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**AN ASSESSMENT OF SIERRA LEONE'S EXPLORATION LICENSING REGIME, WITH PARTICULAR
REFERENCE TO THE MITIGATION OF SPECULATION.**

By

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I say thanks to God, almighty, for his grace and support.

This piece of work is dedicated to the memory of S. V. Katta (RIP). The man who showed me what commitment to family is, and how to be calm in the midst of challenges. Special appreciation to the three phenomenal women in life: my Wife-Mrs. Alitta Ansu-Katta; Mum-Mrs. Mary Katta; and my late Mother-in-law- Mrs. Lovetta Forna (RIP). I owe my commitment to life and success to you and would like to express my profound thanks for your unflinching support always. I love you.

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ABSTRACT

A country's mining policy climate is one of the critical drivers of exploration investment. In light of this, licensing is regarded as the means of optimally managing competing interests in the exploration and development of non-renewable resources through the existing legal and regulatory framework.

This research assesses Sierra Leone's exploration licensing regime within the context of the measures taken to mitigate and/or prevent speculation. It will also provide a deeper understanding of the notion of speculation and its drivers in the mining industry. As well as the context in which such measures have been crafted in the regime and applied in practice. With the ultimate objective being, to measure such provisions against the analytical framework, in respect of "best practice, as well as to identify potential gaps.

The methodology adopted for this research involves desktop analyses of Sierra Leone's current exploration licensing regime, based on recommendations from expert institutions and opinions on mineral exploration, policy, and regulations. It discusses four critical factors of an analytical framework, from which the respective mitigation measures are evaluated.

The outcome of the research shows that Sierra Leone's exploration licensing regime generally demonstrates an aspiration towards "best practice" in exploration licensing. However, the ultimate test of its efficacy invariably lies in strict and consistent adherence to the "equality before the law" and "good governance" principles. These principles form the bedrock upon which the four critical factors of the analytical framework was established. Against this background, the research proves that these principles have been breached in some instances, thereby encouraging speculation to thrive, and possibly impeding the development of the country's mineral sector.

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LIST OF ACRONYMS

“PPI”	Policy Perception Index
“ICAS”	Investment Climate Advisory Services
“FDI”	Foreign Direct Investment
“GDP”	Gross Domestic Product
“MAB”	Minerals Advisory Board
“NMA”	National Minerals Agency
“IT”	Information Technology
“PEPs”	Politically Exposed Persons

KEYWORDS

Exploration Licensing, Speculation, Mitigation, “best practice,” critical factors, analytical framework,

CHAPTER 1: INTRODUCTION

1.1: Background to the Research

A country's mining policy climate is regarded as one of the critical drivers of exploration investment.¹ The *Fraser Institute* uses a Policy Perception Index ('PPI'), based on the judgment of mining executives in jurisdictions in which they operate, as a means of measuring mining investment attractiveness globally.² Also, the World Bank's *Investment Climate Advisory Services ('ICAS')* provides a framework for the identification of common features of "good practice" regarding licensing regimes.³ These have been recommended in various reports, with examples ranging from low-to high income mining jurisdictions across the different continents.⁴ Licensing is thereby considered the means of establishing a legal framework for optimally regulating competing interests in the exploration and development of non-renewable resources.⁵ While licensing practices could hinder investments, on the one hand, they may equally promote investment and contribute to socio-economic development if properly regulated.⁶

Global exploration budgets for nonferrous metals were estimated at US\$10.1 billion in 2018, with this trajectory expected to increase by 5-10% in 2019.⁷ Some mining jurisdictions in Africa are already poised to capitalize on this renewed surge in exploration investment, associated with a corresponding rise in Foreign Direct Investment (FDI).⁸ This increase in FDI could be necessitated by one or more of the common denominators of the *Fraser Institute Survey* and, or the *ICAS* framework.

1.2: Problem Statement

It is crucial to note that Sierra Leone fell outside of the 89 mining jurisdictions of the Investment Attractiveness Index of 2018.⁹ This is despite the country's recent efforts towards improving its exploration investment attractiveness, through the enactment of its current mining law.¹⁰ Also crucial to note is Sierra Leone's socio-economic status, characterized by a 64% multi-dimensional poverty population, with an undiversified economy, burdened by a two billion US Dollar public debt.¹¹ In light of this, Sierra Leone, like other resource-rich developing countries, will continue to depend on Foreign Direct Investment ('FDI') in the sector to foster economic growth.¹² This is predicated on the fact that exploration and mining projects are highly capital intensive, with domestic financial markets often

¹ Fraser Institute, (2019). Annual Survey of Mining Companies, at 1.

² *Ibid.*

³ Krakoff, C., (2009). Sector Licence Studies, World Bank, at 12-17.

⁴ *Ibid.*

⁵ *Idem at 8.*

⁶ *Idem at 2.*

⁷ <https://www.spglobal.com/marketintelligence/en/news.../world-exploration-trends-2018> (last visited 24/06/2019).

⁸ UNCTAD, (2019). World Investment Report, at 9.

⁹ See Fraser Institute, (2019), *supra* no.1 at 9.

¹⁰ Mines and Minerals Act and Regulations, 2009.

¹¹ Sierra Leone Medium-term National Development Plan, (2019), vol.1, at 14-26.

¹² UNCTAD, (2011). "Best Practices in Investment for Development. Case Studies in FDI, How to Attract and Benefit from FDI in Mining, Lessons from Canada and Chile." Investment Advisory Series 7, at 3.

lacking the capacity to fund them.¹³ Even where national companies are being financially supported by their governments, they cannot often compete with private companies in terms of cost efficiency.¹⁴ Consequently, these mineral-rich developing countries, from time to time, would reform their mining and investment legislations, in order to attract foreign companies.¹⁵ Even with such efforts, countries still bear the risk of granting exploration rights to companies that may not have the technical and or financial capacity to develop such projects.¹⁶

On account of this, most countries, as a matter of “best practice,” grant exploration licences either on a “first-come, first-served” basis or by “auction.” However, the auction option is adopted mostly in cases where there is substantial geological data derived from the previous exploration.¹⁷ This gives prospective bidders the luxury of making better investment permutations from a well-informed position.¹⁸ Under such circumstances, it discourages frivolous applicants, with limited financial capacity, from spending substantial amounts for rights which they may not wish to develop.¹⁹ The auction option could, however, be unjustifiable, where a mining jurisdiction is characterized by a vast swathe of relatively unexplored ground and conditions of economic and political uncertainty.²⁰ This provides less appetite for potential investors to incur high up-front costs.²¹ It, therefore, becomes a “best practice” approach for countries to grant exclusive exploration rights to companies to search for commercially viable mineral resources within a defined set of rules.²²

A good mining law is therefore deemed to set out the terms, procedures and obligations applicable to investors, with some of the specific features including: a “first-come, first-served” or “auction” systems for issuing exploration licences; assessment of work programmes and financial statements submitted by applicant; time frame for licence validity, renewal terms, and provision for rights of cancellation in events of non-usage.²³ The features, as mentioned above, are among the fundamental precepts of speculation mitigation in an exploration licensing regime. Such speculation, with a negative connotation, mostly involves the practice of hoarding or licence stockpiling, with no intention of developing the project.²⁴ The hoarding or stockpiling ultimately hinders the country’s mineral sector development over time. For purposes of this research, speculation will be considered generally in the negative sense.²⁵ It is therefore imperative that Sierra Leone’s exploration licence regime bears the

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ See Krakoff, C., (2009), *supra* no.1 at 11.

¹⁷ Extractive Industries Sourcebook, (2010). Good Practice Note. Granting Mineral Rights, World Bank, at 3;see Krakoff,C.,(2009),*supra* no.2 at 25.

¹⁸ *Ibid.*

¹⁹ Krakoff, C., (2009), *Ibid.*

²⁰ *Ibid.*

²¹ *Ibid.*

²² See EI Source Book, (2010), *supra* no.1 at 4-12.

²³ *Ibid.*

²⁴ Ortega Ginores, E., Pugachevsky, A. and Walser, G. (2009). Mineral Rights Cadastre. Promoting transparent access to mineral resources. Washington DC: World Bank, at 36-43

²⁵ *Ibid.*

features of “best practice” licensing regimes to mitigate speculation, in the interest of long-term mineral sector development.

1.3: Aims and Objectives

1.3.1. Aims

The aim of the research is to assess Sierra Leone’s exploration licensing regime within the context of the measures taken to minimize and or prevent speculation. In addition to providing a further understanding of the context in which such measures are crafted in law and applied, through regulatory authorities, institutions, and systems emanating from such a regime. This assessment will be based on an analytical framework comprising four (4) critical factors, including *Legal, Technical, Financial, and Administrative*; as derived from the principles governing the allocation of exploration rights from the *World Bank “Good Practice Note”* and the likes.

1.3.2. Objectives

The main objectives of the research are noted as follows:

- To discuss the notion of speculation in the mining industry and its drivers, in order to provide for an analytical framework against which the exploration licensing regime will be tested;
- To highlight the provisions of Sierra Leone’s exploration licensing regime which potentially mitigate or prevent speculation;
- To benchmark, these provisions against the analytical framework proposed, in a bid to identify gaps and proffer recommendations.

1.4: Research questions

1.4.1. Primary Research question

- What measures are employed in Sierra Leone’s exploration licensing regime to mitigate and, or prevent speculation?

1.4.2. Secondary Research questions

- What is speculation, and its drivers in the mining industry?
- Where are the speculation mitigating measures set out in Sierra Leone’s exploration licensing regime?
- How do these provisions measure against the proposed analytical framework?

1.5: Research methodology

1.5.1. Methodology

The methodology adopted for this research will be limited to desktop analyses of Sierra Leone's current exploration licensing regime, based on recommendations from expert institutions and opinions. This will involve searching libraries, internet, Government of Sierra Leone's online repository and cadastre register, and the likes. These will then be used to discuss the analytical framework in chapter 2, and assess the country's exploration licensing regime in preventing speculation in chapter 4.

1.5.2. Parameters

It is worthy to note that laws akin to mineral exploration are framed typically within the context of the specific social and political economy of jurisdictions and the complexities thereof. This research shall therefore not attempt to delve into the details of the broader mining regulatory regime beyond mere reference in the course of dealing with the four critical factors, including:

- Legal-considers clear legal, non-discriminatory and non-discretionary provisions and procedures based on objective criteria;
- Technical-deals with company's technical resources available and the capacity to design work programmes and comply with such obligations in the quest of developing the country's geological asset and advancing projects;
- Financial-deals with company's financial resources and the capacity to fulfill all financial obligations, including expenditure commitments relating to work programmes;
- Administrative-deals with the administrative framework which deals with the procedures leading to the application, granting, and regulation of the rights and obligations of companies in a transparent manner based on a cadastre system.

Given the inceptive role of exploration licensing in the extractives industry value chain, the effectiveness of granting such rights is anchored on transparent, competitive, and objective criteria.²⁶ These, in addition to the technical and financial capabilities of companies, measured against different phases of the project, must be embedded in the legal, regulatory and institutional frameworks.²⁷ It is, therefore, reasonable to limit the scope of the research to the four critical factors defined in the analytical framework for purposes of this dissertation.

1.5.3. Limitation of the Study

The four critical factors used to establish the framework may not necessarily fully capture all of the factors required in assessing speculation mitigation practices. They could, however, be considered common denominators in the design of exploration licensing regimes in this respect. This framework,

²⁶ Alba, E.M. and March, E., (2009). Extractive Industries Value Chain. Extractive Industries for Development Series, 3, at 4-6.

²⁷ *Ibid.*

therefore, provides a means of conducting the analysis, with the hope that it will advance the means of assessing exploration licensing regimes against speculation, particularly in developing countries.

