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The process of obtaining a License To Operate in the Mining Sector: An Overview

Le processus d'obtention de la licence d'opérer dans le secteur minier : Un aperçu

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Résumé

Dans le secteur minier, une licence d'opérer désigne un permis accordé par une agence gouvernementale pour extraire des minéraux et des ressources de la terre. Le processus d'obtention d'une licence d'opérer peut varier d'un pays à l'autre, mais il comprend souvent des évaluations de l'impact sur l'environnement, des plans d'aménagement du territoire, des garanties financières et le respect permanent des réglementations. L'histoire de la licence d'opérer dans le secteur minier a évolué, les pays mettant en œuvre leurs propres réglementations et politiques, y compris l'intégration de considérations environnementales et sociales. Les principales parties prenantes au processus d'obtention de la licence d'opérer sont la société minière, les agences gouvernementales, les communautés locales, les groupes environnementaux, les autres entreprises intervenantes, les institutions financières et les investisseurs. Le processus de demande de la licence d'opérer peut-être long et compliqué, et il est toujours recommandé de demander des conseils juridiques et environnementaux.

Mots clés : Licence d'opérer, Secteur minier, Études d'impact sur l'environnement, Plans d'occupation des sols, Réglementation, Parties prenantes clés, Société minière, Communautés locales, Conseils juridiques et environnementaux

Abstract

A license to operate (LTO) in the mining sector refers to a permit granted by a government agency to extract minerals and resources from the earth. The process of obtaining an LTO can vary by country but often includes environmental impact assessments, land use plans, financial guarantees, and ongoing compliance with regulations. The history of LTO in the mining sector has evolved, with countries implementing their own regulations and policies, including the integration of environmental and social considerations. Key stakeholders in the LTO process include the mining company, government agencies, local communities, environmental groups, other businesses, financial institutions, and investors. The LTO application process can be lengthy and complicated, and it is recommended to seek legal and environmental advice.

Keywords: License to operate, Mining sector, Environmental impact assessments, Land use plans, Regulations, Key stakeholders, Mining company, Local communities, Legal and environmental advice



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1. Introduction

A license to operate in the mining sector typically refers to a permit or authorization granted by a government agency that allows a company or individual to legally extract minerals or other resources from the earth. The requirements and procedures for obtaining a mining license vary by country and may include environmental impact assessments, land use plans, and financial guarantees. In addition to the initial license, mining operations may also be subject to ongoing regulations and inspections to ensure compliance with safety, environmental, and other standards.

This article talks about the history of getting a license to operate (LTO) in the mining industry. It focuses on the major events that changed laws and policies in different countries and regions. The article starts by showing how LTO has changed since 1872, when the US Congress passed the General Mining Law. The article then talks about how to get an LTO, which can be different from country to country, and goes over the most common steps. The article also lists the key players in the LTO process, such as mining companies, government agencies, local communities, indigenous peoples, environmental groups, other businesses and industries, financial institutions, and investors. Last, the article talks about how important it is to work with all stakeholders in an open and inclusive way to make sure that the mining operation is socially responsible and sustainable.

2. Methodological approach

Obtaining a license to operate in the mining sector is an important topic that carries significant implications for both the industry and the environment. The mining sector plays a crucial role in the global economy, providing essential materials for manufacturing and infrastructure development. However, mining activities can also have negative environmental and social impacts, such as deforestation, water pollution, and the displacement of local communities. The process of obtaining a license to operate in the mining sector involves demonstrating compliance with a range of environmental and social regulations, which are designed to minimize these impacts. Ensuring that mining operations are conducted responsibly and sustainably is essential for the long-term viability of the industry and for protecting the well-being of affected communities and ecosystems. For this reason, it is important for everyone involved in the mining industry to understand the challenges and opportunities that come with getting a license to operate.

The article examines the procedure for obtaining a license to operate (LTO) in the mining industry using a historical and descriptive approach. To help put the current regulatory

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environment in context, a timeline of significant LTO milestones is presented in the article. The article also lists the important parties involved in the process of obtaining an LTO as well as the typical steps that are involved. The strategy is more descriptive and educational than prescriptive or analytical. We are attempting to give a general overview of the subject rather than appear to be supporting any specific policy or method for obtaining an LTO.

