal audit functions, organizations can enhance their governance and operational resilience.

Overall, this chapter has provided a comprehensive theoretical framework on internal audit and risk management, laying a solid foundation for the subsequent chapter of this dissertation.

CHAPTER TWO:

CASE STUDY ON THE ROLE OF INTERNAL AUDIT IN ENHANCING RISK MANAGEMENT AT BMT SPA

CHAPTER TWO: CASE STUDY ON THE ROLE OF INTERNAL AUDIT IN ENHANCING RISK MANAGEMENT AT BMT SPA.

INTRODUCTION

This chapter presents a detailed case study of BMT SPA, focusing on the role of internal audit in enhancing risk management within the organization. The analysis is structured in two sections. The first section provides an overview of the company's historical background, core activities and services, mission, vision, objectives, and organizational structure. The second section evaluates the internal audit process at BMT SPA, covering the planning (preparation) phase, execution phase, and conclusion phase. It also examines the key documents, tools, and techniques used by the internal audit function to identify, assess, and mitigate risks. This case study highlights the critical interplay between internal audit and risk management, demonstrating how internal audit contributes to strengthening risk oversight and improving organizational resilience.

Section One: Case study; Presentation of the company BMT SPA

BMT SPA is a joint venture between the Port Company of Béjaïa (EPB) (*a port authority that manages the Port of Béjaïa)* and PORTEK Systems & Equipment *(a subsidiary of the PORTEK Group, a container terminal operator present in several ports around the world and also specialises in port equipment).* BMT's primary mission is the management and operation of the container terminal at the port of Béjaïa, with a strong focus on innovation, productivity, and customer satisfaction.

This section is dedicated to the presentation of the company BMT (Béjaïa Mediterranean Terminal) where we completed our internship.

1. The historical background

The port of Béjaïa has a rich historical heritage as a major Mediterranean trading port and a political and intellectual centre since medieval times, particularly under the Hammadite and Hasfid dynasties. It has enjoyed a strategic location with a vast bay and fertile valley, **the soummam**, which has favoured its development.

With the need to establish a partnership for the design, financing, operation, and maintenance of a container terminal, the Port Company of Béjaïa (EPB) then began the task of identifying

potential partners and chose the PORTEK group which specialises in container terminal management.

In May 2004, BMT was established by decision of the State Participation Council (CPE) as a joint venture between the Port Company of Béjaïa (EPB) and the Singaporean company PORTEK Systems and Equipment, which specialises in port equipment. By requirement of the law of the state, the Port company of Béjaïa holds a 51% stake while PORTEK holds a 49% stake. BMT is erected in the form of a SPA (joint stock company). In 2011, PORTEK Systems and Equipment was acquired by the Japanese group MISTUI.

2. Activities/ services of BMT SPA.

BMT SPA offers a range of port and logistics services. These services include:

- **Ship Handling**

  This is the art of controlling and manoeuvring a ship. This process includes ship docking and undocking, anchoring, managing speed and direction, navigating in tight spaces and turning the ship around. These operations are handled by specialized teams.

- **Stevedoring**

  This refers to the work of loading and unloading cargo from ships at a port where the use of Tire-mounted stacker cranes (RTGs) is essential. BMT assigns human and material resources to perform its various types of container services. The quality of service is measured at this level by the number of deliveries and returns made per day. Once the container is placed in the yard, the following operations can then take place: Inspection, weighing, unloading, delivery, provision and return

- **Refrigeration Processing**

  The process of refrigerated containers include connection, storage, temperature monitoring and maintenance is handled by a specialized team from the technical department in the REEFER area. In the event of a refrigerated container failure, upon customer request, the BMT technical team can perform corrective action by repairing a faulty unit.

- **Container Repair**

BMT SPA provides repairs and upgrades in compliance with regulations for empty containers for its clients. They work on containers previously selected by the Client by cleaning the containers to allow for the receipt of goods, applying appropriate paint to treat visible rust and ensuring, if necessary, that the floor is rinsed and countersunk screw heads.

- **Transport and Logistics.**

This is the act of Providing for the various clients of the container terminal with a comprehensive, end-to-end logistics service like container stuffing and stripping in dedicated areas, public freight transport, rail transport, warehousing in the Extra-Port Zone and container handling.

- **Extra-Port Zone**

An extra-port zone is dedicated to the reception and return of empty containers after delivery. It is from this zone that empty containers are brought together for unloading onto ships.

- **Lashing/Unlashing**

BMT SPA provides container lashing and unlashing operations on ships for its liner clients. These operations include the following:

  - Securing and unsecuring ship containers on board.
  - Installing and removing container locks or any other lashing equipment on the quay.
  - Securing containers on board, such as locks, bars, buckles, chains, cones, deck fittings, or any other equipment provided by the ship.

- **Import/Export**

BMT SPA offers simplified logistics for Import and export services.

3. The Mission, Vision and Objectives of BMT SPA

3.1. Mission

To make the BMT Container Terminal a terminal with international standards that can compete with the best managed terminals in the world ensuring productivity and profitability, guaranteeing its success and sustainability.

3.2. Vision

To Develop and manage the best Container Terminal in Algeria where Integrity, Productivity, Innovation, Courtesy, and Security are required in order to guarantee their customers the best services at adequate costs while ensuring one of the best working environments for our employees, and a good return on investment to the Company's shareholders.

3.3. Objectives

- To pursue sustained development of the company, with emphasis on excellence, innovation, and customer satisfaction.
- To actively support the growth of the Algerian economy, particularly within the region of Béjaïa and its surrounding areas.
- To promote and assist Algerian producers, exporters, and importers of containerised goods as key contributors to sustainable economic development.
- To strengthen partnerships with national and international shipping companies, as well as with final recipients of goods, notably local industries.
- To contribute to the development of the local community by providing stable, well-remunerated employment opportunities and by fostering growth among local partners, particularly within the road transport sector.
- To achieve continuous growth through close collaboration with customers and strategic partners, in a spirit of mutual support and shared prosperity.

4. The organisation of BMT SPA.

BMT SPA is structured into several key directions and departments with specific roles in each. This organisational structure supports the company’s mission to efficiently manage container handling and storage operations with a focus on innovation, safety, and customer satisfaction.

The different structures of BMT include;

4.1 General Management:

The general manager manages the company by giving directives to the various structures and ensuring coordination between the company’s departments.

4.2 Internal Audit Department:

This department audits procedures and measures their effectiveness.

