Terms of Reference (TOR): IRMA Standard for Responsible Mining and Mineral Processing

1. Introduction

IRMA is committed to building credible, internationally recognized standards that include assurance systems as well as monitoring and evaluation. As an ISEAL Community Member, IRMA is committed to following ISEAL's Codes of Good Practice in addition to its own procedures for standard setting and assurance. IRMA's Standard for Responsible Mining and Mineral Processing is a global voluntary standard that is used for independent third-party IRMA audits.

In 2022, IRMA began the process of reviewing its standards framework with the intention of creating greater efficiencies while integrating updates that maintain alignment with a wide range of international frameworks and best practices. In this effort we found it practical to integrate the following three standards into one combined standard:

- IRMA Standard for Responsible Mining V1, published June 2018
- IRMA Draft Standard for Responsible Mineral Processing V1, draft published June 2021
- IRMA Draft Standard for Responsible Mineral Exploration and Development (IRMA-Ready Standard) VI, draft published December 2021

Combining these standards results in practical benefits including utility across a wider range of mining activities (e.g., mineral exploration, development, and processing), based on one common set of requirements, subject to one common periodic review that eases the burden on stakeholders engaging in review and comment processes.

This Terms of Reference document outlines the objectives, scope and desired outcomes of the combined IRMA Standard.

2. Scope and geographic application

In 2023, IRMA is developing and engaging in a period of public consultation to inform its combined IRMA Standard for Responsible Mining and Mineral Processing. The scope of activities for the combined standard include:

Mineral exploration and development: Defining best practices for business integrity, planning and managing for positive legacies, social responsibility and environmental responsibility during mineral exploration and development, prior to the operational phase of a mine. Requirements are applicable to exploration projects and proposals to develop any type of industrial or large-scale mining operation (including surface, sub-surface and solution or brine "mining"), and all mined materials (e.g., minerals, metals) with the exception of uranium, thermal coal, and deep sea mining. Standard requirements mirror those in the 2021 Draft IRMA Ready Standard.

Mining: Defining best practices for business integrity, planning and managing positive legacies, social responsibility and environmental responsibility at operational mine sites. Applicable to all types of industrial or large-scale mining (including surface, sub-surface and solution mining), and all mined materials (e.g., minerals, metals) with the exception of uranium, thermal coal, and deep sea mining. Requirements will mirror those in the 2018 IRMA Standard for Responsible Mining, updated to reflect best practices as well as experience from prior IRMA audits.

Mineral processing: Defining best practices for business integrity, planning and managing positive legacies, social responsibility and environmental responsibility at sites where smelting, refining or other forms of mineral processing and extractive metallurgy are carried out. Applies to processing of any metal or mineral except for energy fuels. In addition to ore or concentrate, materials processed may include recycled metals. Requirements will mirror those in the 2021 Draft IRMA Mineral Processing Standard.

The geographical scope of the IRMA Standard for Responsible Mining and Mineral Processing is global, with no specific geographic limitations or restrictions.

Given that the IRMA Chain of Custody Standard has objectives and aims that are quite different to IRMA's other standards, the Chain of Custody standard will remain as a standalone document and is therefore not within the scope of this TOR.

3. Justification and Need for a Unified Standard

IRMA was founded in 2006 by a coalition of non-governmental organizations, businesses purchasing minerals and metals for resale in other products, affected communities, mining companies, and labor unions. IRMA spent over 10 years developing the Standard for Responsible Mining, which offers one of the most comprehensive and stringent social and environmental standards available today, setting the benchmark for what a truly sustainable and responsible mining operation looks like. IRMA is equally governed by six sectors: organized labor, affected communities, NGOs, mining companies, investors, and purchasing companies. IRMA is unique in that each of these six sectors has equal voting power in IRMA governance, thus no single sector can make decisions that do not work for other sectors. This is what makes IRMA accountable to all.

IRMA has expanded its original focus on mine site level assessments and reporting by developing standards to cover activities both before and beyond the mine gate. IRMA stakeholders expressed that ensuring responsible practices at mine sites is an essential step and impacts at the exploration phase and mineral processing phase can have significant impacts on a wide range of environmental, social, and other factors where greater transparency and accountability are needed. Furthermore, the expectations of governments, civil society, labor unions, investors, and others are increasing for downstream users of metals and minerals to be able to demonstrate that responsible practices are occurring throughout their minerals and metals supply chains.

IRMA's decision to develop a combined standard for responsible mining and mineral processing was based on two main factors:

- The IRMA Ready Standard, IRMA Standard for Responsible Mining and the IRMA Mineral Processing standard all share the same common principles of business integrity, planning and managing for positive legacies, social responsibility and environmental responsibility. It therefore makes sense to combine the standards into one unified document.
- Transitioning to a combined standard streamlines the standards review process and reduces the burden on stakeholders that would otherwise need to contribute to 3 separate standard review processes. The resulting efficiency enhancements of a combined standard are therefore significant for both the IRMA Secretariat and its stakeholders.