3. History

The history of obtaining a license to operate (LTO) in the mining sector has evolved over time, with different countries and regions implementing their own regulations and policies. However, some key milestones in the history of LTO include:

- 1872: The US Congress passed the General Mining Law (Morriss, 1872), which allowed individuals to claim public land for mining purposes with minimal regulation.
- 1891: The Forest Reserve Act was passed in the United States ("Isani Donald J," 1891), which allowed the President to set aside public lands as national forests, and regulated mining activities on those lands.
- 1948: The United Nations adopted the Universal Declaration of Human Rights (Alston, 1984), which included the right to a healthy environment.
- 1970: The National Environmental Policy Act (NEPA) (Anderson, 2013) was passed in the United States, which established a national policy to protect the environment and required federal agencies to conduct Environmental Impact Assessments (EIA) for certain actions.
- 1972: The United Nations Conference on the Human Environment ("Ohrs Dan J," 1972)
 was held in Stockholm, which recognized the need for sustainable development and the
 need for countries to protect the environment.
- 1985: The Brundtland Commission published the report "Our Common Future" (Burton, 1987) (Burton, 1987), which defined sustainable development and called for the integration of economic, social, and environmental considerations in decision-making.
- 1992: The United Nations Conference on Environment and Development (UNCED) was held in Rio de Janeiro, which resulted in the adoption of Agenda 21 and the Rio Declaration on Environment and Development (Antrim, 1992), which called for the integration of environmental and social considerations in the mining sector.



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2002: The International Council on Mining and Metals (ICMM) was established, which
developed the ICMM Sustainable Development Framework (S. & Olga, 2011), which
sets out the principles and expectations for sustainable development in the mining
sector.

In recent years, many countries have adopted policies and regulations to ensure that mining operations are conducted in an environmentally and socially responsible manner, and to promote stakeholder engagement in the process of obtaining LTO (Justine & al 2016).

4. Process to obtain a license to operate (LTO)

The process to obtain a license to operate (LTO) in the mining sector can vary depending on the country and the specific regulations in place. However, some common steps that may be involved in the process include:

- conducting an environmental impact assessment (EIA) to evaluate the potential impacts of the mining project on the local ecosystem and community.
- Developing a land use plan that outlines the proposed mining activities and their impact on the surrounding area.
- applying for the mining license with the relevant government agency, such as the Ministry of Mines or Environmental Protection Agency. This application will typically include detailed information about the proposed mining project, including the EIA and land use plan.
- undergoing a review process by the government agency to ensure that the proposed mining project meets all relevant regulations and standards.
- paying any required fees and providing financial guarantees to ensure that the mining operation can meet its obligations for reclamation and closure.
- obtaining all the necessary permits and approvals from other relevant authorities, such as local governments, water and air quality agencies, etc.
- signing a mining agreement with the government outlining the terms and conditions of the mining operation, such as royalties, taxes, and other obligations.
- Continuing to comply with ongoing regulations and reporting requirements during the life of the mining project.

It's crucial to keep in mind that the LTO application process can be lengthy and complicated, so it's recommended to speak with legal and environmental experts who can guide you through it.

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5. Stakeholders involved in the process of LTO

There are several key stakeholders involved in the process of obtaining a license to operate (LTO) in the mining sector. These include:

- The mining company or individual seeking the LTO: This is the main stakeholder who is responsible for developing the mining project and applying for the LTO.
- Government agencies: These include the relevant regulatory bodies that are responsible
 for issuing the LTO and overseeing the mining operation. These may include the
 Ministry of Mines, the Environmental Protection Agency, and other relevant authorities.
- Local communities and indigenous peoples: These stakeholders may be directly impacted by the mining operation and have a say in the LTO process. They may also be consulted during the environmental impact assessment (EIA) process.
- Environmental groups: These organizations may be involved in the LTO process to ensure that the mining operation is conducted in an environmentally responsible manner.
- Other businesses and industries: Companies and organizations that do business near the mining project may also have a stake in the LTO process and may be affected by the mining operation.
- Financial institutions: Banks and other lending institutions may be involved in the LTO
 process to ensure that the mining company has the necessary financial resources to
 undertake the mining operation.
- Investors: Investors and shareholders of the mining company are also stakeholders in the LTO process, as they have a vested interest in the mining project.