4.3 Centre for Digitalisation and Information Technology (CDN):

The CDN aims to modernize and unify port systems through digitalization. Its goal is to create a digital and interactive platform for data exchange, boost the competitiveness of the maritime sector, provide quality services to clients and ensure a more organized, consistent, and well governed port systems. All this is achieved by a standardized digital process, automated IT infrastructure across the port and a master IT plan.

4.4 Head of the QHSE Department (Quality, Health, Safety, and Environment):

It ensures long term sustainability of the QHSE management system through continuous improvement and it also analyses the cause and impact of non-conformities, suggesting corrective measures, performing necessary follow up checks to maintain the effectiveness of the Integrated Management System (IMS) following the standards of ISO 9001, ISO 14001, and ISO 45001.

4.5 Operations Department:

Oversees the planning of ship stopovers, allocation of resources (teams and equipment), management of the container terminal, handling of the container operation (loading and unloading), carrying out dock side operations (delivery tracking, container packing and unpacking, provision of empty containers, handling of refrigerated containers) and ensuring safety within the terminal. It carries out these services through departments such as **Operations Sub-Departments** who provide dockside services, cargo handling services, resource services and **Logistics department** providing logistics services.

4.6 Marketing Department:

Responsible for developing marketing plans (market analysis, target identification, action plans, advertising strategies) and is involved in various functional areas of marketing such as strategy, services, and operations. It also ensures coordination with all part stakeholders in line with companies' marketing policy.

4.7 Finance and Accounting department (DFC):

Responsible for preparing the company's financial statements and reports. It is made up of two services: **Accounting service** who handles the control and recording of all company transactions (purchases, sales, investments) and **Finance and Budget service** who monitors

the execution of the company's budget and analytical accounting and manages the company's cash flow.

4.8 The Technical Department:

Responsible for the preventive and corrective maintenance of the company's machinery. It carries out machinery service, cranes service and method service.

4.9 Human Resources and General Resources Department:

Implements integrated management systems aligned with the company's strategy, ensuring a balance between economic goals and employee expectation. This department plays a key role in attracting top talent, retaining them by offering the best conditions (work environment, workplace climate, skills development and appropriate training). The HR and General Resources division consists of **Assets service, General resource service,** and **Human resource service.**

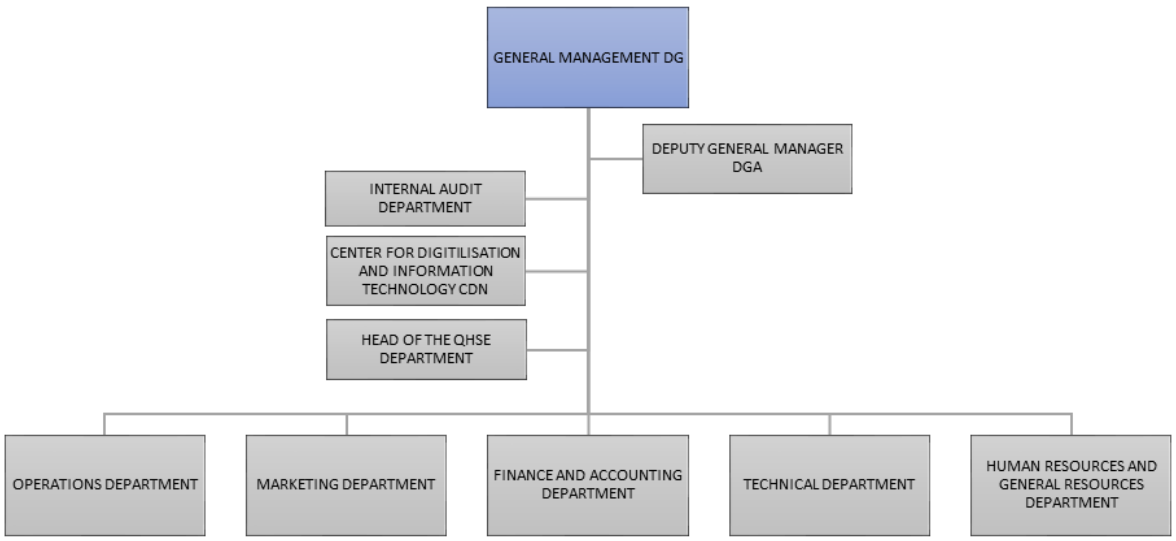


Figure 1: The Organisational Chart of BMT SPA

Having studied the historical background of BMT SPA along with its mission, vision, objectives, activities and organisational structure, we move into the practical application of

this research. The following section presents the real time conduct of an internal audit mission as part of its annual internal audit program. This case study provides a detailed look into how internal audit is implemented with a focus on its role in risk management.

Section Two: The Conduct of an Internal Audit Mission (Practical Case)

The realisation of an internal audit mission at BMT SPA on the management of contracts.

1. THE PREPARATION PHASE

The choice of the audit mission is based on the internal audit plan in BMT SPA, where it is mandatory to carry out six (6) internal audit mission in a financial year. **(see template in Appendix 1).** The formation of the audit team is decided during periodic meetings between heads of internal audit and risk management. A standard audit team consists of; a supervisor, a mission leader and at least two internal auditors. The team is decided based on; audit theme complexity, resources available, required technical skills among others.

1.1 The preliminary study

The purpose of a preliminary study is to understand the internal structure and context of the mission, to identify key actors and stakeholders and to detect weaknesses before commencing fieldwork.

This includes:

- Documentation review: This involves collecting and reviewing internal procedures and policies related to contract management, past audit reports, legal or regulatory documents and risk registers and organizational charts led by the mission leader. **(see example in Appendix 2).**
- Introductory meeting with management: The audit team meets with the head(s) of the audited department to clarify the objective, scope and timeline of the audit, discuss

coordination and availability of documents and personnel, understand management expectation/concerns and establish a foundation for collaboration.

1.2 The scope and objective of the audit mission

The contract management area is to be audited as one out of six of the annual internal audit programme at BMT SPA, this audit takes place in the month of March and April as directed by the board of director and the General manager (GM) who sends out the mission letter which defines the scope of this mission; which is to cover the process and the operations carried out in the entire contract life cycle such as planning, procurement, execution and follow up, and its objective; which is to analyse the contract development process and the contract execution process, manage EPC *(Engineering, Procurement and Construction)* contracts and identify associated risks.

