

NATIONAL REPORTING ORGANIZATIONS – ANNUAL REPORTS 2022 – 2023



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RIO DE JANEIRO – BRAZIL, OCTOBER 2023

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1. CHAIRPERSON'S REPORT

1. INTRODUCTION

1.1. Introduction

This is the second and last year of the Term of this Executive, time to thank all Members for their support and commit with the new Chairperson to be elected.

For a quick balance of achievements already concluded or expected until the end of 2023:

- ⇒ Two new Members admitted to CRIRSCO;
- ⇒ New operational website;
- ⇒ New update of the Bridging Document with the UNFC;
- ⇒ Advanced process for incorporation in Canada;
- ⇒ Secretarial Services available to the Executive and Working Groups/Standing Committees Coordinators;
- ⇒ Stable Financials;
- ⇒ Greater support from the Executive to the NROs

Progress made in the period was clear, but we still have important steps to reach CRIRSCO's ambition to consolidate as the global benchmark and Governance System for the public disclosure of Exploration Results, Mineral Resources and Mineral Reserves.

I reinforce my warm welcome to our new Members and invite their representatives to engage with the activities of the Committee with the energy that made their membership process a success. CRIRSCO is run by highly motivated volunteers, and I am very thankful for them.

The consolidated annual report is a fair picture of the activities of all National Reporting Organizations along the last year and their status, but understanding the dynamics of CRIRSCO and the complexity of our task will require more than an attempted reading. It is critical to engage in discussions with internal and external stakeholders, and our Annual General Meeting is the perfect spot to practice.

1.2. The 2022/2023 Executive

In 2022 the Members of CRIRSCO approved a second-year term for the following Executive:

Chairperson: Edson Ribeiro – CBRR (Brazil)

Deputy-Chairperson: Garth Kirkham – CIM (Canada)

Past-Chairperson: Ken Lomberg – SAMREC (South Africa)

Treasury: Peter Stoker – JORC (Australia)

Secretary: Wilfredo Lopez – CCRR (Colombia)

There were no resignations or replacements along the year.

2. THE 2023 ACTION PLAN AND THE IMPLEMENTED STRATEGY

The following actions were discussed and approved by CRIRSCO members during the 2022 Annual General Meeting:

2.1. Incorporation of CRIRSCO as a legal entity

The Admin Standing Committee, led by Deborah McCombe, finalized initial trade-off analysis, and recommended incorporation in Canada, that was subsequently approved by the Executive.

In Canada, not-for-profit companies

- Are incorporated under federal laws
- Exempt from income tax however do have to report annually
- Must have a set of By-Laws which set out how we operate, Board and officers and how they function and voting rights (these By-Laws are really important to get correct at the start)
- Once incorporated all assets must be transferred to the incorporated company.

The Corporation is a legal person so can have a bank account, own property etc.

CRIRSCO has engaged Canadian legal advisors (Carters Professional Corporation), who are advancing with required documentation and procedures. It is expected that the whole process will be concluded by the first quarter of 2024, a lot slower than previously anticipated.

Costs for incorporation will be funded by ICMM, and CRIRSCO is grateful for their support.

2.2. Development of a new website

This task is led by Thomas Brenner and great progress was made in the last months: all service providers were selected by the Standing Committee (website developer, website host and technical assistance), with contracts approved and signed by ICMM.

Launch Digital (Pty) Ltd, a Digital Marketing Agency based in Johannesburg, was selected to develop the website, that will be hosted by Kinsta. Geoansata, a Brazilian consultancy company that supported CBRR during the development of their website, will also provide technical assistance to the Standing Committee.

First draft of the website design was presented in September 2023 for the members of the Standing Committee and the Executive and was very well received. A trial version of the website will be presented to all CRIRSCO Members at the AGM in October, and final development is expected to November.

Migration from all information and documentation from the current website hosted by AUSIMM is also expected to be concluded on time.

I take the opportunity to acknowledge and thank JORC and AUSIMM for hosting and managing the website for all these years, their support is much appreciated.