1.5.4 Relevance of the study

The relevance of the research is to have a deeper knowledge of the broader exploration licensing regime imperatives regarding speculation, and the measures employed to mitigate it within the context of Sierra Leone's mining jurisdiction.

1.6: Chapter Overview

Chapter 1 provides the background and problem statement of the research and sets out the aims and objectives. These will lead to the primary and secondary questions to be discussed in subsequent chapters and within defined parameters.

Chapter 2 puts the notion of speculation in the mining industry, and its drivers into context. It further discusses "good practice" recommendations in exploration licensing regimes for mitigating speculation based on an analytical framework.

Chapter 3 discusses the evolution of exploration, the status of licensing, and highlights the speculation mitigation provisions set out in Sierra Leone's exploration licensing regime. The highlights of the speculation-mitigating provisions will be anchored on the four critical factors in the analytical framework.

Chapter 4 will culminate into an evaluation of the speculation mitigation provisions, against the "good practice" recommendations noted in chapter 2, in a bid to identify potential shortcomings. This evaluation will subsequently lead to conclusions and possible recommendations in chapter 5.

CHAPTER 2: LITERATURE REVIEW AND CONTEXTUALIZATION

2.1: Introduction

This chapter examines the notion of speculation and its drivers in respect of Exploration Licensing regimes. It also seeks to discuss the circumstances, terms, and conditions under which exploration licences are allocated in different mining jurisdictions. In addition to how, depending on the legal and regulatory frameworks, this may create room for speculation to thrive.

Recent studies²⁸ indicate that most mining jurisdictions employ a dual system for granting Exploration Rights. This dual system comprises the most widely used and traditional method, based on “first-come, first-served”, as well as the “auction/tender system.”²⁹ The choice of each system in the allocation of such rights is, however, predicated on the fundamental knowledge of the country’s geological asset base.³⁰ Where such a dual system is applied, the system is guided by the “best practice” guideline.³¹ With premium put on a uniform and consistent terms, conditions, and means of eligibility for allocating exploration licences, based on either of the two options chosen.³²

Such terms and conditions, as well as eligibility criteria, are predicated on a set of core principles,³³ which include: equality before the law,³⁴ stability and certainty,³⁵ and good governance.³⁶ These core principles have, therefore, been considered in the course of establishing the four critical factors of the analytical framework for this research. These four factors: legal; technical; financial; and administrative, will be discussed in section 2.3 and eventually form the basis of the conclusion and recommendations that will be proffered from this research.

2.2: Notion of Speculation and its Drivers

Speculation, in the mining sector, carries both positive and negative connotations and can be generally regarded as active or passive speculation based on a unique set of circumstances.³⁷ Active speculation, on the one hand, is attributed to the practice of licence acquisition with a motive of undertaking initial exploration.³⁸ The ultimate intention being to increase the value of the asset, thereby prompting

²⁸ See El Source Book, (2010), *supra* no.2 at 3.

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ *Idem* at 4.

³² *Ibid.*

³³ *Ibid.*

³⁴ Regarded a non-discriminatory clause, to provide for both local and foreign interests in licence acquisition similar rights and responsibilities,

³⁵ Ensuring consistency in granting, as well as monitoring operational compliance, devoid of the method of adopted in granting the licence. In addition to adopting clear and operable administrative procedures through a cadastre system to enhance transparency. .

³⁶ Combines state and investor responsibilities in the light of transparency and administrative justice, procedural clarity to forestall ambiguity or discretion leading to subjective decision making by granting authorities; predictable security of tenure with an opportunity to renew under prescribed conditions, and the right to first refusal where a discovery is made.

³⁷ Biastoch, R., (2017). Mineral Licensing Corruption Risk Assessment. Transparency International, Mongolia, at 65.

³⁸ *Ibid.*

significantly high financial returns once sold off to relatively more technical and financially competent companies³⁹. This typifies a Greenfield exploration strategy, whereby the higher risk and concomitant trade-off are considered crucial to the future sustainability of the global mineral supply.⁴⁰ The general understanding is that junior mining companies dominate this space.⁴¹ This is due to their relatively high-risk appetite, particularly during commodity market downturns, coupled with specific country risks associated with exploration investment.⁴²

Passive speculation, on the other hand, is attributed to companies acquiring licences with the sole intention of hoarding the asset, and in the process making relatively no meaningful investment by way of exploration work and expenditure in advancing the project.⁴³ This is mostly in anticipation of eventually selling off the asset for higher financial returns during the licence tenure, nevertheless.⁴⁴ Such practice is more akin to “low level” industry operatives, more amenable to corrupt practices, given their lack of attention or effect of any reputational risks thereof.⁴⁵ Where such passive speculation is incentivized through corruption, the possibility for companies to engage in licence stockpiling, by not necessarily meeting their minimum regulatory conditions, becomes imminent.⁴⁶

Moreover, where such circumstances prevail, the granting authorities may not be motivated to cancel such licences, even in cases of breach or expiration.⁴⁷ For fear of potential backlash from more highly placed officials who might have previously gained or continue to gain from such dubious practice.⁴⁸

However, relatively “mature” mining jurisdictions, with intense competition for exploration rights acquisition, have a greater capacity to reduce passive speculation and increase active speculation.⁴⁹ While marginal or less explored jurisdictions are more likely to attract passive speculation based on the allocation system adopted in respect of the legal and regulatory regime in the respective jurisdictions.⁵⁰ The “first-come, first-served” system is considered more prone to passive speculation, thereby resulting in relatively slow or little investment in developing potential mines.⁵¹ Where licences could be granted purely based on the sequence of application, irrespective of the technical and financial capacity beyond the stipulated bare minimum conditions set out in the law.⁵² As a result, these companies would not have adequate technical and financial wherewithal over time to fully develop the project.⁵³ Hence

³⁹ *Ibid.*

⁴⁰ Parliament of Victoria, (2012). Inquiry into greenfields mineral exploration and project development, at 39.

⁴¹ See Biastoch, R., (2017), *supra* no.1 at 65

⁴² *Ibid.*

⁴³ *Ibid.*

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

⁴⁶ Williams, A. and Wolfe, A., (2015). Constructing a Diagnostic Framework on Corruption Risks in Mining Sector Licensing, at 50.

⁴⁷ *Ibid.*

⁴⁸ *Ibid.*

⁴⁹ See Biastoch, R., (2017), *supra* no.2 at 65.

⁵⁰ *Ibid.*

⁵¹ See UNCTAD, (2011), *supra* no.1 at 97.

⁵² See Ortega Ginores, E., Pugachevsky, A. and Walsler, G., (2009), *supra* no.1 at 35.

⁵³ *Ibid.*

tender bids are more tenable, especially in countries where internationally acceptable minimum thresholds of mineral reserves have been acquired for different mineral assets.⁵⁴

Such a scenario is akin to the method of privatization of public assets through public-private partnerships.⁵⁵ In such instance, all relevant information is packaged, with clearly defined criteria and incentives offered through a public tender to qualified interested parties.⁵⁶ While this gives prospective bidders significant comfort, by being able to assess their investment imperatives, it, however, invariably goes with upfront cost implications.⁵⁷ This ensures the eventual granting of exploration rights to companies with the technical and financial capacities to develop the deposit, thereby eliminating potential speculators from the process.⁵⁸

However, even with the tender system, elimination of passive speculation requires well defined objective criteria, based on the core principles previously noted.⁵⁹ Without which the process will be prone to corruption, thereby exposing the sector to the same risks associated with it.⁶⁰

2.3: Analytical Framework

Addressing passive speculation, irrespective of the granting option adopted, would, therefore, require a framework built around the core principles earlier mentioned, and from which the four critical factors are discussed.

2.3.1-Legal

One of the most critical issues in legal and regulatory regimes is the degree of discretionary powers of the granting authorities, at the different phases of the licensing process.⁶¹ Such discretionary powers could emanate from ambiguous laws that necessitate the use of a veto by the granting authority.⁶² Thereby providing an opportunity for companies or individuals to influence such veto decisions, either in their favour or against potential competitors.⁶³

Where the legal and regulatory regimes are worded and unambiguous, they may include relinquishment and renewal requirements, enforceable throughout the licence tenure.⁶⁴ A maximum of two renewal opportunities, where provided by law, is considered an effective means of committing companies to

⁵⁴Haddow, K., 2014. "Should Mineral Rights for Hard-Rock Minerals be awarded by Tender?" *Journal of Energy and Natural Resources Law* 32(3), at 344.

⁵⁵ Mikhaylova, E. and Stanley, M., (2011). *Mineral Resource Tenders and Mining Infrastructure Projects Guiding Principles*, at 2.

⁵⁶ *Ibid.*

⁵⁷ See Haddow, K., (2014), *supra* no.1 at 345.

⁵⁸ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.2 at 35.

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*

⁶¹ See Williams, A. and Wolfe, A., (2015), *supra* no.1 at 34.

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.3 at 37.

invest resources in developing their mineral assets over time.⁶⁵ This eliminates the possibility of hoarding, and freeing up land for potentially more interested and capable explorers.⁶⁶

Additionally, express provisions for transfer of mineral rights promote active speculation on the one hand, by allowing junior companies to sell their rights to bigger companies, upon discovery.⁶⁷ However, in order to forestall passive speculation, such provisions may include: the transferred licence retaining its initial issuance and expiry dates.⁶⁸ In addition, it may require authorization, through strict compliance standards and due diligence.⁶⁹ Such compliance standards may include taxation of licence transfers, as well as the prevention of licence transfer for a specified period upon acquisition.⁷⁰

2.3.2-Technical

Work programs are a key pre-requisite for applicants seeking exploration rights in most mining jurisdictions and are mostly anticipated to increase in content relative to the corresponding expenditure.⁷¹ This is based on the assumption that rights holders' ramp up exploration efforts throughout the licence tenure as mineralization prospects are delineated.⁷² It essentially serves as an effective means of compelling licence holders to adequately develop the assets or lose it.⁷³ This becomes part of the pre-conditions for the eventual renewal of mineral rights.⁷⁴

Also, a core objective of granting exploration rights is to facilitate exploration and account for the details of such findings to the granting authority.⁷⁵ This progressively contributes towards updating the geological database of the country, through the submission of periodic technical reports on key findings within their tenements.⁷⁶ Details of such reports will include geological surveys and allied work, which are confidential until the licence expires, or surrendered by the holder.⁷⁷ This requirement further extends to providing relinquishment reports, supported by all relevant technical data acquired within the area to be relinquished.⁷⁸ Moreover, they are mostly followed by strict cancellation clauses in the event companies fail to uphold such statutory obligations.⁷⁹

⁶⁵ Anderson, C., (2011). Creating a Legislative Framework to Govern Mining in Zimbabwe, at 6-7; AMLA Guiding Template, (2017) at 143.

⁶⁶ *Ibid.*

⁶⁷ Anderson, C., (2011), *Ibid*; AMLA 2017, *idem* at 163.

⁶⁸ See Anderson, C., (2011) *supra* no.1 at 6-7.

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

⁷¹ Kazakhstan Joint Economic Research Program, (2013). Kazakhstan-Legislation for Allocation of Mining Exploration Rights, Report vol. 2, at 13.

⁷² *Ibid.*

⁷³ Cameron, P.D. and Stanley, M.C., (2017). Oil, Gas, and Mining: A sourcebook for understanding the extractive industries. vol. 1, 1 edn, World Bank Group, Washington, D.C, at 84.

⁷⁴ *Ibid.*

⁷⁵ *Idem* at 86.

⁷⁶ *Ibid.*

⁷⁷ *Ibid*, See Williams, A. and Wolfe, A., (2015), *supra* no.2.