1.3 The mission letter:

In line with professional internal audit practices at BMT SPA, the auditee must be informed of the upcoming audit mission at least one week (8 days) before its start. The Audit Director is responsible for sending a Mission Letter to the head of the audited department. This letter serves as a formal notice that an audit will be conducted and includes the following information: the theme and objective of the audit mission, the planned duration of the implementation phase (start and end dates), the names and roles of the audit team members and the general and specific objectives of the mission (referencing the approved annual audit plan). To ensure the letter was properly received and acknowledged, a confirmation phone call is made by the audit department within 48 hours after the letter is sent. This verbal follow-up creates a more interactive and fluid communication channel, allows clarification or feedback if necessary and reduces the risk of misunderstandings or disputes later on.

In our practical case on Contract Management, the mission letter addressed to the auditee was prepared in this format and archived in the audit file. **(See template in Appendix 3)**

MISSION LETTER

General Manager
No. 03/2025

Recipient: Internal Audit Department

Date: 31 March 2025

Subject: Audit of contracts management EPC

As part of the execution of the annual audit plan established for the 2025 financial year and approved by the general manager, we inform you that a team of auditors, composed of:

Audit team leader: Richard S.

Internal Auditor: Dorothy B.

The audit is scheduled to commence on 8th May, 2025 and is expected to last until 31st May, 2025. The mission will cover the contract lifecycle which consists of planning, procurement, execution and closure of contracts especially EPC projects.

The main objectives of this audit are:

- Verify the compliance of the contract management process.
- Assess the reliability and completeness of project r reporting systems.
- Evaluate the effectiveness of interdepartmental coordination.
- Review the procurement and contract awarding process.
- Ensure involvement in the contract development process and all structures concerned, both within the management and outside.
- Identify the endogenous and exogenous factors that cause delays in delivery times implementation of management projects.
- Determine the impact of delays on activity.
- Analyse the resources dedicated to the management of these contracts.

We kindly request your cooperation in ensuring quick and easy access to relevant documents, systems, personnel necessary for a successful execution of the mission.

Thank you in advance for your collaboration.

Best regards. The Director General BMT SPA

1.4 Risk assessment

In order to identify and evaluate potential risks in the management of contracts a preliminary contract risk assessment was conducted through past audit findings and audit reports, reviewing existing contracts and policies, and conducting informal interviews with key staffs to analyse the ways contracts are initiated, approved, executed, monitored and closed. Thereby identifying the most critical risks and aid in designing an effective and efficient audit plan. The risk heat map **(See figure in Annexe 4)** gives a visual explanation of the outcome of this phase; the final risk table which gives an overview of the current situation. **(See table in Annexe 5)**

The Risk Assessment Table presented **below** is a tool used by the Internal Audit Department of BMT SPA to systematically identify and evaluate key risks affecting various areas of the organization. It highlights specific risk areas, evaluates their likelihood (probability) and potential impact (severity), and assigns a priority level to guide the organization's risk response strategies.

The table is organized into six columns:

1. **Area**: The organizational domain where the risk is identified, such as contract compliance, internal governance, coordination, or resource management.
2. **Identified Risk**: A brief description of the specific risk observed within each area.
3. **Probability (P)**: The likelihood of the risk occurring, rated on a scale (e.g., 1–3), with 3 indicating a likely event.
4. **Severity (S)**: The potential impact if the risk occurs, also rated on a scale (e.g., 1–3), with 3 representing a major impact.
5. **Priority (P × S)**: The product of probability and severity, indicating the overall risk level. This helps prioritize which risks need urgent attention. A higher score signifies higher risk.
6. **Existing Controls**: Describes the current internal controls in place to mitigate each risk and identifies any weaknesses or gaps.

This structured approach helps the audit team assess vulnerabilities and focus audit efforts where they are most needed, thereby improving the effectiveness of risk management. For instance, risks like *"Failure to follow contract procedures"* and *"Lack of accountability due to unclear roles"* have high priority ratings (6), indicating the need for immediate management attention and stronger internal controls.

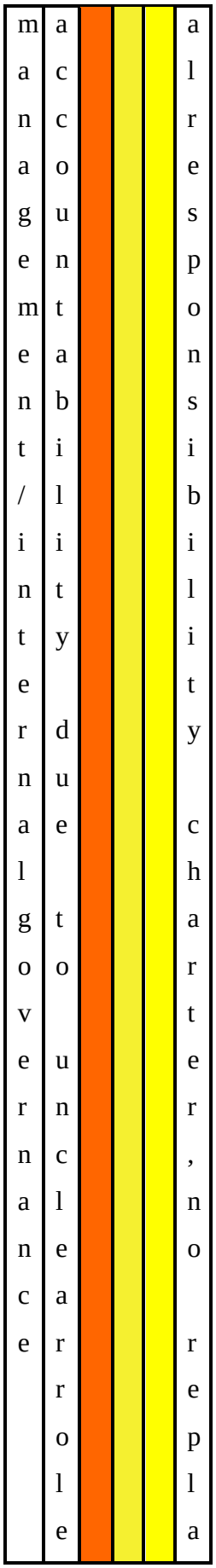
RISK ASSESSMENT TABLE

General Manager

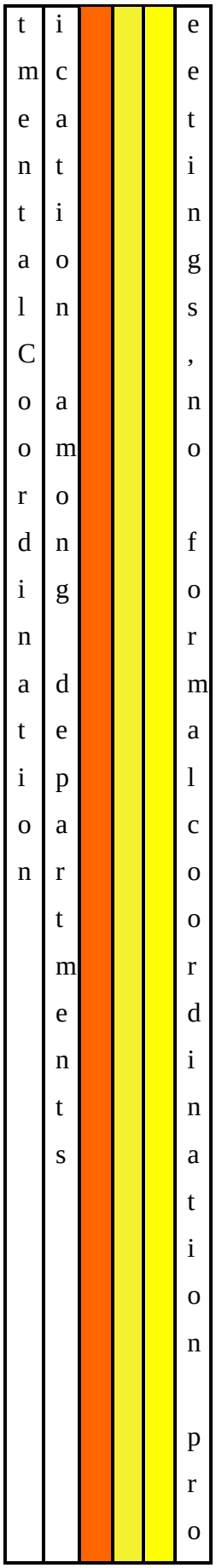
Internal Audit Department

Area	Identified Risk	Probability (P)	Severity (S)	Priority (P x S)	Existing Controls
Contract Comp	Failure to f	3 (likely)	2 (major)	6 - high	Weak documen

liance	ollow contract procedures				tation, inconsistent reviews
Project	Lack of	3	2	6	No form


management/internal governance
accountability due to unclear role
all responsibility chart er, no repla

	sand responsibilities				cement/handover protocol
Interdepar	Poor communun	3	2	6	Irregularm


tmentalCoordinationicationamongdepartmentsetingsnoformalcoordinationpro

					cess
Budget Control	Cost overrun snotdetected in ti	2	3	6	Weak reporting mechanism

	me				
Resource Allocation	Undersized project teams	2	2	4	No regular workload reviews