The IRMA Standard for Responsible Mining and Mineral Processing will address key sustainability issues at the exploration and development, mining and mineral processing stages of the minerals supply chain.

| Principle | Sector | | | |
|--------------------|--|--|--|--|
| | Exploration and development | Mining | Mineral Processing | |
| Business Integrity | Legal complianceCommunity and | Legal ComplianceCommunity and | Legal ComplianceCommunity and | |

| | stakeholder engagement Human rights due diligence Complaints and Grievance Mechanism and Access to Remedy Revenue and Payments Transparency | Stakeholder Engagement Human Rights Due Diligence Complaints and Grievance Mechanism and Access to Remedy Revenue and Payments Transparency | Stakeholder Engagement Human Rights Due Diligence Complaints and Grievance Mechanism and Access to Remedy Financial Transparency and Anti-Corruption Supply Chain and Responsible Sourcing (NEW) |
|---|---|--|--|
| Planning and managing for positive legacies | Environmental and Social Impact Assessment and Management: Free, Prior and Informed Consent (FPIC) Obtaining Community Support and Delivering Benefits Resettlement Emergency Preparedness and Response Planning and Financing Reclamation and Closure | Environmental and Social Impact Assessment and Management Free, Prior and Informed Consent (FPIC) Obtaining Community Support and Delivering Benefits Resettlement Emergency Preparedness and Response Planning and Financing Reclamation and Closure | Environmental and Social Impact Assessment and Management Free, Prior and Informed Consent (FPIC) Obtaining Community Support and Delivering Benefits Resettlement Emergency Preparedness and Response Planning and Financing Decommissioning and Reclamation |
| Social responsibility | Fair Labor and Terms of Work Occupational Health and Safety Community Health and Safety Mining and Conflict-Affected or High-Risk Areas Security Arrangements Artisanal and Small-Scale Mining Cultural Heritage | Fair Labor and Terms of Work Occupational Health and Safety Community Health and Safety Mining and Conflict-Affected or High-Risk Areas Security Arrangements Artisanal and Small-Scale Mining Cultural Heritage | Fair Labor and Terms of Work Occupational Health and Safety Community Health and Safety Conflict-Affected or High-Risk Areas Security Arrangements Artisanal and Small-Scale Mining Cultural Heritage |
| Environmental responsibility | Waste and Materials Management Water Management Air Quality | Waste and Materials Management Water Management Air Quality | Waste and Materials Management Water Management Air Quality |

| Noise and Vibration Greenhouse Gas Emissions Biodiversity, Ecosystem Services and Protected Areas Cyanide Mercury Management | Greenhouse Gas Emissions Biodiversity, | Noise and Vibration Greenhouse Gas Emissions and Energy Consumption Biodiversity, Ecosystem Services and Protected Areas Cyanide Mercury Management Land and Soil Quality (NEW) |
|--|---|--|
|--|---|--|

IRMA believes that all of the above issues are critical to ensuring the sustainable and responsible management of the minerals supply chain from mineral exploration to mineral processing, smelting and refining. While there are other voluntary sustainability standards available that cover some or all of these topics, such as the Responsible Jewellery Council (RJC) Code of Practices Standard and the ResponsibleSteel Standard, the IRMA Standard for Responsible Mining and Mineral Processing will be the most comprehensive social and environmental standard available for mineral exploration, mining and processing companies and the only standard broad enough in scope to cover all types of minerals (with the exception of energy fuels). Furthermore, the Standard will be the only standard for the sector to be equally governed by the public and private stakeholders and rights holders most relevant to the mining sector.

4. Economic, Social and Environmental Outcomes

The priority economic, social and environmental outcomes of the standard include:

Social Outcomes

1. Human rights: the human rights of workers, communities, and other stakeholders are respected. This includes, but is not limited to, preventing forced labor, child labor, discrimination, and other forms of human rights abuses.

2. Gender equality and gender protections: the social and political dynamics of communities are understood, workplace and community data is disaggregated by gender, gender-related risks are assessed and addressed, and gender equity and empowerment is advanced within the workplace and community.

3. Community engagement: there is engagement with communities and other stakeholders to understand their concerns and needs. This includes providing

information about exploration, mining and mineral processing projects, consulting with communities on project design and implementation, and addressing community grievances.

4. Health and safety: the health and safety of workers and communities is protected by requiring users of the standard to implement measures to prevent accidents, injuries, and illnesses. This includes providing safety equipment and training, monitoring health and safety risks, and implementing emergency response plans.