2.3. Development of a repository for CRIRSCO documents and correspondence

This will be included in the new website. In the meantime, key documents are uploaded to the current website (www.crirSCO.com).

2.4. Meetings with Standing Committees

Instead of defining fixed dates for the meetings with the SCs, the Executive has agreed to delegate to their Chairs to decide when to call for the updates/alignments.

Only one meeting was called by the Communications SC, to inform about the progress of the creation of the website, and to confirm next steps.

No other meetings were called, and the Chairperson strongly recommends that this routine is resumed in 2024, because communication via emails is not as effective.

2.5. Finalize the reciprocity/recognition diagnostic and white paper

There was no progress on this initiative in 2023 and the priority will be revised during the AGM.

CBRR and CCRR, the Brazilian and Colombian NROs, are progressing on a bi-lateral reciprocity document, that might be used by other Members as a practical example.

2.6. Standard Definitions and ESG

A compilation of previously discussed terms prepared by Ken Lomberg, final ESG definitions prepared by the Working Group and some proposals for new terms were circulated by the Chairperson on September 3rd, with a request for comments until October 12th.

The Executive will meet with the ESG and the Standard Definitions Working Groups on October 16th, to prepare a proposal for approval during the AGM.

It is important that representatives of all NROs familiarize themselves with the circulated documents and are prepared to vote, the approved changes will be incorporated a new release of the CRIRSCO Template is expected to be issued by the end of the current year.

2.7. In-person Meetings of the Executive

Due to budget restrictions, the Executive agreed that only three of its members (Edson Ribeiro, Gath Kirkham and Ken Lomberg) would meet in London on April 25th, extending the agenda for meetings with representatives of the ICMM and PERC, and also representing CRIRSCO in one the preselected events of the year (Mines and Money Connect).

Besides this face-to-face meeting in London, the members of the Executive Committee had several online meetings and email exchanges along the year, and level of communication was considered adequate, with important decisions built by consensus.

Considering the experience of the last two years, the Chairperson considers that more frequent online meetings are more effective than extra in-person meetings, with clear budget implications.

2.8. Quarterly feedbacks to all Members

A mid-year Chairperson report was circulated to all Members in July 2023.

Together with more frequent communication via emails and the discipline with a pre-set Calendar of meetings, this reporting frequency is considered adequate by the Chairperson.

2.9. Implement secretarial services

The Executive has decided to start with a more junior professional based in Brazil due to the relatively low complexity of the tasks and the need of local support for the AGM. The contract was signed by ICMM in July, with services starting in August. A message was circulated to all Members introducing Gabriel Paiva Serrano, on August 24th.

All members are encouraged to provide their feedbacks to the Chairperson. This will be a bridging contract, until CRIRSCO is incorporated, and more definite arrangements are made.

2.10. Setting the 2023 Calendar

The 2023 AGM in Brazil is confirmed for the third week of October (16-19^h).

As approved by the Committee, this year we will include a fourth day, with technical presentations and discussions, open to the local QPs and other relevant stakeholders.

2.11. Approach Financial Institutions and Funds

There was no progress in this front in 2023.

2.12. Liaison with the ICMM

Relationship with the ICMM remains very positive, with communication through focal points, Sophie Donszelmann (sophie.donszelmann@icmm.com) and Duncan Robertson (duncan.robertson@icmm.com).

This included one in-person meeting in London (April 24th), video conferences and several messages.

ICMM's in-kind and financial support are very appreciated, and we are keen to reinforce and grow this strategic partnership.

2.13. Liaison with the UNECE

On March 2023, Europe launched its Raw Materials Act, to guide and coordinate efforts for the management of scarce raw materials considered critical for the energy transition towards a lower carbon economy. Under this new policy, natural resources are required to be reported under the UN Framework Classification to be eligible to certain fiscal benefits and financial conditions.

Together with some raising concerns of the application of the CRIRSCO Template in Asian countries, this triggered the need of a stronger involvement of the Committee on the discussions, that included the update of the bridging document between the CRIRSCO Template and UNFC.