Table 1: **Preliminary Risk Assessment**

1.5 Audit Plan

The audit work plan is a key planning document that outlines the intended process of carrying out the audit mission based on risks identified in the preliminary risk assessment section. **(See table in Appendix 6).** It outlines the systematic approach used to evaluate the effectiveness and compliance of project and contract management practices at BMT SPA. It is structured around four main components: **Audit Objectives**, **Audit Tests**, **Identified Risks**, and **Audit Procedures**. Each objective targets a specific area of concern such as contract compliance, project roles, timelines, resource allocation, and interdepartmental coordination. For every objective, corresponding audit tests are designed to gather relevant information and evidence. These tests help uncover potential or existing **risks** (e.g., non-compliance, project delays, lack of accountability), which are clearly identified in the third column.

The final column details the **audit procedures** to be followed, including document review, staff interviews, comparisons with internal standards, and analysis of records. This structured plan ensures that the audit is both focused and evidence-based, enabling the identification of control weaknesses and offering practical recommendations for risk mitigation and performance improvement.

AUDIT **WORK PLAN**

General Manager

Internal Audit Department

Audit Objective	Audit Test	Identified Risk	Audit Procedure
Verify the compliance of the contract management process	Review tender files, selection reports	Non-compliance with procedures and regulations	Compare steps followed with internal rules, interview staffs
Evaluate the clarity (definition, assignment, documentation) of project managers and other key stakeholder's roles and responsibilities	Verify that project managers are formally designated, confirm the availability and application of a responsibility charter, review handover protocol	Lack of clear responsibility leads to project mismanagement and loss of accountability	Examine documents, conduct interviews with project managers and supervisors and compare with internal standards
Evaluate internal and external factors causing project delays	Compare planned vs actual timelines, review progress reports	Delays leading to penalties and cost overruns	Interview project managers, analyse performance dashboards
Access adequacy of allocated resources	Review resource allocation plans and project staffing	Understaffed teams affect contract execution	Interview HR and project leads, review workload planning
Check existence of coordination mechanisms	Review communication charters and meeting records	Lack of interdepartmental coordination	Interview key stakeholders, asses governance practices

Table 2: Audit Work Plan

1.6 Audit Logistics

The duration of this internal audit mission is from 31st March 2025 up until 31st May 2025. The realisation of this internal audit mission requires close collaboration with the legal department who reviews and safeguards the contract terms, the procurement and purchasing department who ensure tendering and vendor selection, the technical department who defines the technical deliverables and evaluates performance and finally the finance department who manages budget and payments. There is also a need to get documents like the engagement letter approved and also send a notification to all departments on the audit timeline.

ENGAGEMENT LETTER

General Manager
Internal Audit
Department

Recipient: General management

Subject: **Engagement letter for Internal Audit of Contract Management**

Mission: **No: 03/2025**

In accordance with the audit plan of 2025 approved by the General Manager and after preliminary study of the audited entity, this letter confirms the commencement of the internal audit mission on the contract management process. This audit is part of our commitment to enhancing risk management and internal control within the organization.

Objective

To evaluate the effectiveness and efficiency of the contract management process (EPC contracts) and to assess internal controls put in place in order to mitigate risks.

Scope

The audit will cover all stages, including planning, procurement, execution, and closure of the contract lifecycle. The review will involve several departments such as Legal, Procurement, Technical and Finance.

Methodology

This will include document review, interviews with key personnel, and testing controls related to contract management.

Duration

This mission is scheduled to commence on 8th May 2025 and end on 31st May 2025

We kindly request full cooperation of all departments involved as well as access to necessary documents, systems and personnel essential to the success of this mission.

Sincerely,

Internal audit department

BMT SPA

2. THE EXECUTION PHASE

This phase typically includes the following key components;

2.1 The opening meeting:

The opening meeting was held between the internal audit team and the relevant management/stakeholders involved in contract management at BMT SPA.

Participants typically included the Head of Internal audit, representatives from Legal, Procurement, Contract Administration, Project Management teams and audit team members.

The points to be addressed by the audit mission team at this meeting were as follows:

- Formalized the start of the mission, the contract management audit.
- The auditors reviewed the mission's objective, presented the scope and duration, and methodology for conducting the audit.
- Roles and responsibilities of the audit team and the auditee management were communicated.
- There was emphasis on the importance of cooperation from stakeholders throughout the process.
- Agreement on timelines, access to documentation, and mission's logistics.
- Lines of communication and assignment of key contacts were established.

The opening meeting minutes cover the audit mission on contract management, focusing on the development and execution of EPC contracts. The auditors outlined the mission's objectives, scope, and methodology. **(See template in Appendix 7)** This entire engagement is carried out to ensure that all parties are aligned from start to finish, minimizing misunderstandings and enabling a smooth fieldwork phase.

2.2 Field work:

During field work, the audit team conducts tests and observations both immediate and specific using tools like test sheets, the FRAP (Problem Detection and Analysis Sheets) or observation sheets and cover sheets to detect and analyse issues in high-risk areas, ensuring a comprehensive assessment of contract execution and management with in BMT SPA.

- **Audit Test Sheets**

Test sheets are structured forms used by auditors to carry out and document compliance and substantive tests during the audit. At BMT SPA, test sheets are used in formalising audit tests

in which the objective of the test, the execution methods, the results and the conclusion are transcribed or documented respectively. **(See model in Appendix 8)**

- **Observation sheets (FRAPs).**

This is a structured document used by auditors to record, track, and report audit findings or observations during the audit process. During the contract management at BMT SPA, the observation sheets serve to formally document identified non-conformities, they allow the auditor to correlate observed issues with their causes and identify areas for improvement suggesting solutions or recommendations. (**See template in Appendix 9)**

- **Cover Sheets**

A cover sheet is a summary document used to formalize the objectives of the audit work plan, the findings of the FRAPs and the conclusions reached in the test sheets.

This document serves to provide a link between the audit work plan and the fieldwork carried out as well as a general overview of the conclusions made with in the audit mission. These therefore help in the reviewing of the completeness of fieldwork and facilitate audit supervision and reporting. **(See template in Appendix 10)**

For our practical case (Management of Contracts), see the following examples of test sheets, observation sheets (FRAPs) and Cover Sheet used.