⁷⁸ See Cameron, P.D. and Stanley, M.C., (2017), *supra* no.1 at 86

⁷⁹ *Ibid.*

2.3.3-Financial

Exponential increments in licence fees over the licence tenure and minimum exploration expenditure commitments are additional mechanisms employed to prevent passive speculation.⁸⁰ Thereby prompting companies to ramp up exploration investment, as well as maintaining the country's investment attractiveness.⁸¹ In this regard, the cost implications of rights holders are such that licence fees are estimated on the bases of size and age, rendering its monitoring and enforceability less cumbersome.⁸² This instigates voluntary relinquishment of areas with a lesser prospect, in addition to minimizing the risks of security of tenure of the rights holder.⁸³

Also, minimum exploration expenditure commitments, mostly based on age and licence size, are typically considered separate from administrative and other general expenditures.⁸⁴ Hence such commitments are expected to be met through actual and verifiable spending,⁸⁵ rather than indirect, general, and administrative costs, and are mostly non-negotiable.⁸⁶ Both mechanisms require establishing a cost threshold that creates a fine balance between discouraging passive speculation, while at the same time promoting active speculation and legitimate exploration.⁸⁷ However, unlike licence fees calculations, which are direct, companies, are expected to submit proof of exploration expenditure, which creates monitoring, validation, and enforceability relatively difficult for the granting authority.⁸⁸

2.3.4-Administrative

In modern mining jurisdictions, Mineral Rights Cadastres are established public sector institutions, with primary administrative mandate and management systems for mineral resource access and tracking sector performance.⁸⁹ Hence Mineral Rights Cadastre and its Systems play a fundamental role in the regulation and administration of mineral title ownership and information.⁹⁰ Thereby deriving legitimacy from the legal and regulatory framework, where hard copy documents support such systems, bestowed the exclusive and full legal and administrative validity.⁹¹

With such systems enhanced by technology, they minimize the use of discretion, through the use of automated systems designed to activate deadlines for the fulfillment of statutory obligations.⁹² Thus leading to forfeiture of mineral rights in some instances, as well as preventing the granting of mineral

⁸⁰ See Biastoch, R., (2017), *supra* no.3 at 65.

⁸¹ *Ibid.*

⁸² *Idem* at 66.

⁸³ *Ibid.*

⁸⁴ *Ibid*; see Cameron, P.D. and Stanley, M.C., (2017), *supra* no.2 at 86.

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*

⁸⁷ See Biastoch, R., (2017), *supra* no.4 at 66.

⁸⁸ *Ibid.*

⁸⁹ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.4 at 11.

⁹⁰ *Idem* at 20.

⁹¹ *Ibid.*

⁹² See Williams, A. and Wolfe, A., (2015), *supra* no.3 at 35

rights, where the applicant does not fulfil certain conditions.⁹³ A timely update of licence status is therefore considered a key indicator of anti-speculation regimes.⁹⁴ In this regard, greater transparency is enhanced through online systems that grant public access and oversight.⁹⁵ Especially where deadlines, obligations, and processes are provided for in the legal and regulatory frameworks, thus providing clarity and certainty to companies.⁹⁶

Also, the advent of computerized cadastre systems has bolstered their administrative and institutional efficiency with shorter time leads for processing applications and eliminating licence overlaps.⁹⁷ This provides greater security of tenure, reduces undue influence and corruption, by eliminating the use of discretionary powers in the execution of the legal and regulatory provisions.⁹⁸ They essentially serve as the key management system that aids administrative decisions through access to accurate and timely information, thus enhancing relatively seamless licence management based on procedures.⁹⁹

2.4: Conclusion

Speculation in the mining sector can be generally regarded as active or passive, based on a unique set of circumstances. Active speculation involves acquiring exploration licences for purposes of undertaking initial exploration work. The drive for this type of speculation is to increase the value of the asset and ultimately sell off to major mining companies for profit. Passive speculation, however, involves acquiring licences, without the requisite technical and financial capacity to develop the asset. It is largely driven by the sole intention of hoarding the asset, in anticipation of selling off the asset directly to other interested parties, regardless. In the process, no meaningful investment is made by way of exploration to advance the project.

In this regard, promoting active speculation, especially in less mature mining jurisdictions, while mitigating passive speculation, irrespective of the method of allocation of exploration rights, requires well defined objective criteria. Based on a set of core principles embedded in the analytical framework established, without which the process will be prone to abuse, thereby ultimately hindering the development of the sector.

International “best practice,” therefore, suggests that contemporary legal and regulatory regimes must contain specific provisions aimed at mitigating speculation-especially passive speculation. Where such provisions will be considered in light of the four factors espoused:

Legal: including curtailing or minimizing the degree of discretionary powers given to granting authorities for the allocation and management of exploration licences, which sometimes emanate from ambiguous laws. Thereby necessitating veto decisions that may be influenced by individuals or companies against potential competitors.

⁹³ *Ibid.*

⁹⁴ *Ibid.*

⁹⁵ *Ibid.*

⁹⁶ *Idem at 50.*

⁹⁷ See Ortega Ginores, E., Pugachevsky, A. and Walsler, G., (2009), *supra* no.5 at 20.

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*

There may also be specific provisions regarding licence transfer under strict terms and conditions. Such provision could be aimed at promoting active speculation on the one hand while preventing passive speculation on the other hand.

Technical: including specific provisions for the submission of work programme and periodic technical reporting obligations as a pre-condition for granting exploration rights and subsequently maintaining the validity of such rights based on strict compliance. They are mostly designed to increase in form and content over the tenure of the licence and is considered a “use it or lose it” strategy. This aims to compel the right holders to develop projects adequately, and implicitly increase the geological knowledge base of the country.

Financial: provides for exponential increase in licence fees and minimum exploration expenditure commitments, based on size and age of licence. This provision makes monitoring and enforceability less cumbersome. As a result, it instigates voluntary relinquishment of areas with fewer prospects throughout project development.

Administrative: include legal provisions, requiring the establishment of a mineral rights cadastre, with primary administrative mandate and management systems for regulating mineral title ownership and information-considered “best practice.” Where such systems are enhanced by technology, they minimize the use of discretion, through the use of automated systems designed to activate deadlines for the fulfillment of statutory obligations. This becomes effective, especially wherein deadlines, obligations, and processes are provided for in the legal and regulatory framework. Thus providing clarity and certainty to companies, as well as enhancing the integrity of the licensing system.

CHAPTER 3: SIERRA LEONE'S EXPLORATION LICENSING REGIME (CASE STUDY)

3.1: Introduction

This chapter presents a high-level overview of Sierra Leone's mineral sector, the evolution of its exploration history and status of exploration licensing, under past and current legal and regulatory frameworks. In addition to presenting a case study, it is aimed at identifying potential speculation-mitigating or prevention provisions in the current legal and regulatory framework based on the four critical factors discussed in chapter 2.

Sierra Leone has a long history of mineral sector development, with the commencement of exploration dating back to the early 1930s. This earlier exploration led to initial discoveries of Diamond, Iron ore, and Chromite, which were later developed into relatively medium-sized mines. This heralded official mining operations, following the enactment of its first mining law in 1927.¹⁰⁰ The country's mining sector is currently characterized by privately-owned, large scale iron-ore, diamonds, bauxite, and rutile producers, as well as artisanal and small-scale operators.¹⁰¹ This makes the sector key to the country's economy, with mineral exports accounting for 2.7% of national GDP and 91.1% of total exports in 2016.¹⁰²

The legal and regulatory framework currently governing the sector comprises the Mines and Minerals Act, 2009,¹⁰³ and the Mines and Minerals Regulations, 2009,¹⁰⁴ respectively. Sierra Leone's exploration licensing regime is, therefore, derived from these. Among other types of licences, it provides for the granting of exploration licences, following the submission of applications, assessment, and subsequent monitoring for compliance once the licence is acquired.¹⁰⁵ This is implemented through an institutional framework-the National Minerals Agency, which provides regulatory oversight for effective licensing management, among other functions, based on the guidelines established.¹⁰⁶

This legal and regulatory framework will, therefore, be the principal document used in identifying the speculation mitigation provisions in respect of the four critical factors. Based on these factors, details of all provisions, ranging from the processes, procedures, form, content, and registry of exploration licence applications, will be considered. Additionally, the disposition and granting of licences, the attendant rights and obligations of the holder, as well as the transparency and accountability mechanisms will form the totality of the discussion.

Conclusions will then be drawn based on the country's exploration history and current status, in respect of the speculation-mitigating measures contained in the legal and regulatory frameworks. This conclusion will eventually set the tone for analyses of these measures against the analytical framework in the subsequent chapter.

¹⁰⁰ Mineral Potential of Sierra Leone, (2004), at 1. Available at National Minerals Agency Library in hard copy.

¹⁰¹ Available at <https://eiti.org>; July 2019, (last visited 02/09/2019).

¹⁰² *Ibid.*

¹⁰³ Herein referred to as the Act.

¹⁰⁴ Herein referred to as the Regulations.

¹⁰⁵ Fanthorpe, R. and Gabelle, C.,(2013). Political economy of extractives governance in Sierra Leone, at 29.

¹⁰⁶ *Ibid*; available at www.SLIEPA.org, (last visited 02/09/19).

3.2: Mineral Sector Overview, Exploration History and *Status of Licensing*

Sierra Leone's mineral sector has undergone different cycles of events, ranging from active exploration and mining to an almost inactive state. This was prior to the civil war in 1991, as well as the post-civil war years of 2002.¹⁰⁷

Relative to the country's population and GDP, the sector was a vital driver of the formal economy, with 20% of GDP, 15% of revenues, and more than 90% of exports recorded pre-1991 and also in 2009. Thus becoming the 3rd and 10th ranked global producer of diamonds and rutile, respectively.¹⁰⁸ This was further boosted in recent years with a surge in exports, owing to two relatively new operating iron ore mines.¹⁰⁹ This led to a spike in real GDP from an average of 5.7% in 2010-2011 to 15.2% in 2012, peaking at 20.1%, in addition to accounting for 94.3% of export revenues in 2013.¹¹⁰

Several reports indicate that all previous and existing mines in Sierra Leone emanated from exploration undertaken between the late 1920s - 1970s, mainly by the Sierra Leone Geological Surveys. Albeit mostly supported by the then British colonial administration, overseas development programmes and in some instances, private international companies.¹¹¹ This, however, only accounted for approximately 50% of the country, thus rendering a holistic assessment of the mineral potential of the country difficult.¹¹² Large scale minerals production has been mostly confined to these previous discoveries and includes diamonds, rutile, bauxite, and iron ore, respectively.¹¹³ In addition to gold, having been mostly limited to artisanal and small scale production, with primary discoveries reported relatively recently.¹¹⁴

However, exploration investment significantly dwindled between 1970 to 1991, partly due to rising political instability, thus rendering the country a mere speculative exploration target.¹¹⁵ There has, however, been a gradual resurgence of exploration investment, post 2002, mostly driven by private companies, although, in most part, limited to areas of previously proven deposits.¹¹⁶ Where regional-scale or limited exploration has been undertaken, there are no official records of the discovery of mineral resources beyond rudimentary indications of mineral occurrence in some instances.¹¹⁷ The country's mineral exploration database is therefore limited to a 2004 compilation, albeit based on the

¹⁰⁷ UNCTAD, (2009). Investment Policy Review of Sierra Leone. https://unctad.org/Docs>diaepcb200914_en.pdf, at 1-5

¹⁰⁸ *Ibid*; Warnsloh, J.M., (2011). Geology and Mineral Industry of Sierra Leone. Geologic Country Report with Emphasis on Diamonds, Gold, and Titanium, at 13.