Edson Ribeiro (CRIRSCO) and Edmund Sides (PERC) met Dario Liguti, the Director of Sustainable Energy at the United Nations Economic Commission for Europe (UNECE) in Geneva, on April 27th.

In the meeting, the two parties agreed to update the bridging document between the United Nations Framework Classification (UNFC) and the CRIRSCO Template, and to continue collaborating to educate all stakeholders on how to use the two systems, that are complementary and not conflicting. To reinforce this message, it was agreed that the bridging document will be released by both the UNECE and CRIRSCO (including their logos) and training courses will also be offered by both institutions.

Edmund Sides (PERC) and Roger Dixon (SAMREC) are the two CRIRSCO representatives with the UNECE Expert Resource Management Group and are in close collaboration with Hendrick Falk finalizing the updated version of the bridging document.

A detailed draft of the bridging document was presented in May, and several contributions were received by the reviewers.

Slavko Solar from the EGRM provided feedback that although the longer document was in general acceptable, it would not be suitable for approval by the EGRM at their next meeting in April 2024, because for official documents the UNECE has to follow the UN's procedures which require 'parliamentary documents' to be prepared in a standard format so as to facilitate translation into the UN's official languages.

During discussions in the task group it was agreed that a relatively short document (5-10 pages) will be prepared as an Executive Summary and will form the basis for the 'official' document to be approved by the UNECE, and the longer document could be classed as a guidance document and approved for release more readily.

It is expected that the Executive Summary will be submitted for approval by the CRIRSCO Members via Circular Resolution in November, and a joint webinar with UNECE to announce and explain the bridging document can be held still in 2023.

2.14. Liaison with the International Seabed Authority (ISA)

The International Seabed Authority - a United Nations-backed agency with jurisdiction over international waters - has been challenged by several countries and civil organizations that are against any authorizations to start commercial exploration of the Area before more robust environmental impact studies are available.

After intense negotiations, ISA has agreed to postpone discussions on commercial deep-sea mining until probably 2025.

With all focus on the debate, there was no progress on the discussions about mineral resources/mineral reserves classifications.

After years representing CRIRSCO as an Observer with the ISA, Pat Stephenson has communicated the Chairperson on June 5th that he will no longer be available for this role and the Executive has agreed to appoint Wilfredo Lopez as our new representative.

2.15. Increase visibility of CRIRSCO, sending representatives to key events

It was agreed by the members of the Executive that the official representation at key events should not bring additional costs to CRIRSCO, unless in very specific conditions.

The Chairperson joined the following events in 2023:

PDAC (Toronto): Edson Ribeiro and Deborah McCombe

Mines and Money Connect (London, 25-26 April): Edson Ribeiro, Ken Lomborg, Garth Kirkham

UNECE Resource Management Week (Geneva, 25-27 April): Edmund Sides, Edson Ribeiro (27 only)

Astana Mining and Metallurgy Congress (Astana, 1-2 June): Edson Ribeiro, Nikolai Yenshin, Saule Urazayeva

2.16. Set mid- and long-term goals for CRIRSCO

The short-term goals set as a priority by the Executive to the four Standing Committees are:

- ⇒ Register CRIRSCO as a legal Entity (in progress)
- ⇒ Finalize the reciprocity/recognition white paper (on hold)
- ⇒ Manage 2023 budget and identify additional sources of funding (on hold)
- ⇒ Develop a new website (in progress)

Additionally, the following goals are considered strategic in the short-term:

- ⇒ Conclude membership processes of China (in progress) and Philippines (concluded)
 - ⇒ Update the bridging document with the UNFC and launch joint training programs (in progress)
- Mid- and long-term goals are to be discussed at the AGM.

2.17. Reinforce CRIRSCO's support to current NROs

During last AGM it was recognized that some NROs might need some extra support from the Committee, to continue with the implementation of their Codes and increase their relevance in their jurisdictions.

This could be achieved through a direct involvement of the Executive in local/regional events and joint workshops.