5. Labor rights: there is respect for labor rights, including the right to organize and bargain collectively, the right to a living wage, and the right to a safe and healthy working environment.

6. Indigenous Peoples' rights: the rights of Indigenous Peoples who may be affected by exploration, mining and mineral processing activities are protected. This includes respecting Indigenous Peoples' rights to their lands, territories, and resources, and ensuring that exploration, mining and mineral processing operations do not impact their cultural heritage.

Environmental Outcomes

1. Biodiversity conservation: negative impacts to biodiversity are minimized through the identification and protection of important habitats and species, and through the implementation of measures to prevent pollution and degradation of ecosystems.

2. Water management: water resources are managed responsibly by requiring exploration, mining and mineral processing operations to minimize their use of water, prevent contamination of water sources, and manage wastewater and mine drainage.

3. Air quality: impacts to air quality are minimized through the control of dust and other emissions to the air.

4. Land use: land use is managed responsibly by requiring exploration, mining and mineral processing operations to minimize their impact on land and soil, reclaim disturbed land, and prevent land degradation.

5. Climate change: the negative impacts of climate change are minimized through the reduction of greenhouse gas emissions, promotion of energy efficiency, and use of renewable energy sources by exploration, mining and mineral processing operations, where feasible.

6. Circularity: opportunities to incorporate circular economy approaches are identified in environmental and social impact assessments and are incorporated into management plans and public reporting.

Economic Outcomes

1. Transparency and accountability: exploration, mining and mineral processing operations are transparent and accountable in their financial and operational practices. This includes disclosing information about their financial performance, paying taxes and royalties, and engaging in responsible business practices.

2. Economic development: economic development in mining-affected and mineral processing communities is promoted through the creation of jobs, support for local businesses, and the payment of fair wages and benefits.

3. Resource efficiency: resources are used efficiently and waste is minimized via the implementation of best practices for resource management and recycling.

4. Infrastructure development: there is infrastructure development in miningaffected and mineral processing communities, such as from the construction of roads, schools, and healthcare facilities.

5. Risk management: exploration, mining and mineral processing operations have risk management systems in place to identify and manage risks associated with their operations, including financial, environmental, and social risks. This includes implementing measures to prevent accidents, respond to emergencies, and mitigate the impact of mining and mineral processing operations on local communities and the environment.

5. Risk assessment

Factors that could have a negative impact on the ability of the standard to achieve its outcomes; unintended consequences that could arise from its implementation; and possible corrective actions that could be taken to address these potential risks include:

Industry resistance: the industry may resist the implementation of the new combined standard due to perceived concerns about increased costs, resource needs or potential impacts on profitability. This resistance could hinder the adoption and effectiveness of the standard. To address this, IRMA will engage in proactive industry outreach and collaboration, involving key stakeholders early in the process to address their concerns, seek input and achieve consensus on the need for the combined standard.

Inadequate stakeholder engagement: failure to engage a diverse range of stakeholders during the standard development process could lead to a lack of legitimacy and acceptance. It is important to ensure that all relevant stakeholders are involved and have the opportunity to provide input and feedback. Regular communication, public consultations, and transparency in the standard development process will help to mitigate this risk, as will ensuring broad stakeholder participation. The length of the integrated standard may deter stakeholders from engaging in review of and input on the draft standard. It is therefore especially important to provide summary documents, factsheets, webinars, in-person presentations, and other formats for sharing the integrated standard in a variety of meaningful and relevant formats and relevant languages.

Unintended environmental or social consequences: implementation of the standard could have unintended consequences that negatively impact the environment and/or social conditions for workers and communities.. For example, the standard might inadvertently promote certain mining practices that harm ecosystems or lead to displacement of local communities. To minimize such risks, IRMA will involve relevant experts and other stakeholders in the standards design process, and consider field trials of specific sections of the standard where deemed appropriate.

Lack of harmonization and compatibility: if the standard is not harmonized or compatible with existing frameworks, certifications, or regulations in the mining industry, it could create confusion and duplicative efforts. It is essential to align the new standard with other relevant initiatives where appropriate, such as existing sustainability frameworks or international guidelines, while at the same time ensuring that the standard is sufficiently robust and comprehensive. IRMA will seek to collaborate with other standards setting organizations and with industry associations that can help promote harmonization and compatibility.

Technological and scientific advancements: the exploration, mining and mineral processing industry is constantly evolving, with advancements in technology and scientific knowledge. The standard needs to be adaptable and responsive to these changes. Regular review cycles, continuous improvement mechanisms, and flexibility in the standard can help address emerging technologies, scientific discoveries, and best practices.