¹⁰⁹ See www.SLIEPA.org, *supra* no.1; Bermúdez-Lugo, O., (2013). Minerals Yearbook. U.S. Geological Survey. Sierra Leone. (Advance Release) 2015

¹¹⁰ *Ibid*.

¹¹¹ Freitag, K.P., (1974). The Mineral Potential of Sierra Leone. A Compilation of Information from Various Published and Unpublished Reports. Available in paper file at the National Minerals Agency Library; see Mineral Potential of Sierra Leone, (2004), *supra* no.1; see Warnsloh, J.M., (2011), *supra* no.1.

¹¹² See Freitag, K.P., (1974), *supra* no.1 at 10.

¹¹³ See Freitag, K.P., (1974), *supra* no.2; see Warnsloh, J.M., (2011), *supra* no.2.

¹¹⁴ *Ibid*.

¹¹⁵ See UNCTAD, (2009), *supra* no.1.

¹¹⁶ See Warnsloh, J.M., (2011), *supra* no.3.

¹¹⁷ Available at <https://sierraleone.revenuedev.org/dashboard>. GOSL online repository, (last visited 04/09/19).

1950s to 1970's data, with varying extents of groundwork to validate it.¹¹⁸ This emphasizes the paucity of the country's existing geological data.¹¹⁹ Against this background, the country, through support from the *World Bank*, commenced a nationwide air-borne geophysical survey in October 2018.¹²⁰ This aims to improve the geological knowledge of the country, in a bid to attract further exploration investment.¹²¹

Formal regulation of the country's mineral sector was introduced by the enactment of the Minerals Act of 1927. This was followed by a host of mineral discoveries, mostly under Special Exclusive Prospecting Licences, covering relatively large areas, with varying lease tenures granted running into tens of years.¹²²

The 1927 Minerals Act was amended as the Revised Minerals Act of 1960 and continued in force until repealed and replaced in 1994 by the Mines and Minerals Decree.¹²³ Over this period, licences covering relatively large areas, termed regional exploration licences, somewhat similar to the previously termed Special Exclusive Prospecting Licences, were granted to some companies.¹²⁴

The current institutional and regulatory set up for administering the sector comprises the National Minerals Agency (NMA) and the Ministry of Mines and Mineral Resources, respectively.¹²⁵ The Ministry is the key government entity, with policy-making responsibility and overall management of the sector, and the NMA, serving as a semi-autonomous entity, having regulatory oversight functions.¹²⁶ Both institutions' regulatory operations are primarily underpinned by the current Mines and Mineral Act and Regulations 2009, (herein referred to as the Act, and Regulations respectively).¹²⁷ These will be considered in light of the speculation-mitigating measures provided therein.

3.3: Speculation-Mitigating Provisions

3.3.1 Legal

- ***Allocation of Exploration licenses, Suspension, and Cancellation of Mineral Rights***

Sections 25 (1&2) and 27 of the Act provides for the granting of exploration rights either based on public tender or first-come, first-served, respectively. They stipulate defined terms, conditions, and processes under which either of the two may apply. Additionally, section 4(1-5) of the Regulations provides further details on the process involved in the case of public tender.

Upon granting of the exploration right, Sections 74, 75 and 76(1) of the Act describe the content, terms, and conditions of the licence. These include a maximum four year initial validity period from the date of

¹¹⁸ Available at <https://www.mining-journal.com/September2018>, (last visited 30/08/2019).

¹¹⁹ *Ibid.*

¹²⁰ *Ibid.*

¹²¹ *Ibid.*

¹²² See Mineral Potential of Sierra Leone, (2004), *supra* no.2 at 1; See Freitag, K.P., (1974), *supra* no.3 at 256.

¹²³ See Mineral Potential of Sierra Leone, (2004), *supra* no.3 at 1.

¹²⁴ See Mineral Potential of Sierra Leone, (2004); GOSL online repository, *supra* no.1.

¹²⁵ Available at <http://www.nma.gov.sl> (last visited 07/09/2019).

¹²⁶ *Ibid.*

¹²⁷ *Ibid.*

grant, a cadastral plan of the licence area, with size not exceeding 250sq.km, an approved work programme, and minimum expenditure commitment.

Additionally, section 53 (1-3) of the Act provides for the Minister to suspend or cancel exploration rights, in consultation with the Minerals Advisory Board, in cases of breach of stipulated compliance obligations. It further provides for such a decision to be preceded by written notice for recourse in not less than 30 calendar days, failing which the Minister may serve a substantive notice of suspension or cancellation of the mineral right.

- ***Relinquishment and Renewal***

Sections 76 (2, 3,6,7,8 &11) of the Act, provides for licence holders to apply, prior to or three months before the expiration of the initial licence tenure, for two consecutive terms. With subsequent renewals being for three and two years respectively. This will be for an area not more than 125 sq.km of the initial maximum area, unless where there is strong justification by way of the extent of mineralization beyond the 125 sq.km.

These sections further provide details of the form, terms, and conditions upon which such renewals may be granted or refused by the Minister, after due consideration by the MAB. Such terms and conditions for renewals and relinquishment are further provided for in sections 28 and 29 of the Regulations.

- ***License Transfer***

Section 83 of the Act, provides for a transfer of exploration rights, upon submission of a complete application, in form and content as described, for consideration by the Minerals Advisory Board. Such consideration is based on defined terms and conditions, which are subsequently approved by the Minister. It further provides for all rights and obligations in respect of the remaining tenure of the licence to be assumed by the Transferee.

Furthermore, sections 32 (2,4&5) of the Regulations, stipulate a minimum two-year satisfactory operation of the licence by the transferor, in compliance with its obligations, to render it eligible for transfer. In addition to other information, which may be required within a specific time frame, for the consideration of the Minister's authority to grant or reject the transfer. Albeit on such terms that the Minister may consider appropriate, with reasons proffered.

3.3.2 Technical

- ***Work Programme***

Sections 70 (g) of the Act and 24 (2)(c) of the Regulations require the submission of work programmes for the first year of exploration. This is in addition to a suggestive programme for the remaining tenure of the licence as a pre-condition for application. Such a work programme is considered adequate based on guidelines in the regulation and is expected to be based on the existing geological knowledge and

exploration history of the area. To the extent that it would further build on the knowledge base or lead to a resource or reserve definition over the course of the exploration.

- ***Technical Reporting***

Sections 78 (1&2) of the Act, and 32(5, 8, 11&12) of the Regulations, deal with the operational obligations of an Exploration licence holder. They range from the commencement of exploration within three months of acquisition of the licence to submission of bi-annual and annual technical reports, measured against the previously approved work programme.

Additionally, an indicative work programme for the subsequent year, aimed at building on the previous year's work is also required. These reports are required to be submitted with full technical details of all surveys conducted, including geophysics, geochemistry, mapping, drilling, and analysis of the results obtained. Such reports are considered confidential over the tenure of the licence until 90 days upon expiration. Also, the licence holder is obliged to maintain all technical data provided in the respective reports in both electronic duplicate and physical forms at a registered premise in a manner considered satisfactory by the Minister.

3.3.3: Financial

- ***Declaration of Beneficial Ownership and Financial Resources***

Section 70 (A&F) of the Act, deals with the financial preconditions imposed on applicants and include a declaration of shareholders with beneficial ownership of more than or equal to 5% of share capital. In addition to details of financial resources available to undertake exploration required. Also, an audited and certified financial statement of the company for the year immediately preceding the application is required.

- ***Reconciliation of minimum expenditure commitments***

Sections 78(2) (i)&(3) of the Act and 32 (15) of the Regulations provide for submission of audited financial statements prior to, or three months post end of the year. The provision is in respect of expenditure explicitly incurred relating to exploration work undertaken during the year. This will be measured against the expenditure commitment of that year, and where such expenditures fall short of the commitment, it shall be considered a debt recoverable through legal redress. However, the Minister may accept or decline to waive off such debt once, during the licence tenure. This can be effected where the minimum expenditure commitment of the succeeding year in which debt incurred is more than the approved expenditure commitment.

Furthermore, section 23 (1&2) of the Regulations provides a formula for the calculation of minimum allowable expenditure based on a set of variables. This includes a fixed cost plus licence area size and age, with such expenditure required to rise exponentially year on year. Such that the variables could be

adjusted to ensure that expenditure commitments are in line with stipulated costs over the licence tenure.

- ***Payment of area-based annual licence fee***

Additionally, Sections 2(3)(b) and 32(1 & 4) of Regulations stipulate an area-based payment of annual licence fee upon granting or renewal within a 30 calendar period. A failure to pay within the stipulated time frame results in automatic cancellation of the right.

3.3.4: Administrative

- ***Establishment of a Mining Cadastre Office and Purpose***

Sections 39-40 of the Act and 5-6 of Regulations provides for the Director to establish a mining cadastre office. A cadastre system is also set up for the overall management of mineral rights from the point of application to operationalization. These include the registration of applications in a prescribed manner, in both hard copy and digital forms, to validation, assessment, and granting of the rights through the issuance of certificates.

- ***Form, the content of Mineral Rights Register and evidentiary provisions***

Section 41-48 of the Act and 7-9 of Regulations provide for such register to contain unique information about company ownership, mineral type, area, size, and time of registration. Upon granting the licence, additional information required includes licence tenure, renewals, relinquishment, transfers, submission of periodic reports and fees paid. Such specific dates and information are considered conclusive evidence of validity or otherwise, and maintained in the register and cadastral map, in both hard and digital forms.

Additional provisions of conclusive evidence take the form of either receipt, in respect of payments, letters of acknowledgement for submission of periodic reports and statutory financial information, suspension, cancellation, and transfer certificates. Also, section 53(5) of the Act provides a specific time frame of “seven calendar days” for the Director to effect the registration of cancellation in the cadastre.

- ***Public Access and Transparency***

Sections 49 of the Act and 10 of the Regulations provide for the granting of public access to all details of the cadastral system. This includes the register of mineral rights, applications, and non-confidential reports in both hard and digital forms within stipulated office hours for a prescribed fee.

3.4: Conclusion

Sierra Leone introduced its maiden mining law in 1927, with active exploration spanning the period 1930 to the 1970s. This was mostly undertaken by the country’s Geological Surveys and overseas development agencies. Where private companies undertook exploration, licences were mostly Special

Exclusive Prospecting rights, covering relatively large areas, up to 2,500 square miles, with tenures running into tens of years. These explorations accounted for only about 50% coverage of the country's landmass, albeit leading to the discovery of all current deposits, some of which developed into previous and current mines. Hence, the mineral sector has been a vital economic driver over the years, with mineral exports accounting for 2.7% of national GDP and 91.1% of total exports in 2016.

Exploration investment, however, dwindled significantly between 1970 and 1991, mainly due to the nationalization of the sector and rising political instability, thereby reducing the country to a mere speculative exploration destination. However, there has been a surge in exploration investment, following cessation in 2002. This surge has been mostly driven by the private sector, leading to the re-establishment of previously abandoned mines and the development of previously proven deposits. Additionally, private companies have been undertaking mostly Greenfield exploration. Even though mining cadastre records do not indicate any significant improvement in the country's geological database beyond the 1970s status quo.

On account of this, Sierra Leone's current exploration licensing regime appears to have been developed in the spirit of promoting private sector exploration investment. This assertion is in the light of a range of speculation-mitigating measures identified in the current legal and regulatory regime. These include: sections 25,27, 39-49, 53(1-3), 70, 74-76, 78 of the Act; and sections 2(3)(b), 4(1-5), 5-10, 23(1&2), 24(2)(c), 32(1,2,4,5,8,11,12 &15) of the Regulations respectively. All of these were discussed in light of the four critical factors of the analytical framework, as summarized below:

Legal- provisions include a "first-come, first-served," or "tender" option for the granting of exploration rights. With an initial four-year maximum tenure and 250 square kilometer area, subject to renewal and relinquishment of 50% of the area. Suspension and cancellation clause for breach of obligations following a 30-day notice of redress, and licence transfer provisions based on a satisfactory minimum of two years of strict compliance to obligations. Also, additional conditions may be stated by the Minister.