In March KCMI conducted a Competent Person's workshop with CRIRSCO via JORC providing the workshop presenter. The very successful workshop resulted in a share of the surplus being provided by KCMI to CRIRSCO.

In June, Edson Ribeiro travelled to Astana, Kazakhstan, for a series of meetings with local stakeholders together with representatives of PONEN, to reinforce the advantages of implementing KAZRC.

In September, the Chairperson sent letters to several Indian stakeholders, support NACRI initiatives. A trip to India will be scheduled for November 2023.

3. NEW MEMBERSHIPS

3.1. China (Working Group Coordinator: Peter Stoker – JORC)

Zhu Yang Yang CRIRSCO's representative in China advises that the CAMRA working group has been revised to include Ju Jianhua the former director general of the Mineral Reserves department of MLR, and renewed progress has been made with the application documentation.

The Working Group has provided comments on all received documents, and feedback will be provided by the Chinese delegation at the AGM.

3.2. Philippines (Working Group Coordinator: Peter Stoker – JORC)

Final documents were reviewed and approved by the Working Group and submitted to the Executive. A formal request for approval was circulated to all Members on September 2nd, and only positive responses were received.

Philippines admission ceremony is planned for the first day of the AGM.

3.3. Ecuador (Working Group Coordinator: Wilfredo Lopez – CCRR)

Final documents were provided by the Ecuatorian Corporation for Mineral Resources and Reserves and approved by the Working Group. A formal submission to all Members is planned for October 2023, with expected completion in November. Everything going well, an admission ceremony will be scheduled for Quito, with the presence of the Chairperson and the Secretary of CRIRSCO.

3.4. Kyrgyzstan (Working Group Coordinator: (Saranchimeg Purevgerel – MPIGM)

One amendment to the original MOU was signed on June 2nd by Edson Ribeiro and the Director of the Department of Geology and Subsoil Use, Deputy Minister of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic.

With this amendment, the parties reinforce their collaboration and best efforts to conclude the membership process no longer than December 2024.

3.5. Kingdom of Saudi Arabia (Working Group Coordinator: Garth Kirkham – CIM)

Mr. Abdulrahman Bashkail was appointed by the Saudi authorities as the new initiative owner to coordinate their membership process.

The Memorandum of Understanding was signed on June 25th and the Working Group will be confirmed by Garth to support the local team to prepare and review the critical documents.

3.6. West Africa (Working Group Coordinator: Ken Lomborg – SAMREC)

Previously submitted documents weren't aligned with the last version of the CRIRSCO Template, and the Working Group has shared initial analysis with West Africa representatives.

2. AUSTRALASIA – JORC

Steve Hunt Chair, JORC Committee, CRIRSCO Representative

Peter Stoker Deputy Chair, JORC Committee, CRIRSCO Representative

Lynn Olssen. JORC Committee, alternate CRIRSCO Representative

1. The number of registers/affiliations in the period and accumulated, broken down by membership category.

JORC does not have individual members, other than Committee members. Professionals involved in the public reporting of Exploration Results, Mineral Resources or Ore Reserves usually belong to:

- The Australasian Institute of Mining Metallurgy (AusIMM); and / or the
- Australian Institute of Geoscientists (AIG).

2. The number of applications in total, approved, rejected, partial (other)

JORC does not have individual members, other than Committee members. Professionals involved in the public reporting of Exploration Results, Mineral Resources or Ore Reserves must belong to:

- The Australasian Institute of Mining Metallurgy (AusIMM); and / or the
- Australian Institute of Geoscientists (AIG), or
- A Recognised Professional Organization (see <https://www.jorc.org/competent/> for the current list

3. Complaints, number of complaints, how many are in progress, concluded with sanctions and concluded with no penalties.

Complaints about individual members are made through their respective professional institute. The following information summarizes these complaints in the 2022 calendar year.