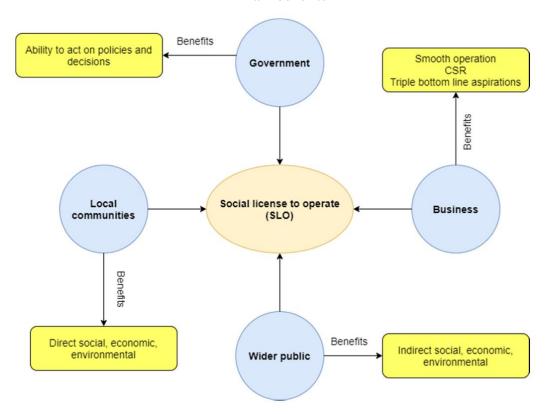
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Figure 1. The main stakeholders involved in acquiring a social license to operate and their main benefits



Source: Konstantinos Komnitsas, https://doi.org/10.3390/resources9060079

To ensure that the mining operation is run in a socially responsible and sustainable manner, it is crucial for the mining company to engage with all of these stakeholders in a transparent and inclusive manner throughout the LTO process.

6. Ritual and accountability for obtaining an operating license

To ensure that they are abiding by all applicable laws and regulations while applying for a license to operate (LTO) in the mining industry, it is the ritual and responsibility of the mining company. This includes conducting an environmental impact assessment (EIA) to evaluate the potential impacts of the mining project on the local ecosystem and community, developing a land use plan that outlines the proposed mining activities and their impact on the surrounding area, and obtaining all the necessary permits and approvals from other relevant authorities.

The mining company would also have the responsibility of engaging with key stakeholders, such as the local communities, indigenous peoples, and environmental groups, in a transparent and inclusive manner throughout the LTO process to ensure that the mining operation is conducted in a socially responsible and sustainable manner.



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Additionally, the mining company must be able to meet ongoing regulations and reporting requirements throughout the life of the mining project, including the duties of reclamation and closure, as well as possess the financial and technical capacity to carry out the mining operation. In the event of any accidents or incidents, it is also crucial for the mining company to have an emergency response plan.

To summarize, the mining company's ritual and duty in obtaining an LTO is to adhere to all legal requirements, interact with stakeholders, show that it is capable of carrying out the mining operation, and ensure environmental and social responsibility both before and after the operation.

7. Process for obtaining a LTO in the mining sector in Africa

The process for obtaining a license to operate (LTO) in the mining sector in Africa (2021) can vary depending on the country, but many African countries have similar regulations and requirements. In general, the process for obtaining an LTO in Africa includes the following steps:

- Conducting an environmental impact assessment (EIA) to evaluate the potential impacts of the mining project on the local ecosystem and community.
- Developing a social and environmental management plan (SEMP) that outlines the proposed mining activities and their impact on the surrounding area, including the measures to mitigate negative impacts and enhance positive ones.
- Applying for the mining license with the relevant government agency, such as a
 Ministry of Mines or Environmental Protection Agency. This application will typically
 include detailed information about the proposed mining project, including the EIA and
 SEMP.
- Undergoing a review process by the government agency to ensure that the proposed mining project meets all relevant regulations and standards.
- Paying any required fees and providing financial guarantees to ensure that the mining operation can meet its obligations for reclamation and closure.
- Obtaining all the necessary permits and approvals from other relevant authorities, such as local governments, water and air quality agencies, etc.
- Signing a mining agreement with the government outlining the terms and conditions of the mining operation, such as royalties, taxes, and other obligations.
- Continuing to comply with ongoing regulations and reporting requirements during the life of the mining project.



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It's crucial to remember that obtaining LTO in Africa can be a difficult and drawn-out process. For guidance, it is advised to speak with legal and environmental experts. In order to ensure that the mining operation is run in a way that is both sustainable and socially responsible, it is crucial for mining companies to engage with key stakeholders like local communities, indigenous peoples, and environmental groups in a transparent and inclusive manner throughout the LTO process.

An examples of an African country that has applied the concept of stakeholder engagement and social and environmental responsibility in the process of obtaining a license to operate (LTO) in the mining sector is South Africa.

In South Africa, mining companies are required to conduct an environmental impact assessment (EIA) and develop a social and environmental management plan (SEMP) as part of the process for obtaining an LTO. These documents must be submitted to the Department of Mineral Resources (DMR) for review and approval.