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Document prepared by: Christiana O.

Test Sheet 1 - Absence of a Responsibility Charter for Project Managers.

Audit Objective:

To assess whether the roles and responsibilities of project managers and other stakeholders are clearly defined.

Test Execution Procedures:

- Verification of the existence of a responsibility charter.
- Interviews with project managers and their supervisors.
- A review of project files to assess formal designation of project managers.
- Verification of whether handover procedures are in place during staff transitions.

Documents used:

- Organizational policies.
- Project files.

Results:

- No formal responsibility charter was identified.
- Lack of awareness by project managers of their obligations and powers during the implementation of the project.
- No formal handover procedures were found.

Conclusion:

The absence of formalized roles and responsibilities for project managers exposes the organization to risks of delays in execution of projects, confusion of responsibilities and gaps in accountability.

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Document prepared by: Christiana O.

Observation Sheet 1

Observation:

- There is no formal responsibility charter in place.
- Project managers are designated informally and when put in charge formally, there is no systematic handover process.

Cause:

Lack of an organized governance framework for project managers and other key project stakeholders.

Risk/ Impact:

- Confusion in task responsibility and accountability.
- Delays and inefficiencies in execution of the project.

Recommendation:

To specify project roles and responsibilities, a formal responsibility charter needs to be put in place.

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Test Sheet 2 - Non-Compliance with Procurement Procedures.

Document prepared by: Agaba M.

Audit Objective:

To verify conformity of procurement procedures with internal rules and regulations that are related.

Test Execution Procedures:

- Review of procurement guidelines and applicable legal frameworks.
- Selection of a sample of procurement files (e.g., tenders, bids, contracts)
- Conduct interviews with procurement officers and other related departments.
- Verify if required committees (e.g., evaluation, COP) were involved and if their prerogatives were respected.

Documents Reviewed:

- Procurement policies and guidelines.
- Tender documents.
- Committee evaluation reports.
- Award publication records.

Results:

- Several procurement files lacked required documentation (e.g. lack of parent company guarantees)
- Evaluation committee practices were inconsistent.
- Award results were not systematically published.

Conclusion:

Frequent anomalies from procurement procedures were observed, creating risks including potential contract termination and non-compliance with the principle of fairness among bidders particularly concerning the alignment and evaluation of administrative files.

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Document prepared by: Agaba M.

Observation Sheet 2

Observation:

Contracts were awarded with incomplete administrative documentation; evaluation processes were inconsistent and award results were not routinely disclosed.

Cause:

Weak application of existing procurement procedures and insufficient internal administration.

Risk/Impact:

- Legal challenges and procurement disputes.
- Contract terminations.
- Incomplete bids returned to the bidders.

Recommendation:

- Reinforce adherence to procurement procedures, with a focus on:
    1. Proper evaluation and alignment of administrative tender documents.
    2. Respect for the responsibilities and prerogatives of the different procurement committees.
- Involve legal departments systematically to provide expert support and training to the committees, ensuring compliance and consistency in procurement activities

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Document prepared by: Christiana O.

Test Sheet 3 - Weak Cost Monitoring and Control System.

Audit Objective:

To evaluate the effectiveness of cost tracking and analysis mechanisms during contract execution.

Test Execution Procedures:

- Review project cost reports and check for evidence of manager validation.
- Review of timesheet use and cost allocation methods.
- Comparison of actual expenditures against budget forecasts.

Documents Reviewed:

- Financial reports.
- Budget and expenditure records.
- Cost validation approvals.

Results:

- Absence of a structure responsible for analysing project costs and comparing them to allocated budgets.
- Project managers do not validate costs allocated to their projects via allocation codes, nor do they review edits made in the cost accounting system managed by the Production Division.
- A lack of timesheets for headquarters management staff, making it difficult to accurately distribute indirect costs.

Conclusion:

The current cost analysis and monitoring system is ineffective, undermining financial oversight and resource accountability.

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Document prepared by: Christiana O.

Observation Sheet 3

Observation:

The current cost analysis and monitoring system is ineffective, exposing SH to financial risks and excessive focus on physical project progress rather than financial performance.

Cause:

- Allocation of costs to inadequate projects, preventing proper validation of actual project costs.
- Lack of a designated team tasked with monitoring and analysing of project costs.
- Project managers are not responsible for cost validation despite being accountable for both physical and financial aspects of contract execution.

Risk/Impact:

- Inefficient execution of contracts.
- Budget overruns and poor cost compliance.
- Misallocation of costs.
- Management's focus on physical project progress over financial performance.

Recommendation:

- Establish timesheets for headquarters staff to enable accurate allocation of indirect costs.
- Conduct a detailed analysis of project cost structures using data from the Production Division’s accounting system.
- Assign formal responsibility for cost analysis and monitoring to a dedicated unit within the management structure.

Assignment: 015/CSH/DPC/ADG-10 DATE: 15/05/2025

Document prepared by: Agaba M.

Cover Sheet

Ref./ Comment:

Audit objective:

1. Verify the compliance of the contract management process.
2. Evaluate the clarity (definition, assignment, documentation) of project managers and other key stakeholder's roles and responsibilities.
3. Evaluate internal and external factors causing project delays.
4. Access adequacy of allocated resources.
5. Check the existence of coordination mechanisms.
6. Evaluate the effectiveness of cost tracking and analysis mechanisms during contract execution.

Conclusions:

1. Non-compliance with procurement procedures was observed, creating risks of potential contract termination.
2. The absence of formalized roles and responsibilities for project managers was noted exposing the organization to risks of delays in execution of projects, confusion of responsibilities and gaps in accountability.
3. Internal factors, such as insufficient planning, slow decision-making, and inadequate coordination as well as an external factor of supplier disruption were observed leading to project delays.
4. The inadequate allocation and monitoring of human and financial resources was observed exposing the organisation to risks of underestimated needs, and inefficient use of the resources.
5. No formal interdepartmental coordination mechanisms were in place leading to delays in decision-making across phases of the project lifecycle.
6. The current cost analysis and monitoring system is weak, undermining financial oversight and resource accountability.

3. THE CONCLUSION PHASE

3.1 The closing meeting:

During this meeting, the Head of internal audit, the audit team members as well as the contract management representatives discuss on whether the objectives of the mission have been achieved and if all the points in the work program have been completed. This meeting is also organised to close the verification phase through a verbal briefing, using a specially prepared presentation to illustrate the findings.