Technical- provisions include work programme and periodic technical reporting commitments, based on prescribed guidelines.

Financial- provides for declaration of beneficial ownership and submission of details of financial resources of the company before granting of right, as a pre-condition. Also includes, reconciliation of minimum expenditure commitment with work programme, and payment of area-based licence fees. This increases exponentially, in respect of the age of the licence.

Administrative- provides for the establishment of a mining cadastre office and register of applications, mineral rights, and evidentiary provisions of compliance to statutory procedures. Also includes obligations for maintaining the validity of rights, as well as the transparency and monitoring mechanisms that go with it.

CHAPTER 4: EVALUATION AGAINST ANALYTICAL FRAMEWORK

4.1: Introduction

This chapter seeks to evaluate the speculation mitigation provisions in Sierra Leone’s exploration licensing regime, as described in section 2.2, in respect of the analytical framework. Specific or overlapping provisions relating to each of the four factors of the analytical framework will be considered in light of the content and details of such provisions. To the extent of juxtaposing them with previously established examples or illustrations of “best practice” by institutions such as the *World Bank*,¹²⁸ *Transparency International*,¹²⁹ and the likes. It will take into consideration the processes and practices associated with the granting and regulation of exploration rights, aimed at mitigating speculation while promoting mineral sector development.

Against this background, each of the four critical factors will be discussed under various but cross-cutting sub-themes, taking due cognizance of the “equality before the law” and “good governance” principles.¹³⁰ These will include provisions and practices that may confer discretionary powers in the allocation, evaluation, granting/rejection, suspension, and cancellation of mineral rights. Additionally includes the terms and conditions for operationalizing the exploration rights once granted. These include due diligence on technical and financial commitments and an independent and transparent mechanism for mineral rights administration.

Furthermore, this chapter will seek to highlight potential gaps or inadequacies in the specific provisions. Whether based on context, processes, or practices, in respect of the four critical factors of the analytical framework, in so far as mitigating speculation. This will be done in due consideration of previously noted “best practice,” and ultimately lay the basis for recommendations in the concluding chapter.

4.2: Evaluation

4.2.1: *Legal*

Speculation mitigation provisions that constitute the legal factor of the analytical framework have been highlighted in the previous chapter. These include the dual option for granting exploration rights, as well as the processes and procedures that go with the application, assessment, and granting of the exploration right. Further provisions include a stipulated licence tenure, size, two renewal options-partial (50%) relinquishment condition, suspension, and cancellation for breach of statutory obligations. The right to licence transfer, upon satisfactory review of adherence to certain operational obligations in the first two years of the licence tenure, is also in the Act. All of these provisions are, in many respects, consistent with similar provisions in jurisdictions considered examples of good licensing practice.¹³¹

¹²⁸ See Krakoff, C., (2009) *supra* no.4; El Source Book., (2010), *supra* no. 3.

¹²⁹ Capiris, L., (2017). *Combatting corruption in mining approvals: Assessing the risks in 18 resource-rich countries.* Transparency International Australia.

¹³⁰ See Krakoff, C., (2009), *supra* no. 5; El Source Book., (2010), *supra* no. 4.

¹³¹ See Krakoff, C., (2009), *supra* no.6; El Source Book., (2010), *supra* no. 5.

However, on account of this evaluation, a host of possible gaps which may run contrary to the measures aimed at mitigating speculation are noted below:

- ***Conflicting and ambiguous clauses leading to discretionary powers***

It is worth considering the extent of powers vested in the Minister as the granting authority, in seemingly broad and ambiguous terms. There is an inherent risk that such arbitrary decisions, borne out of ambiguity in the law, could be influenced by corruption or other motivations, which would implicitly encourage speculation.¹³²

While section 71(2) of the Act confers certified advisory duties upon the MAB, as well as the evaluation of work programmes,¹³³ another provision appears to be at variance in both context and procedure.¹³⁴ Under the circumstance, such carte blanche accorded the minister, without any recourse to the MAB, or based on standard evaluation criteria, may be prone to abuse. These conflicting clauses could have far-reaching implications on exploration expenditure commitments in respect of project development.

- ***Potential for political influence in decision making***

The current composition¹³⁵ of the MAB shows a preponderance of government appointees and public servants, compared to representatives of independent professional institutions, civil society, and other interest groups. With previously reported issues of capacity constraints and political considerations in the appointment and promotion of the public sector and civil service corps in Sierra Leone,¹³⁶ such composition could render the MAB pliable to arbitrary decisions. This situation is further compounded, given that even the appointment of representatives of the independent groups is subject to an initial presidential decision.¹³⁷ Given this status quo, the theoretical “best practice”¹³⁸ consideration of incorporating independent experts in such boards may not be achieved. With no official assessment criterion or scorecard for evaluating applicants' technical and financial capability statements or records, it leaves room for manipulation.¹³⁹

- ***Non-compliance and ineffective implementation of statutory obligations***

A case worthy of note is the relatively recent¹⁴⁰ cancellation of thirty six (36) exploration licences by the Minister. Over 50% (20) of the licences were owned by only to companies: Rimco Mining (SL) Limited,¹⁴¹

¹³² See Krakoff, C., (2009), *supra* no.7 at 12; African Mining and Mineral Policy Guide, (2016) at 11.

¹³³ Mines and Minerals Act (MMA), (2009) at S.12.

¹³⁴ *Idem* at S.82: “holder of an exploration rights to periodically, notify the Minister of intended amendments to his work programme of exploration operations, where such amendments shall, unless rejected by the Minister within sixty calendar days upon notification, have effect after such period”.

¹³⁵ *Idem* at S.11(2).

¹³⁶ Srivastava, V and Larizza, M., (2013). Working with the grain for reforming the public service: A live example from Sierra Leone. *International Review of Administrative Sciences*, Volume: 79(3), at 461-470.

¹³⁷ See MMA, (2009), *supra* no.1 at S.11(4).

¹³⁸ Kim, M., (2017). Cambodia’s Mineral Exploration Licensing Process: Governance Risk Assessment. Transparency International Cambodia, at 47.

¹³⁹ *Ibid.*

¹⁴⁰ See <http://www.nma.gov.sl>, *supra* no.1. Public Notice: 31st July 2018 (last visited 10/10/19).

owning nine (9); and King Ho Investment Company Limited,¹⁴² owning eleven (11), respectively. A review of the mining cadastre register revealed that both sets of licences had exhausted their initial four-year tenure, thereby mandating renewal, on condition of partial (50%) relinquishment.¹⁴³ There are, however, no records of such compliance on the part of both companies in that regard.¹⁴⁴ In the case of Rimco, for example, submission of renewal applications, not later than three months before initial expiry,¹⁴⁵ would have meant registration of applications for renewal or otherwise, not later than December of 2015.¹⁴⁶ In the case of King Ho Investments, with its set of licences granted between 2010 and 2012, it should have warranted renewal applications relatively earlier.¹⁴⁷

Additionally, there was a breach of payment of licence fees, based on the initial calculation, and the prescribed escalating fee, upon first renewal. Payments records for Rimco were for the period 2012 to 2016 and King Ho between 2011 and 2014, respectively. Even under such circumstances, both sets of licences continued as valid exploration licences registered in the cadastre and only got cancelled in July 2018.¹⁴⁸

- ***Lack of clearly defined objective criteria***

Although the Act provides for public tender,¹⁴⁹ as an alternative granting option for exploration rights, no records show proof of this system ever been used. This could be attributed to unclear or inadequate terms and conditions for the exclusive use of the tender option, as is the case in other mining jurisdictions. In such cases, the law provides for assets, either previously explored by the state or reverted to the state through cancellation or relinquishment, to be allocated only through public tender.¹⁵⁰

In this respect, a particular instance worth noting is a previous mining licence (ML 02/08),¹⁵¹ granted in 2013 to Baomahun Gold Limited, a 100% owned subsidiary of a public listed company Cluff Gold.¹⁵² The government revoked the licence in 2016 and subsequently granted it to Algom Resources,¹⁵³ as an exploration licence,¹⁵⁴ based on the “first-come, first-served” option for another four years.¹⁵⁵ The decision to choose such a granting option in this case, even though there was significant technical and

¹⁴¹ A Sierra Leone registered subsidiary of a Nigerian-based company-Chicason Group, with a 100% individual Nigerian Beneficial Ownership at the time of application.

¹⁴² A Sierra Leone registered company with 100% single individual Beneficial Ownership at the time of application.

¹⁴³ See MMA,(2009), *supra* no.2 at S. 76(1).

¹⁴⁴ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.1 (last visited 10/10/19).

¹⁴⁵ See MMA, (2009), *supra* no.3 at S. 76(2).

¹⁴⁶ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.2.

¹⁴⁷ *Ibid.*

¹⁴⁸ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.3

¹⁴⁹ See MMA, (2009), *supra* no.4 at S.25.

¹⁵⁰ See El Source Book., (2010), *supra* no. 6 at 19.

¹⁵¹ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.4.

¹⁵² Available <https://www.mining.com/cluff-gold> (last visited 09/10/19).

¹⁵³ Available at www.miningreview.com/Algom/BCM (last visited 09/10/19).

¹⁵⁴ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.5.

¹⁵⁵ See MMA, (2009), *supra* no.5.

commercial data generated by the previous company, based on internationally recognized reporting standards,¹⁵⁶ falls short of best licensing practice.

Apart from the lack of clearly defined objective criteria, it is worth noting that the two instances of non-adherence to statutory provisions show a lack of respect for and compliance with applicable laws. Especially where such laws, in both form and content, are unambiguous and straight forward to interpret and, therefore, must be easy to implement.

Hence they demonstrate a classic case of licence stockpiling, which could have been encouraged, either through political interference or regulatory officials, negatively influencing the decision-making process. This notion could be further reinforced based on the coincidence that the licences only got cancelled in July 2018.¹⁵⁷ This was almost immediately after a change of political leadership, upon successful democratic transfer of power from the previous ruling government to the then opposition party.¹⁵⁸

4.2.2: *Technical*

The submission of work programmes and periodic reports which are expressly provided for in the Act and reinforced in the Regulations, as previously noted, form the key elements of the technical factor. Evidence from this research shows them to be generally consistent, in principle, with good practice provisions.¹⁵⁹ It is, however, worthy to note that a recent *World Bank* study¹⁶⁰ alludes that the evaluation and approval phases of mineral sector licensing are prone to the highest incidences of corruption. In such circumstances, passive speculation becomes one of its possible outcomes.¹⁶¹ Such status quo essentially prevails where the legal and governance frameworks are not adequately prescribed to take due consideration of effective evaluation criteria for work programme assessment,¹⁶² as well as due diligence on the technical capacity of applicants.¹⁶³ The following gaps are hereby noted in this regard:

- ***Lack of effective evaluation criteria***

Beyond the general guidelines,¹⁶⁴ for work programmes, no standard guidelines exist for conducting due diligence on the technical capacity of applicants beyond the scope of the general content of the Act.¹⁶⁵ In light of this, a review of both paper files and the digital cadastre register of applications was conducted during the research. This was intended to verify the details of proof of professional qualifications and experiences of proposed technical staff, and independent confirmation of their

¹⁵⁶ Amara Mining, (2013). Feasibility Study of the Baomahun Project in Sierra Leone. NI 43-101 Technical Report.

¹⁵⁷ See <http://www.nma.gov.sl>, supra no.2.Public Notice: 31st July 2018.