The EIA must include an assessment of the potential impacts of the mining project on the local ecosystem and community, including air and water quality, biodiversity, and land use. The SEMP must include measures to mitigate negative impacts and enhance positive ones. The mining company must also engage with key stakeholders such as local communities, indigenous peoples, and environmental groups, in a transparent and inclusive manner throughout the LTO process.

In addition to the LTO process, South Africa has also implemented regulations and policies to ensure that mining operations are conducted in an environmentally responsible and socially responsible manner. This includes regulations for the closure and rehabilitation of mines, as well as laws to promote black economic empowerment and the development of local communities.

South Africa has applied the concept of stakeholder engagement and social and environmental responsibility in the process of obtaining a license to operate (LTO) in the mining sector for several reasons:

- 1. Environmental concerns: South Africa has a diverse and fragile ecosystem, and mining activities can have a significant impact on the environment. Therefore, the government has implemented regulations and policies to ensure that mining operations are conducted in an environmentally responsible manner.
- 2. Social concerns: Mining activities can also have a significant impact on local communities, particularly those living in close proximity to mining operations.



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Therefore, the government has implemented regulations and policies to ensure that mining operations are conducted in a socially responsible manner, and that local communities are consulted and engaged in the LTO process.

- 3. Economic development: The mining sector is an important contributor to South Africa's economy, and the government recognizes the need to balance economic development with environmental and social concerns. Therefore, regulations and policies have been implemented to ensure that mining operations are conducted in a sustainable manner, and that local communities and indigenous peoples benefit from the mining activities.
- 4. Legal framework: South Africa has a well-established legal framework that supports the protection of environment, human rights and promotes sustainable development. The laws and regulations of the country such as the National Environmental Management Act and the Mineral and Petroleum Resources Development Act support the implementation of the concepts of stakeholder engagement and social and environmental responsibility in the mining sector.

South Africa is a good example of an African country that has applied the concept of stakeholder engagement and social and environmental responsibility in the process of obtaining LTO in the mining sector.

8. SWOT analysis of LTO process

A SWOT analysis of obtaining a license to operate (LTO) in the mining sector can help to identify the Strengths, Weaknesses, Opportunities, and Threats associated with the LTO process.

Strengths:

- Legal and regulatory frameworks in place that promote environmental and social responsibility.
- Stakeholder engagement can help to build trust and ensure that the mining operation is conducted in a socially responsible manner.
- An LTO process can help to identify and mitigate potential environmental and social impacts of the mining operation.

Weaknesses:

- The process of obtaining an LTO can be complex, time-consuming, and costly.
- Compliance with legal and regulatory requirements can be difficult, particularly for small and medium-sized mining companies.



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• Stakeholder engagement can be challenging, particularly when there are competing interests and conflicting views.

Opportunities:

- An LTO process can provide an opportunity for mining companies to identify and implement sustainable development programs in the local communities.
- The process of obtaining an LTO can be an opportunity for mining companies to demonstrate their commitment to environmental and social responsibility.
- Advances in technology and digitalization can be an opportunity to improve the process of obtaining LTO and increase transparency and stakeholder engagement.

Threats:

- Changing regulations and policies can make it difficult for mining companies to maintain compliance with legal and regulatory requirements.
- Social and environmental concerns can lead to resistance from local communities and opposition to mining projects.
- The lack of capacity and expertise in the mining sector can be a threat to the implementation of the regulations and the LTO process.

It's crucial to keep in mind that this SWOT analysis is not exhaustive and that the factors may change depending on the particular context and country. To fully comprehend the LTO procedure, a more thorough analysis that takes into account each individual nation would be necessary.

Based on the SWOT analysis of obtaining a license to operate (LTO) in the mining sector, an action plan could be proposed as follows:

Strengths:

- Leverage existing legal and regulatory frameworks to promote environmental and social responsibility in the mining sector.
- Expand stakeholder engagement efforts to build trust and ensure that mining operations are conducted in a socially responsible manner.
- Develop a streamlined and efficient LTO process to identify and mitigate potential environmental and social impacts of mining operations.

Weaknesses:

 Reduce complexity, time and costs associated with the LTO process by simplifying regulations and procedures.