The participants were the same as the ones in the opening meeting

The points to be addressed by the audit mission team at this meeting were as follows:

- Welcome the members to the meeting.
- There was a reminder on the objective of the audit mission.
- Presentation and validation of the draft audit report with the auditees.
- Discuss the audit approach that was conducted using different audit techniques with a particular goal in hand.
- Present and validate audit findings and specific recommendations.
- Establishment of an action plan to be implemented by relevant officials.
- The meeting concludes with a thank you for the cooperation of participants.

The minutes of the closing meeting held for the purpose of finalizing a Contract Management Audit were written. It shows the meeting's aims, presentations and discussions addressed. **(See template in Appendix 11)**

3.2 The draft audit report:

A draft audit report is a preliminary version of the final audit report prepared at the end of fieldwork to present the audit team's initial findings, conclusions, and recommendations. The draft report serves as a basis for discussion with management, allowing them to validate facts, provide explanations, and propose corrective actions before the final report is issued. Its purpose is to ensure accuracy, transparency, and collaboration by giving the auditee an opportunity to respond to the findings and improve the relevance and fairness of the final audit conclusions. During the closing meeting on the contract management audit at BMT SPA, the draft audit report is presented and discussed with the auditees for them to review it and make any clarifications therefore leading to its validation.

3.3 The action plan:

An action plan is a formal document established after the validation of the final audit report outlining specific measures used in the implementation of the audit findings and recommendations made.

During the Contract Management Audit at BMT SPA, the action plan includes the actions put in place to address each audit finding, the individuals or departments assigned to carry out each action and the deadlines or timeframes for implementing each recommendation.

3.4 The final report:

A final report is the official and complete audit document issued after validation of the draft audit report. It incorporates confirmed findings, recommendations, and sets the foundation for the action plan. It serves as a formal record of the audit results and a reference point for follow-up and accountability**. (See template in Appendix 12)**

NB: Based on the internal audit report provided to us by BMT SPA, we were able to draft the **audit report below** through independent analysis and methodology learnt during the audit mission.

FINAL **REPORT**

General Manager

Internal Audit Department

1. Introduction

As part of the approved annual audit plan, the internal audit department conducted an audit mission on the **management of contracts** at BMT SPA. This audit involved collaboration with some services namely Procurement, Legal, Technical and Finance department. Our job was to give an opinion on the execution of EPC (Engineering, Procurement and Construction) contracts.

2. Objectives of the Audit

The specific objectives of the audit mission were to:

- Verify the compliance of the contract management process.
- Evaluate the clarity of project managers' roles and responsibilities.
- Assess internal and external factors causing project delays.
- Evaluate the adequacy of allocated resources.
- Review coordination mechanisms across departments.
- Evaluate the effectiveness of cost tracking and analysis mechanisms.

3. Methodology and Execution

The audit execution began with an opening meeting attended by representatives from Legal, Procurement, Contract Administration, Project Management, and the audit team. The meeting outlined the mission's scope, methodology, deliverables, and communication protocols.

Fieldwork was conducted using audit test sheets, observation sheets (FRAPs), and cover sheets to formalize findings systematically.

4. Key Audit Findings

- **Absence of a Responsibility Charter for Project Managers.**

There is no formal responsibility charter defining project manager's roles. Appointment of project managers is often informal, and no structured handover procedures exist when leadership changes occur. This gap increases risks related to project delays, unclear accountability, and role confusion.

- **Non-Compliance with Procurement Procedures**

Several procurement files lacked essential documentation. Evaluation committees did not consistently follow procedures, and award results were not systematically published. These deficiencies expose BMT SPA to legal and reputational risks.

- **Weak Cost Monitoring and Control**

Cost control mechanisms are inadequate due to missing validations, absence of timesheets for headquarters staff, and lack of a dedicated budget monitoring team. Financial performance tracking is less rigorous than monitoring of physical project progress.

- **Lack of Interdepartmental Coordination**

No formal coordination framework exists among departments involved in contract execution, leading to communication breakdowns and project delays.

- **Inadequate Resource Allocation and Monitoring**

Human and financial resources are poorly assigned and not effectively monitored. Teams are sometimes understaffed, and no formal system exists to track staff capacity or resource needs.

- **Internal and External Factors Causing Delays**

Delays stem from internal issues such as slow decision-making and weak planning, as well as external disruptions like supplier problems, impacting project timelines.

5. Recommendations

Based on the findings, the following recommendations are proposed to strengthen contract management and risk mitigation:

- Develop and implement a formal responsibility charter for project managers, including structured handover procedures.
- Reinforce compliance with procurement procedures and ensure proper documentation and transparency.

- Establish a dedicated cost monitoring team and implement timesheet tracking for all relevant staff.
- Create formal interdepartmental coordination mechanisms with designated liaisons.
- Develop a resource allocation and capacity tracking system.
- Improve project planning processes and proactively monitor supplier performance.

6. Relationship with Risk Management

The audit findings highlight significant risk exposures in contract management at BMT SPA. These gaps directly affect the organization's ability to manage operational, financial, compliance, and reputational risks effectively. Specifically:

- **Operational Risks:** Lack of clear responsibilities and poor coordination increase the likelihood of delays and errors.
- **Financial Risks:** Weak cost controls and resource misallocation heighten the risk of budget overruns and inefficiencies.
- **Compliance Risks:** Non-adherence to procurement procedures exposes the company to legal challenges and reputational damage.
- **Strategic Risks:** Internal and external factors causing delays affect the company’s ability to meet strategic objectives.

Implementing the recommended measures will enhance BMT SPA’s risk management framework by improving accountability, transparency, and control effectiveness, thereby supporting sustainable organizational performance.

7. Conclusion

This audit has revealed critical weaknesses in BMT SPA’s contract management processes, which pose significant risks to project success and organizational performance. Addressing these issues through the recommended actions will not only improve contract execution but also strengthen the integration of internal audit and risk management functions. This alignment is essential for enhancing the company’s resilience, compliance, and overall governance.

CONCLUSION

This chapter has provided a comprehensive overview of BMT SPA, detailing its historical evolution, core activities, services, mission, vision, and strategic objectives. This foundational understanding of the company's operational framework and organizational structure sets the stage for analysing its internal control environment.

The empirical findings from the internal audit mission on EPC contract management revealed significant weaknesses in coordination, procurement compliance, cost monitoring, and resource allocation. These deficiencies expose BMT SPA to a range of operational, financial, regulatory, and strategic risks that could adversely impact project delivery, financial stability, and organizational reputation.