¹⁵⁸ Available at <https://www.aljazeera.com/news/2018/04/sierra-leone-opposition-leader-wins-presidential-election-runoff-180405050505118.html>(last visited 15/10/19)

¹⁵⁹ See El Source Book; 2010, supra no. 7.

¹⁶⁰ Votava, C.L., Hauch, J.M. and Clementucci, F., (2018). License to Drill: A Manual on Integrity Due Diligence for Licensing in Extractive Sectors. The World Bank., at 14-15; see Kim, M., (2017), supra no.2 at 74.

¹⁶¹ *Ibid.*

¹⁶² *Ibid.*

¹⁶³ *Ibid.*

¹⁶⁴ Mines and Minerals Regulations (MMR),(2009),at S.24(2)(c):E1 fifth schedule

¹⁶⁵ See MMA, (2009), supra no.6 at S.70(g).

capability statements. Additionally, the applicants' sector operational history was also noted, as done in some of the "good practice" mining jurisdictions.¹⁶⁶

Out of a total of 16 randomly selected exploration licence applications, eventually granted between 2013 and 2016, approximately 45% had no prior sector operational experience, and no proof of verification of technical capability statements.¹⁶⁷ Evidence shows that in similar circumstances, the evaluation panel, such as the MAB, mostly relies on its internal judgment to assess applications.¹⁶⁸ This leaves room for subjectivity and manipulation, especially where the outcomes of such assessments are not public knowledge.¹⁶⁹ That being said, the recent cancellation of thirty-six (36) exploration licences,¹⁷⁰ could be partly attributed to inadequate application assessment at the outset, as has been previously stated to be the case under similar circumstances.¹⁷¹

- ***Subjectivity in evaluating Technical Reports***

Additionally, although the regulation provides guidelines¹⁷² for self-generated technical reporting, this in itself creates an inherent risk of inaccurate or under-reporting by right holders in some instances.¹⁷³ A random review of open file reports of some of the cancelled licences revealed the lack of standard assessment criteria or scorecard against the reporting template and work programme commitment.¹⁷⁴ Given the circumstance, such reports could have been possibly considered compliant based on subjective internal judgments and not necessarily on the bases of quality, quantum, and content of work done.

4.2.3: Financial

The declaration of beneficial ownership and submission of audited financial statements as pre-requisites for licence application are mostly consistent with "best practice" due diligence efforts towards mitigating speculation.¹⁷⁵ This further buttresses the pre-established notion that an applicant's financial capacity to undertake exploration is inextricably linked to its technical capacity.¹⁷⁶ On account of this notion, an evaluation of the respective mitigation provisions revealed a host of possible gaps that may run contrary to the measures aimed at mitigating speculation.

¹⁶⁶ Department of Natural Resources, Mines and Energy, Queensland, Australia. Financial and technical capability guide, version 1.1, (2018); see Votava, C.L., Hauch, J.M. and Clementucci, F., (2018), *supra* no.1 at 17.

¹⁶⁷ Available at GOSL Mining Cadastre Office. Paper-based files (Accessed 10/10/19).

¹⁶⁸ See Kim, M., (2017), *supra* no.3 at 60-63.

¹⁶⁹ *Ibid.*

¹⁷⁰ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.5 at public notice 31st July 2018.

¹⁷¹ See Kim, M., (2017), *supra* no.4 at 60-63.

¹⁷² See MMR, (2009), *supra* no.1 at E1,5th Schedule.

¹⁷³ Smith, E. and Rosenblum, P., (2011). Enforcing the Rules. Revenue Watch Institute, at 39.

¹⁷⁴ Available at National Minerals Agency Library. Paper-based files (Accessed 10/10/19).

¹⁷⁵ See Krakoff, C., (2009), *supra* no.8 at 16.

¹⁷⁶ See Votava, C.L., Hauch, J.M. and Clementucci, F., (2018), *supra* no.3 at 16-17.

- ***Subjectivity and lack of standard and effective due diligence criteria***

For purposes of proof of financial resources of applicants, section 70(f) of the Act, provides for the submission of audited financial statements of the year preceding the application. This is considered one of the pre-requisites that determine the completeness¹⁷⁷ of an application for an exploration licence. In light of this provision, a review of previous applications,¹⁷⁸ relating to the recently cancelled exploration licences was instigated. It revealed that six of the applications submitted in respect of the substantive exploration rights had no audited financial statements of the years preceding the application,¹⁷⁹ as required by the provision mentioned above.

On the back of this, they were nevertheless considered “complete” applications, based on submission of bank statements provided in lieu-albeit with no records of such statements verified by the MAB or the mining cadastre office.¹⁸⁰ Assuming that the “completeness” was based on the “satisfaction” of the mining cadastre office as provided for by section 25(1) of the Regulations, this could or should have been further evaluated by the MAB. Where this is done, it could ascertain the efficacy of the evidence, as provided for in section (25) (2) of the Regulation.

With no records of due diligence by the MAB, against any publically available criteria having been used, it leaves the impression that the bank statements were considered prima facie. This is against the apprehension that banks statements are not necessarily be the most reliable means of ascertaining an applicant’s financial capability. This is predicated on the notion that cash deposits could be withdrawn by applicants immediately after acquiring the licence. This may well be so, especially where, in most cases, they were merely meant to fulfill the terms of acquiring the licence in the first place.¹⁸¹ This situation has been previously highlighted as one of the very high risks associated with granting licences in some mining jurisdictions, including Sierra Leone.¹⁸²

- ***Complexities of prescribing and enforcing financial obligations***

Operational obligations on rights holders, through minimum expenditure commitment, and escalating rental fees, are typically prescribed with due consideration for the inherent complexities of setting such minimum requirements.¹⁸³ In addition to not being able to verify such expenditure claims made by right holders.¹⁸⁴ This may be, either due to lack of capacity on the part of the regulator, or difficulty in determining an optimum amount to discourage speculation.¹⁸⁵ While also eliminating the risk of setting prohibitive charges that would prohibit genuine investors.¹⁸⁶

¹⁷⁷ See MMA (2009), *supra* no.7 at S.70, 71.

¹⁷⁸ See GOSL Mining Cadastre Office. Paper-based files, *supra* no.1 (Accessed 10/10/19).

¹⁷⁹ *Ibid.*

¹⁸⁰ *Ibid.*

¹⁸¹ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no. 6 at 40.

¹⁸² See Capiris, L., (2017), *supra* no.1 at 16.

¹⁸³ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.7 at 41

¹⁸⁴ *Ibid.*

¹⁸⁵ *Ibid.*

¹⁸⁶ *Ibid.*

In light of this, a plausible recommendation by the *World Bank*,¹⁸⁷ for determining minimum expenditure commitment is provided for in the Regulation. This is based on a fixed rental fee per surface unit of the licence area, increasing exponentially year on year.¹⁸⁸ However, the verification of compliance to such prescribed expenditure commitment, through the cadastre and NMA library records proved to be somewhat problematic.

This is against the background that the information checklist,¹⁸⁹ found in the Regulation, including summary expenditure statements, to accompany periodic reports, is being mostly relied upon. This is without any recourse to audited financial statements, even where it is meant to be the case, as stated on the checklist. This is further compounded by the Act,¹⁹⁰ only making it explicitly mandatory at the application and renewal stages of the licensing process. However, whilst the expenditure commitments verification may not have been effectively implemented so far, a more direct approach is being adopted upon renewal of exploration licences. This is based on a function of the product of four times a fixed amount per square kilometer of the retained licence area, in line with section 23 of the Regulation, as previously noted.

It is, however, worthy to note that identifying an optimum licence fee may be fundamentally contingent upon the maturity of the mining jurisdiction, and prevailing commodity market trend.¹⁹¹ This renders such approach not necessarily an absolute "firewall" against speculation.¹⁹² Hence the inadequacy in preventing speculation through this means could be more attributed to a misquotation of fees, as opposed to the methodology being considered inefficient.¹⁹³

4.2.4: Administrative

The establishment of mineral rights cadastre-albeit under varying institutional arrangements has been adopted by different mining jurisdictions to suit specific country needs.¹⁹⁴ In some cases, these outfits are established within the Directorate of Mines, as found in Mozambique.¹⁹⁵ However, irrespective of the institutional arrangement, there is a shift towards establishing hierarchical independence of the Mineral Rights Cadastre office.¹⁹⁶ Albeit remaining interlinked with other directorates such as mines, geological surveys, and the environment under the same sector ministry, in a quest to protect it from possible manipulation.¹⁹⁷

¹⁸⁷ *Ibid.*

¹⁸⁸ See MMR, (2009), *supra* no.2 at S.23.

¹⁸⁹ See MMR, (2009) *supra* no.3 at C2&C3 Schedules.

¹⁹⁰ See MMA, (2009) *supra* no.8 at S.70 (f); 76(3)(a)(i).

¹⁹¹ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.8 at 39.

¹⁹² *Ibid.*

¹⁹³ *Ibid.*

¹⁹⁴ Venugopal, V., (2014). Assessing mineral licensing in a decentralized context: The case of Indonesia. Executive Summary, Natural Resources Government Institute, Oktober, at 3; see Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.9 at 25-27.

¹⁹⁵ *Ibid.*

¹⁹⁶ *Ibid.*

¹⁹⁷ *Ibid.*

- **Lack of hierarchical independence and undue influence**

Sierra Leone's legal framework¹⁹⁸ provides for the establishment of a Mining Cadastre Office. This office is currently a sub-unit within the Directorate of Mines of the National Minerals Agency.¹⁹⁹ Although this falls short of conferring the status of hierarchical independence or equivalence to the other established Directorates within the agency, it may still be considered tenable.²⁰⁰ Albeit, based on the notion that the efficacy of a cadastre office is mostly contingent upon upholding the principles of transparency, non-discretion practice, and the adoption of objective criteria in making decisions, rather than the institutional arrangements set forth.²⁰¹

In the context of such efficacy thereof, careful note is taken of section 43(1) of the Act. This section confers the right of entering grants, renewals, relinquishment, and other memorials into the register, to the Director. In addition to subsection (2) stating a "no effect" provision where such memorials have not been so entered into the register. Furthermore, subsection (3) gives the right to the Director to rectify the register where he is "satisfied" that a mistake had occurred, or there is a case of incorrect entry into the register.

This status quo, without any objective criteria for determining "satisfaction," and the lack of any express provision for legal recourse to the MAB or the Minister could be problematic. In these circumstances, it may create room for manipulation, especially given that the operations of the cadastre office are under the direct supervision of the Director.

- **Weak IT infrastructure and vulnerability**

The Act and Regulations make no express provision for online submission of applications as the exclusive means of submission of applications. This leaves applicants to mostly rely on the physical submission of applications for registration in the cadastral system. With this status quo, the timing of registration of applications should be determined based on the time a complete application is registered in the mineral rights cadastre.²⁰² It may, however, be difficult to independently verify this, especially where the details of a full application are not accessible to potential competing applicants and other interested parties.²⁰³ Thereby rendering the process prone to manipulation, given that they may not be able to determine the "completeness" of the applications and where required, query the integrity of the application process, and the timing of the submission.²⁰⁴

¹⁹⁸ See MMA, (2009), *supra* no.9 at S.39.

¹⁹⁹ See <http://www.nma.gov.sl>, *supra* no.2.

²⁰⁰ See Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009), *supra* no.10 at 26.

²⁰¹ *Ibid.*

²⁰² See MMA, (2009), *supra* no.10 at S.41(3).

²⁰³ See <https://sierraleone.revenuedev.org/dashboard>, *supra* no.5.