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• Provide technical and financial assistance to small and medium-sized mining companies to help them comply with legal and regulatory requirements.

 Develop effective communication and engagement strategies to manage competing interests and conflicting views among stakeholders.

Opportunities:

 Develop sustainable development programs in local communities in connection with the LTO process.

• Use advances in technology and digitalization to improve the LTO process and increase transparency and stakeholder engagement.

 Promote responsible mining and environmental and social responsibility as a way of differentiating and positioning the mining company in the market.

Threats:

 Monitor changes in regulations and policies to ensure compliance with legal and regulatory requirements.

• Develop contingency plans to address potential resistance from local communities and opposition to mining projects.

• Invest in capacity building and training to improve the implementation of regulations and the LTO process.

9. Innovative practices to implement the LTO process

Mining companies can use the following cutting-edge strategies to encourage stakeholder engagement and social and environmental responsibility when they apply for a license to operate:

- Community-based monitoring: Mining companies can establish community-based monitoring programs (Thora et al., 2014), where local communities are trained to monitor and report on the environmental and social impacts of the mining operation.
 This can help to build trust and transparency between the mining company and the local community.
- Sustainable development programs: mining companies can implement sustainable development programs that promote economic, social, and environmental sustainability in the local communities (Gavin Hilson, 2000). These programs can include initiatives such as education, healthcare, and infrastructure development.



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• Sustainable procurement: Mining companies can implement sustainable procurement practices (Tamires & al 2017), where they source materials and services from suppliers who meet environmental and social standards. This can help to promote responsible practices in the mining supply chain (Van, & al, 2019).

- Green mining practices: Mining companies can implement green mining practices such as reducing energy consumption, recycling water, and minimizing waste (Tim & al 2021). This can help reduce the environmental impact of the mining operation.
- Transparency and reporting: Mining companies can be transparent in the decision-making process, report on the environmental and social impacts of the mining operation, and engage with the community in an inclusive manner (Frederiksen, 2018).
- Collaboration and Partnership: Mining companies can collaborate and partner with local organizations, NGOs (Bendell, 2017) and government agencies to promote sustainable development and environmental protection.
- Digitalization: Mining companies can use digital technologies like remote sensing, GIS, and drones to monitor (T., Anthony, & Gillian, 2019), analyze, and report on the environmental and social impacts of their operations, which enables better decision-making, increased transparency and more effective stakeholder engagement.

It's crucial to remember that these procedures are not all-inclusive and may differ depending on the particular situation, but they can be used to encourage stakeholder involvement and social and environmental responsibility during the LTO application process in the mining industry.

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10. Conclusion

In conclusion, acquiring a license to operate (LTO) in the mining industry entails a difficult process that includes adhering to legal and regulatory requirements, engaging stakeholders, and exhibiting social and environmental responsibility. In order to obtain LTO in the mining sector, African nations have used the principles of stakeholder engagement and social and environmental responsibility.

A SWOT analysis of obtaining an LTO in the mining sector can help to identify the strengths, weaknesses, opportunities, and threats associated with the process. Based on the SWOT analysis, an action plan can be developed to improve the LTO process and promote environmental and social responsibility in the mining sector.

Based on the SWOT analysis, an action plan recommended can include:

- Establish a task force to review and simplify regulations and procedures associated with the LTO process.
- Develop a training program for small and medium-sized mining companies to help them comply with legal and regulatory requirements.
- Increase transparency and stakeholder engagement by implementing a communitybased monitoring system.
- Develop sustainable development programs in local communities in connection with the LTO process.
- Implement digitalization and technology solutions to improve the LTO process and increase transparency and stakeholder engagement.
- Monitor changes in regulations and policies and develop a plan to address potential noncompliance issues.
- Develop effective communication and engagement strategies to address potential resistance from local communities and opposition to mining projects.
- Invest in capacity building and training to improve the implementation of regulations and the LTO process.

Mining companies can use cutting-edge techniques to encourage stakeholder engagement and social and environmental responsibility while obtaining LTO, such as community-based monitoring, sustainable development programs, sustainable procurement, green mining practices, transparency and reporting, collaboration and partnership, and digitalization. Mining firms must strike a balance between economic growth and environmental and social concerns while also abiding by the nation's legal system.



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