Internal audit plays a crucial and strategic role in BMT SPA's risk management framework by providing an independent and objective assessment of these vulnerabilities. Beyond ensuring compliance, internal audit serves as a proactive tool for anticipating, identifying, and mitigating risks. The audit findings demonstrate how internal audit enables informed decision-making by uncovering risks early and proposing actionable recommendations.

Through its practical recommendations, internal audit actively supports continuous improvement by enhancing governance, transparency, and process efficiency. Strengthening the risk management framework equips BMT SPA's leadership with the necessary tools to minimize uncertainties, secure operations, and promote sustainable growth.

By integrating internal audit as a strategic pillar of risk management, BMT SPA enhances its resilience against both internal challenges and external disruptions. This approach highlights that internal audit is not merely a control mechanism but a vital driver of organizational security, performance, and long-term development.

GENERAL CONCLUSION

GENERAL CONCLUSION

Internal audit is a fundamental pillar of risk management, playing a central role in strengthening governance, optimizing internal controls, and ensuring proactive risk mitigation. This study has demonstrated that internal audit goes beyond regulatory compliance it serves as a strategic lever that enhances organizational performance by systematically identifying, assessing, and addressing risks.

Through both theoretical insights and practical application, this research examined how internal audit contributes to risk management. The literature review established that international frameworks such as COSO and ISO 31000 provide structured guidelines for integrating internal audit into enterprise-wide risk management. These frameworks emphasize audit's function not only in detecting risks but also in reinforcing governance mechanisms.

The empirical analysis conducted at BMT SPA through a comprehensive audit mission on EPC contract management revealed critical weaknesses in interdepartmental coordination, procurement procedures, financial monitoring, and resource allocation. The audit mission followed all professional phases from risk assessment and planning to execution and reporting ensuring a systematic approach to risk detection and mitigation. Key weaknesses were identified using standardized tools, such as audit test sheets, FRAPs, and cover sheets, which allowed for structured documentation of observations and corrective actions.

This research **validated all three hypotheses**, demonstrating internal audit's **direct impact on risk management**:

- **The independence and objectivity of internal audit significantly enhance risk management** by providing unbiased evaluations and strengthening risk control measures.
- **Challenges such as role formalization, weak cost control, and ineffective communication negatively impact risk management** and must be addressed through improved internal processes.
- **The effectiveness of audit procedures, auditor expertise, resource allocation, and executive support directly influence internal audit's ability to identify and mitigate risks**, emphasizing the need for continuous improvement.

General Conclusion

Despite certain organizational challenges, the audit proved to be highly effective in identifying operational risks and led to the formulation of a comprehensive action plan, aimed at reinforcing contract execution, improving coordination, and strengthening financial oversight. The implementation of these recommendations will significantly enhance BMT SPA's risk management framework, ensuring a more structured, transparent, and resilient organization.

In conclusion, this study reaffirms that internal audit is far more than a compliance mechanism it is a strategic instrument that drives risk awareness, strengthens internal controls, and supports sustainable decision-making. Its integration into corporate governance structures enhances transparency, stakeholder confidence, and organizational resilience. To maximize internal audit's impact, organizations must commit to continuous improvement, focusing on formalizing procedures, optimizing coordination, and reinforcing financial oversight. Internal audit should not be seen as a regulatory burden but rather as an essential investment for long term sustainability and competitive advantage.

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APPENDICES

APPENDICES.

APPENDIX NO 01: AUDIT PROGRAMME

From the host company and presented in its original form

N°	Missions d'audit interne	Période
1	Audit de la gestion logistiques	janvier/Février
2	Audit de la gestion des contrats	Mars/Avril
3	Audit de la gestion des ressources humains et matériels	Mai/Juin
4	Audit de la gestion des actifs informatiques	Juillet/Août
5	Audit de la Manutention aux navires	Septembre/Octobre
6	Audit du recouvrement	Novembre/Décembre

APPENDIX NO.02: LIST OF REQUESTED DOCUMENTS

(for information purposes only)

BMT

General Manager

Internal Audit Department

No.	Title / Nature of documents
1.	
2.	
3.	
4.	
5.	

APPENDIX NO.03: MISSION LETTER

General Manager

No. xx/20xx

Recipient: Internal Audit Department

Date: xx. xx. 20xx

Subject: **Audit of contracts management EPC**

As part of the execution of the annual audit plan established for the 20xx financial year and approved by the general manager, we inform you that a team of auditors, composed of:

Audit team leader:

Internal Auditor:

The audit is scheduled to commence on xx xx,20xx and is expected to last until xx xx, 20xx. The mission will cover the contract lifecycle which consists of planning, procurement, execution and closure of contracts especially EPC projects.

The main objectives of this audit are:

- Verify the….;
- Identify the ……;
- Analyse the ….;

We kindly request your cooperation in ensuring quick and easy access to relevant documents, systems, personnel necessary for a successful execution of the mission.

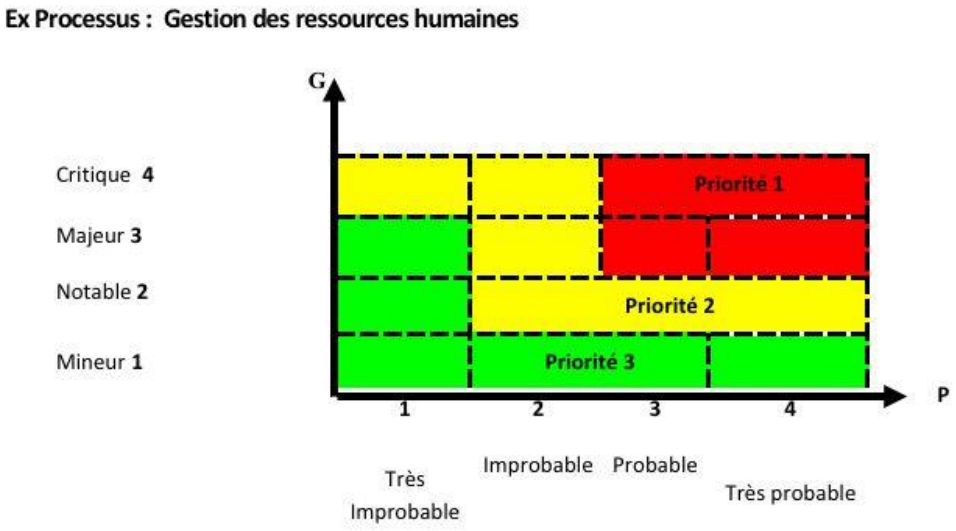
Thank you in advance for your collaboration.