²⁰⁴ *Ibid.*

The potential for manipulation could be further exacerbated by the lack of a robust technological infrastructure to support an online application system, as is the case in many other mining jurisdictions.²⁰⁵

4.3-Conclusion

Evaluation of the speculation-mitigation provisions against the analytical framework has generally taken cognizance of “best practice” recommendations by International institutions, including the World Bank, Transparency International, and the likes. However, due cognizance is taken of the fact that similar legal provisions may yield different outcomes in different jurisdictions. Hence this “best practice” imperative has been mostly derived from the commonality of relatively successful outcomes across various mining jurisdictions, in addition to such jurisdictions being either mature or developing. Whilst the commonality of these best practice provisions is generally consistent with Sierra Leone's, some gaps or inadequacies, based on context, processes, and outcomes, have also been highlighted accordingly.

- Conflicting and ambiguous clauses leading to discretionary powers- with an inherent risk that such arbitrary decisions, borne out of conflicting and/or ambiguous laws, could be influenced by corruption, or other motivations, and implicitly encourage speculation. A case in point worthy of note is sections 71(2) and 82 of the Act being at variance, in both context and procedure.
- Potential for political influence in decision making- with the current composition of the MAB showing a preponderance of government appointees and public servants, compared to representatives of independent professional institutions, civil society, and other interest groups. Such composition could render the MAB pliable to arbitrary decisions.
- Lack of clearly defined objective criteria for choosing alternate granting options- in a case of a previous mining license granted in 2013 subsequently revoked, and eventually re-issued in 2016, as an exploration licence, based on the “first-come, first-served” option for another four years.
- Subjectivity and Lack of effective evaluation criteria for technical and obligations compliance-out of a total of 16 randomly selected exploration licence applications approved between 2013 and 2016, approximately 45% had no prior sector operational experience. Additionally there was no proof of verification of technical capability statements. Thus suggesting that the MAB could have relied only on its internal judgment, leaving room for subjectivity and manipulation.
- Subjectivity and lack of standard and effective due diligence criteria for financial obligations compliance- some of the applications submitted in respect of the substantive exploration rights granted had no audited financial statements of the years preceding the application, contrary to section 70(f) of the Act. They were nevertheless considered “complete” applications based on the submission of bank statements. Given that monies deposited immediately before an application could be withdrawn and diverted for other purposes, make this option untenable.

²⁰⁵ See Capiris, L., (2017), *supra* no.2 at 47.

- Complexities of prescribing and enforcing financial obligations- summary expenditure statements, accompanying periodic reports, are mostly being relied on, without any recourse to audited financial statements. This could be attributed either to a lack of capacity on the part of the NMA, or difficulty in determining an optimum amount to discourage speculation. This is further compounded, given that the Act only makes the submission of audited financial statements explicitly mandatory at the application and renewal stages of the licensing process.
- Potential for undue influence on the mining cadastre- some of the rights and responsibilities of the Director are based on what is considered "satisfaction." Such status quo, without any objective criteria for determining "satisfaction," and the lack of any express provision for legal recourse to the MAB or the Minister could be problematic. In these circumstances, it may create room for manipulation, especially when the operations of the cadastre office are under the direct supervision of the Director.
- Weak IT infrastructure and vulnerability- applicants mostly rely on the physical submission of applications for registration in the cadastral system. Given this status quo, the timing of registration of applications could be manipulated, either in favour or against potential competitors.

CHAPTER 5: SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1: Summary and Conclusion

The research aimed to assess Sierra Leone's exploration licensing regime, within the context of the measures taken to mitigate and/or prevent speculation. It is also meant to provide a further insight of the notion of speculation and its drivers in the mining industry. As well as the context in which such measures have been crafted in the regime and applied in practice, in respect of the four critical factors of the analytical framework. With the ultimate objective of identifying potential gaps in preventing or mitigating speculation by and through the regulatory authorities, institutions, systems, and procedures emanating from this regime.

Speculation in the mining sector is generally regarded as active or passive, based on a unique set of circumstances. Active speculation involves acquiring exploration licences for purposes of undertaking initial exploration work to increase the value of the asset and ultimately sell off to major mining companies. Passive speculation, however, involves acquiring licences with the sole intention of hoarding, and in the process, makes relatively no meaningful investment by way of exploration to develop the project.

In this regard, to mitigate or prevent speculation, irrespective of the method of allocation of exploration rights, would require well defined objective criteria. Such criteria, based on a set of core principles embedded in the analytical framework, without which the process will be prone to corruption, thereby ultimately hindering the development of the sector.

International best practice, therefore, suggests that contemporary legal and regulatory regimes must contain specific provisions aimed at mitigating or preventing speculation. Such provisions may be considered in light of the four critical factors below:

Legal: including curtailing or minimizing the degree of discretionary powers given to granting authorities for the allocation and management of exploration licences, which sometimes emanate from ambiguous laws. Thereby necessitating veto decisions that may be influenced by individuals or companies against potential competitors.

Technical: including specific provisions for the submission of work programme and periodic technical reporting obligations as a pre-condition for granting exploration rights and subsequently maintaining the validity of such rights based on strict compliance. They are mostly designed to increase in form and content over the tenure of the licence and is considered a "use it or lose it" strategy.

Financial: provides for exponential increase in licence fees and minimum exploration expenditure commitments, based on size and age of licence. This provision makes monitoring and enforceability less cumbersome. As a result, it instigates voluntary relinquishment of areas with fewer prospects throughout project development.

Administrative: include legal provisions, requiring the establishment of a Mineral Rights Cadastre, with primary administrative mandate and management systems for regulating mineral title ownership and information-considered "best practice." With robust IT infrastructure, they minimize the use of

discretion, through the use of automated systems designed to activate deadlines for the fulfillment of statutory obligations. This is especially where it is believed that greater transparency in licence administration could be enhanced through public access and oversight.

To get an appreciation of these four critical factors requires a broader understanding of the country's minerals sector and the evolutionary history of exploration and current licensing status. Sierra Leone has a long history of mining, with its maiden mining law introduced in 1927, and active exploration spanning the period 1930 to the 1970s. This was mostly undertaken by the country's Geological Surveys and overseas development agencies. In addition to private companies undertaking exploration, mostly under Special Exclusive Prospecting rights, covering relatively large areas, up to 2,500 square miles, and tenures were running into tens of years.

These exploration efforts, however, accounted for only about 50% coverage of the country's landmass, albeit leading to the discovery of all presently known deposits. Some of these deposits have been developed over time, including currently existing mines. Hence, the mineral sector has been a vital economic driver over the years, with mineral exports accounting for 2.7% of national GDP and 91.1% of total exports in 2016.

Exploration investment, however, dwindled significantly between 1970 and 1991, mainly due to the nationalization of the sector and rising political instability. This reduced the country to a mere speculative exploration destination. However, there has been a surge in exploration investment following the cessation of hostilities in 2002. This is mainly driven by the private sector, leading to the re-establishment of previously abandoned mines and the development of some of the previously proven deposits. Additionally, private companies have been undertaking mostly Greenfield exploration. However, mining cadastre records do not indicate any significant improvement in the country's geological database beyond the 1970s status quo.

Sierra Leone's current exploration licensing regime appears to have been crafted in the spirit of promoting private sector exploration investment. This assertion is in line with the measures employed in the exploration licensing regime to mitigate and or prevent speculation. These have been identified accordingly, and include: sections 25,27, 39-49, 53(1-3), 70, 74-76, 78 of the Act; and sections 2(3)(b), 4(1-5), 5-10, 23(1&2), 24(2)(c), 32(1,2,4,5,8,11,12 &15) of the Regulations respectively.

Hence, the specific clauses here so mentioned, institutional set up, systems, procedures and authorizations emanating from all of these can be collectively regarded as the measures employed in Sierra Leone's exploration licensing regime to mitigate and/or prevent speculation. All of these speculation mitigating provisions have been discussed in light of the four critical factors of the analytical framework, as summarized below:

Legal- provisions include: a "first-come, first-served," or "tender option" for the granting of exploration rights. With an initial four-year maximum tenure and 250 square kilometer area, subject to renewal and relinquishment of 50% of the area. Also, included is a suspension and cancellation clause for breach of obligations, following a 30-day notice of redress. In addition to these, are licence transfer provisions,

based on a satisfactory minimum of two years of strict compliance, as well as additional conditions, which may be stated by the Minister.

Technical- provisions include work programme and periodic technical reporting commitments, based on prescribed guidelines, with penalty clauses including suspension and cancellation in cases of non-compliance.

Financial- provides for declaration of beneficial ownership and submission of details of financial resources of the company before granting of right, as a pre-condition. Also included are reconciliation of minimum expenditure commitment with work programme, and payment of area-based licence fees, which increase exponentially, in respect of the age of the licence.

Administrative- provides for the establishment of a Mining Cadastre Office and register of applications, mineral rights, and evidentiary provisions of compliance to statutory procedures and obligations for maintaining the validity of rights. Also included are transparency and monitoring mechanisms that go with it.

However, it is crucial and worth noting how these speculation-mitigating provisions contained in the exploration licensing regime measure against the analytical framework. This evaluation is against the background that the ultimate test of these measures lies in strict and consistent adherence to the “equality before the law” and “good governance” principles. These principles form the bedrock upon which the four critical factors of the analytical framework were established.

It is therefore worth noting that evaluation of these speculation-mitigating provisions against the analytical framework generally took cognizance of “best practice” imperatives. Such “best practice” imperatives are within the scope of International institutions, like the *World Bank*, *Transparency International*, to name but a few.

However, due cognizance is taken of the fact that similar legal provisions may yield different outcomes in different jurisdictions. As such, these “best practice” imperatives have been essentially derived from the commonality of relatively successful outcomes across various mining jurisdictions, irrespective of maturity or otherwise. Whilst the commonality of these “best practice” provisions are generally consistent with Sierra Leone's, some gaps or inadequacies, based on context, processes, and procedures have also been identified accordingly:

- *Conflicting and ambiguous clause leading to discretionary powers-* with an inherent risk that such arbitrary decisions, borne out of conflicting and/or ambiguous laws, could be influenced by corruption, or other motivations, and implicitly encourage speculation.
- *Potential for political influence in decision making-* with the current composition of the MAB showing a preponderance of government appointees and public servants, compared to representatives of independent professional institutions, civil society, and other interest groups.
- *Lack of clearly defined objective criteria for choosing alternate granting options-* with a case of a previous mining licence granted in 2013 subsequently revoked, and eventually re-issued in 2016, as an exploration licence, based on the “first-come, first-served” option for another four years.

- *Subjectivity and Lack of effective evaluation criteria for technical and obligations compliance*-with out of a total of 16 randomly selected exploration licence applications approved between 2013 and 2016, approximately 45% had no prior sector operational experience. In addition to this, was no proof of verification of technical capability statements. This is suggestive that the MAB could have relied only on its internal judgment, leaving room for subjectivity and manipulation.
- *Subjectivity and lack of standard and effective due diligence criteria for financial obligations compliance*- some of the applications submitted in respect of the substantive exploration rights granted had no audited financial statements of the years preceding the application, contrary to section 70(f) of the Act.
- *Complexities of prescribing and enforcing financial obligations*- with summary expenditure statements, accompanying periodic reports, mostly being relied on, without any recourse to audited financial statements. This could be attributed either to a lack of capacity on the part of the NMA, or difficulty in determining an optimum amount to discourage speculation.
- *Potential for undue influence on the mining cadastre*- with some of the rights and responsibilities of the Director based on what is considered "satisfaction." Such status quo, without any objective criteria for determining "satisfaction," and the lack of any express provision for legal recourse to the MAB or the Minister being problematic.
- *Weak IT infrastructure and vulnerability*- applicants mostly relying on the physical submission of applications for registration in the cadastral system. Hence, the timing of registration of applications could be manipulated, either in favour or against potential competitors.

In conclusion, it is worth noting the recent cancellation of thirty six (36) exploration licences by the Ministry of Mines. A review of the Mining Cadastre register revealed that over 50% (20) of the licences were owned by only to companies. Additionally, both sets of licences had exhausted their initial four-year tenure, thereby mandating renewal, on condition of partial (50%) relinquishment. Without any records of compliance on the part of the respective companies under the circumstance, both sets of licences continued as valid exploration licenses in the cadaster register and only got cancelled in July 2018.

It is therefore worth noting that the two instances of non-adherence to statutory provisions show a lack of respect for and compliance with applicable laws. Especially where such laws, in both form and content, are unambiguous and straight forward to interpret and, therefore, must be easy to implement.

Hence this demonstrates a classic case of licence stockpiling, which is generally considered a speculative practice. This could have been encouraged, either through political interference or regulatory officials, negatively influencing the decision-making process. This notion is reinforced based on the coincidence that the licences only got cancelled in July 2018, almost immediately after a change of political leadership in the country.

In the final analysis, it is worth noting that the speculation mitigation provisions contained in Sierra Leone's current exploration licensing regime demonstrate an aspiration towards an embodiment of a

“best practice” licensing regime. However, the ultimate test of it invariably lies in strict and consistent adherence to the “equality before the law” and “good governance” principles. These principles form the bedrock upon which the four critical factors of the analytical framework were established. However, this research ultimately proves that these principles have been breached in some instances, thereby encouraging speculation to thrive, and possibly impeding the development of the country’s mineral sector.

5.2: Recommendations

- There is a compelling need to minimize or eliminate discretion where absolutely required, across the different phases of the exploration licence administration. This could be done by reviewing and updating the existing regime to include clearly defined evaluation criteria for decision making at every stage. Such decisions and attendant justifications, as per previous recommendation,²⁰⁶ must be considered official and public records, subject to public scrutiny and admissible in court. Additionally, where perceived discretionary actions are upheld by the court, payment of legal fees and other compensations must be instituted.²⁰⁷ This would possibly lend greater credence to the existing provisions.
- Given the potential case of political interference or regulator complicity, a more stringent mechanism aimed at scrutinizing beneficial ownership of licences must be instituted through a sector law review.²⁰⁸ With the intention of warding off Politically Exposed Persons (PEPs).²⁰⁹
- A reconstitution of the institutional arrangement of the Mining Cadastre Office is required to make it more hierarchically independent from the Directorate of Mines. This must be followed by a considerable enhancement of the IT infrastructure to ensure greater applicability of an online system of application, supported by law. Especially in the case of the “first-come, first-served” option, in addition to setting clear conditions for the exclusive use of the tender option with strict guidelines for bidding.
- Review the composition of the MAB through the force of law to reflect greater independence in a bid to minimize political appointments and over-reliance on public servants who may be subservient to higher political authority in decision making.

²⁰⁶ See Votava, C.L., Hauch, J.M. and Clementucci, F., (2018), supra no.4 at 74-75.

²⁰⁷ *Ibid.*

²⁰⁸ Westenberg, E. and Sayne, A., (2018). Beneficial Ownership Screening: Practical Measures to Reduce Corruption Risks in Extractives Licensing. Natural Resource Governance Institute. Retrieved from.

²⁰⁹ *Ibid.*

Bibliography

Primary sources

Statutory Instruments

1. Mines and Minerals Act (2009).
2. Mines and Minerals Regulations (2009).

Secondary sources

Journal articles

3. Haddow, K., (2014). Should Mineral Rights for Hard-Rock Minerals be awarded by Tender? (335-346). *Journal of Energy and Natural Resources Law*, Volume 32, 2014 - Issue 3. <https://doi.org/10.1080/02646811.2014.11435365>
4. Srivastava, V. and Larizza, M.(2013). Working with the grain for reforming the public service: A live example from Sierra Leone. *International Review of Administrative Sciences*, Volume: 79 Issue: 3, (458-485) Sage Publications. [siteresources.worldbank.org>Resources>Larizza_Working_With_the_Grain_.pdf](http://siteresources.worldbank.org/Resources/Larizza_Working_With_the_Grain_.pdf).
5. Venugopal, V., (2014). Assessing Mineral Licensing in a Decentralized Context: The Case of Indonesia-Natural Resource Governance Institute. [https://resourcegovernance.org/analysis-tools>publications>assessing-mineral-licensing-decentralized-context-case-indonesia](https://resourcegovernance.org/analysis-tools/publications/assessing-mineral-licensing-decentralized-context-case-indonesia).

Books

6. Cameron, P.D and Stanley, M.C., (2017). *Oil, Gas, and Mining: A Sourcebook for Understanding the Extractive Industries*. vol. 1, 1 edn, World Bank Group, Washington, D.C. <https://doi.org/10.1596/978-0-8213-9658-2>.
7. Votava, Cari L, Hauch, Jeanne M., Clementucci, Francesco., (2018). *License to Drill: A Manual on Integrity Due Diligence for Licensing in Extractive Sectors* (English). Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/514571530085582916/License-to-drill-a-manual-on-integrity-due-diligence-for-licensing-in-extractive-sectors>.

Online sources

8. African Mining Legislation Atlas. Guiding Template, (2017). <https://www.amla.org/guidingtemplate/part/115>.
9. <https://www.aljazeera.com/news/2018/04/sierra-leone-opposition-leader-wins-presidential-election-runoff-180405050505118.html>.
10. [www.dnrme.qld.gov.au/__data/assets/pdf_file/0009/Department of Natural Resources, Mines and Energy, Queensland, Australia. Financial and technical capability guide, version 1.1](http://www.dnrme.qld.gov.au/__data/assets/pdf_file/0009/Department_of_Natural_Resources,_Mines_and_Energy,_Queensland,_Australia.Financial_and_technical_capability_guide,_version_1.1).

11. <https://eiti.org>; July 2019.
12. <https://www.mining.com/cluff-gold>
13. <https://www.mining-journal.com/September2018>
14. www.miningreview.com/Algom/BCM
15. <http://www.nma.gov.sl>
16. <https://sierraleone.revenuedev.org/dashboard>.
17. <https://www.SLIEPA.org>.
18. <https://www.spglobal.com/marketintelligence/en/news.../world-exploration-trends-2018>

Reports

19. African Mining and Mineral Policy Guide (2016). <https://ianra.org> › images › images › PDFs › Policy-Guide.
20. Alba, E.M. and March, E., (2009). Extractive Industries Value Chain. Extractive Industries for Development, African Region Working Paper. siteresources.worldbank.org/.../ei_for_development_3.pdf
21. Amara Mining, (2013). Feasibility Study of the Baomahun Project in Sierra Leone. NI 43-101 Technical Report. <https://secure.kaiserresearch.com>TRAMZ20130628.pdf>
22. Anderson, C., (2011). Creating a Legislative Framework to Govern Mining in Zimbabwe. <https://resourcegovernance.org>sites>default>files>zimbabwebriefing.pdf>.
23. Bermúdez-Lugo, O., (2013). Minerals Yearbook. U.S. Geological Survey. Sierra Leone (Advance Release) 2015. <https://www.eisourcebook.org>cms>SierraLeoneMineralsYearbook2013.pdf>.
24. Biastoch, R., (2017). Mining for Sustainable Development. Mineral Licensing Corruption Risk Assessment. Transparency International, Mongolia.
25. Capiris, L., (2017). Combatting corruption in mining approvals: Assessing the risks in 18 resource-rich countries. Sydney, Australia: Transparency International Australia.
transparency.org.au>tia>wp-content>uploads>2017/11>M4SD_CombattingCorruption.pdf.
26. Fanthorpe, R. and Gabelle, C., (2013). Political Economy of Extractives Governance in Sierra Leone. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/16726> License: CC BY 3.0 IGO.
27. Fraser Institute, (2019). Annual Survey of Mining Companies. www.fraserinstitute.org/sites/default/files/

28. Freitag, K.P., (1974). The Mineral Potential of Sierra Leone-A Compilation of Information from Various Published and Unpublished Reports. Geological Survey Division, Sierra Leone. (Available in a paper file at the National Minerals Agency Library).
29. Kazakhstan Joint Economic Research Program, (2013). Kazakhstan-Legislation for Allocation of Mining Exploration Rights, Report vol. 2.
<https://www.worldbank.org/en/country/kazakhstan/brief/joint-economic-research-program>
30. Kim, M., (2017). Cambodia's Mineral Exploration Licensing Process: Governance Risk Assessment. Transparency International Cambodia.
ticambodia.org>1502788284GovernanceRiskAssessment12.08.17.pdf.
31. Krakoff, C., (2009). Sector licensing studies: Mining sector. Investment Climate Advisory Services, World Bank. openknowledge.worldbank.org/handle/10986/27787.
32. Mineral Potential of Sierra Leone, Geological Survey Division (2004). Available in paper file at the National Minerals Agency Library.
33. Mikhaylova, E. and Stanley, M., (2011). Mineral Resource Tenders and Mining Infrastructure Projects Guiding Principles. www.eisourcebook.org/cms/files/attachments/worldbank/5.
34. Ortega Ginores, E., Pugachevsky, A. and Walser, G., (2009). Mineral Rights Cadastre: Promoting Transparent Access to Mineral Resources.
documents.worldbank.org/curated/en/2009/06/10587371/.
35. Parliament of Victoria, (2012). Inquiry into greenfields mineral exploration and project development.<https://www.parliament.vic.gov.au>287-edic>inquiry-into-greenfields-mineral-exploration-and-project-development-in-victoria>.
36. Westenberg, E. and Sanye, A., (2017). Beneficial Ownership Screening: Practical Measures to Reduce Corruption Risks in Extractives Licensing.
<https://resourcegovernance.org/sites/default/files/documents/beneficial-ownership-screening>
37. Sierra Leone Medium-term National Development Plan, (2019), vol.1
www.imf.org/en/Publications/CR/Issues/2019/07/09/.
38. Smith, E. and Rosenblum, P., (2011). Government and Citizen Oversight of Mining: Enforcing the Rules. Revenue Watch Institute. www.scribd.com/document/141942266/Smith.
39. UNCTAD, (2009). Investment Policy Review of Sierra Leone.
https://unctad.org>Docs>diaepcb200914_en.pdf
40. UNCTAD, (2011). Best Practices in Investment for Development. Case Studies in FDI (How to Attract and Benefit from FDI in Mining: Lessons from Canada and Chile).
unctad.org/en/Docs/diaepcb2010d11_en.pdf
41. UNCTAD, (2019). World Investment Report. Special Economic Zones.
https://unctad.org>PublicationsLibrary>wir2019_overview_en.pdf.

42. Warnsloh, J.M., (2011). Geology and Mineral Industry of Sierra Leone. Geologic Country Report with Emphasis on Diamonds, Gold, and Titanium). [Jmw-geo.com>wp-content>uploads>2016>Sierra-Leone-Geology-and-Mineral-Industry.pdf](http://jmw-geo.com/wp-content/uploads/2016/Sierra-Leone-Geology-and-Mineral-Industry.pdf).
43. Williams, A. and Wolfe, A., (2015). Constructing a Diagnostic Framework on Corruption Risks in Mining Sector Licensing. <http://im4dc.org/wp-content/uploads/2015/07/Corruption-Risks-in-the-Mining-Chain-Final-Completed-Report.pdf>
44. World Bank, (2010). Extractive Industries Sourcebook. Good practice note for Granting Mineral Rights. [www.eisourcebook.org>Fcms>files>uow_granting_mineral_rights;_a_good_practice_note.pdf](http://www.eisourcebook.org/Fcms>files>uow_granting_mineral_rights;_a_good_practice_note.pdf).