Best regards.

The Director General

BMT SPA

APPENDIX NO. 04: RISK MAPPING



APPENDIX NO. 05: RISKTABLE

General Manager

Internal Audit Department

	RISQUE	S	P	PRIORITY	MEANS OF CONTROL
QUALITE					

APPENDIX NO.06: AUDIT WORK PLAN

General Manager

Internal Audit Department

No.	Recommendations		Responsibility		Deadline	Comments
			Concerned structure	In-charge		
	Content	Priority				

APPENDIX NO.07: MINUTES OF THE OPENING MEETING

Meeting date: xxxx at 9:00 a.m.

Meeting location: DG meeting room.

Meeting Agenda: Opening meeting of the Contract Management Audit mission.

Participants:

Name / First names	Function	Signing in

Mission objectives:

The objective of this mission will be to ensure that the process of developing EPC contracts and the process of executing these contracts are analysed.

Report:

The purpose of the meeting being the opening of the audit of contract management, it allowed to formalize the start of the mission. The auditors gave a reminder of the objectives of the mission and presented the scope and methodology for conducting the mission.

The agenda being exhausted, the meeting was adjourned at 9:30 a.m.

Assignment:

Document prepared by:

APPENDIX NO.08: Test Sheet

Ref./ Comment

Audit Objective:

Test Execution Procedures:

Documents used:

Results:

Conclusion:

Assignment:

Document prepared by:

APPENDIX NO. 09: Observation Sheet

Observation:

_____

Cause:

_____

Risk/ Impact:

_____

Recommendation:

_____

Auditor's Signature:

_____

Assignment:

Document accomplished by:

APPENDIX NO.10: Cover Sheet

Ref./ Comment

_____

Audit objective:

_____

Conclusions:

_____

APPENDIX NO.11: MINUTES OF THE CLOSING MEETING

Meeting date: xxxx at 10:00 a.m.

Meeting location: Meeting room.

Meeting Agenda: Contract Management Audit Closing Meeting

Participants:

Name / First names	Function	Signing in

Mission objectives:

The objective of this mission was to analyse the process of developing contracts and the process of executing these contracts.

Report:

The objective of the meeting was to validate the draft audit report, which was presented to the auditees. The auditors presented a summary of the report, including a presentation of the findings and recommendations. After discussions and comments, the auditees accepted the findings and recommendations, and the report was validated.

To this end, an action plan has been established and will be sent to the relevant officials to indicate the action to be implemented, the officials responsible and the deadline for implementing the recommendations.

The agenda being exhausted, the meeting is adjourned at 11:00 a.m.

APPENDIX NO.12: Illustration of Internal Audit Report

CONFIDENTIAL

Internal Audit Department

INTERNAL AUDIT REPORT

AUDIT OF CONTRACT MANAGEMENT

Mission code/ No.:

Date:

IMPORTANT

This document is an internal audit report on the management of contracts especially EPC contracts. It contains confidential information,

Its recipients are strongly recommended not to extend its distribution because:

The style may surprise an uninitiated reader.

An audit report is not neutral: it analyses a situation, but, like a repair estimate,

It focuses on dysfunctions, in order to develop actions for improvement.

"At least one page on what's wrong, at most one line on what's right."

It contains recommendations. A recommendation is not a criticism, it does not imply

fault: it is an improvement proposed to the manager authorized to take action. It is

responsible for developing and implementing a solution to the problem raised: the one proposed or a better one.

Audited structure: XXX Department

Report recipients:

SUMMARY

1. Summary

The audit mission of contract management within the directorate, carried out as part of the annual 200x audit plan of the upstream audit department took place from xx xx 20xx to xx xx 20xx.

The general objectives of the mission were to analyse ……

It should be noted that the management is equipped with management tools to monitor projects during the execution phase.

Our detailed comments are included in the body of the report. However, the major areas of improvement include;

- ……..
- ……
- …….

2. Introduction

The following themes and processes were addressed during the audit through interviews and tests:

- ……
- ……
- …….

3. Objectives

The mission focused mainly on the following points:

- …….;
- …….;
- …….;

4. Key audit findings and observations

The deficiencies described follow this logic and have been classified within each theme according to their level of severity.

1. Part

1.1.Deficiency identified

Level of severity

Facts

Cause

Consequences

Recommendations

Auditee’s comment

1.2.Deficiency identified

Level of severity

Facts

Causes

Consequences

Recommendations

Auditee’s comment

RECOMMENDATIONS

No.	Recommendations		Responsibility		Deadline	Comments
			Concerned structure	In-charge		
	Content	Priority				

TABLE OF CONTENTS

TABLE OF CONTENTS

ABSTRACT

This research explores the role of internal audit as a tool for risk management, using the contract management process at BMT SPA as a practical case study. The research aims to understand how internal audit contributes to identifying, assessing, and mitigating operational and financial risks in a real organizational context.

The body combines theoretical analysis with a practical audit mission at BMT SPA focused on the management of contracts, especially EPC contracts. It highlights the relevance of internal audit in governance and decision making and identifies key weaknesses in contract management through a structured approach involving risk assessment, audit planning fieldwork tools. The findings confirmed that when internal audit is conducted independently and objectively, it plays a major role in identifying risks and enhancing organizational performance.

Internal audit is a vital, proactive tool that strengthens accountability and performance when supported by robust structures and engaged management.

Key words: Audit, internal audit, risk management, organizational performance.

RESUME

Cette recherche explore le rôle de l'audit interne en tant qu'outil de gestion des risques, en utilisant le processus de gestion des contrats chez BMT SPA comme étude de cas pratique. Elle vise à comprendre comment l'audit interne contribue à identifier, évaluer et atténuer les risques opérationnels et financiers dans un contexte organisationnel réel.

Elle associe une analyse théorique à une mission d'audit pratique chez BMT SPA, axée sur la gestion des contrats, en particulier les contrats EPC. Il souligne l'importance de l'audit interne dans la gouvernance et la prise de décision et identifie les principales faiblesses de la gestion des contrats grâce à une approche structurée impliquant une évaluation des risques et des outils de planification de l'audit sur le terrain. Les résultats ont confirmé que lorsque l'audit interne est mené de manière indépendante et objective, il joue un rôle majeur dans l'identification des risques et l'amélioration des performances de l'organisation.

L'audit interne est un outil vital et proactif qui renforce la responsabilité et la performance lorsqu'il est soutenu par des structures solides et une direction engagée.

Mots clé : Audit, audit interne, gestion des risques, performance des organisations