The AusIMM

In 2022 eight complaints were submitted to end December which represented a decrease when compared to 2021 where twelve complaint submissions were investigated and concluded. Three of the complaints related to alleged breaches of the JORC Code as follows:

- An alleged breach of clauses 18 & 19 of the JORC Code (2012 edition). A warning was issued, and the respondent was encouraged to rectify and reissue the relevant Public Report and this request was obliged.
- One case of an alleged breach of JORC Code, clause 19; was not progressed when the announcement in question was amended following the original publication.
- One case involving an alleged breach of JORC Code, clauses 5 & 19; was not progressed as on review the announcement was considered to have satisfied the JORC Code requirements.

AIG

In 2022, seventeen (17) complaints were submitted to end December 2022. Sixteen (16) of the complaints related to alleged breaches of the JORC Code.

Of these fifteen (15) were due to AIG initiating random reviews of ASX announcements requiring compliance with the JORC Code. The objective of this review was to provide information for the Competent Person Baseline Study and to identify needs for targeted education and training for members. Announcements by both AIG and AusIMM members were reviewed. Identified compliance issues by AusIMM members resulted in complaints being formally submitted for review by the Institute. A number of public reports were issued without a Competent Person being nominated, in which case, announcements were brought to the ASX’s attention.

All 2022 complaints finalised resulted in Members being cautioned regarding aspects of their public reporting practices.

4. Professional training initiatives organized by the NRO

While JORC itself does not organise professional training, relevant courses are hosted by parent bodies AIG and AusIMM. Several JORC Committee members were involved in the development of the AusIMM course and many of these same committee members continue to contribute their time and skills to refine the course and take part in its delivery each year, independently of their JORC membership.

AusIMM

In 2022 the AusIMM conducted three (3) of its ‘Online Professional Certificate in JORC Code Reporting’ courses for 285 attendees, an increase of 37% on the previous reporting period. Attendees are domiciled in Australia (59%) and international (41%). The completion rate is 87% and the approval rate is 98%. In 2023 the percentage of international attendees has now reached 56% surpassing the percentage of Australian attendees for the first time.

Note this is a course in how to report. Completion of the course does not qualify the attendees to claim to be Competent Persons: <https://ausimm.com/courses/jorc-code-reporting/>

AIG

The AIG offered its ‘**JORC Code Webinar Series**’ twice during April - May 2022.

| | |
|------------|--|
| Workshop 1 | Introduction to the JORC Code |
| Workshop 2 | JORC Code: Reporting Exploration Results and Targets |
| Workshop 3 | JORC Code: Reporting Mineral Resources |
| Workshop 4 | Integrating ASX Rules with the JORC Code |

Total participant attendance for each workshop:

| | Workshop 1 | Workshop 2 | Workshop 3 | Workshop 4 |
|-----------|-------------------|-------------------|-------------------|-------------------|
| April-May | 13 | 19 | 13 | 15 |

5. List of other events, conferences, etc.

Although JORC doesn't organise these types of events, JORC has presented at several conferences throughout 2022-23 to provide industry stakeholders an understanding of the Code update process and status. These include:

- Southern Queensland Branch AusIMM JORC Code Update, Peter Stoker April 2023
- AIG Annual Meeting JORC Code Update, Rod Carlson and Ann Ledwidge May 2023
- Hunter Valley Branch JORC Code Update, Steve Hunt June 2023
- AusIMM New Zealand Branch Conference JORC Code Update, Steve Hunt August 2023
- AusIMM Oron Ore Conference JORC 202X: An update on the progress and next steps for the JORC Code Review, Leigh Slomp September 2023

6. Other Key Activities

Review of the JORC Code

JORC is undertaking a detailed review of the JORC Code provisions and procedures, to maintain professional standards and to satisfy the ongoing governance requirements of the ASX and ASIC. The review process commenced late 2020.

JORC completed a draft revision of the 2012 JORC Code and in October 2022 sent this draft to the Australian corporate regulator ASIC (Australian Securities and Investments Commission) and the main securities exchange operator ASX (Australian Securities Exchange) for initial comments. JORC received some verbal feedback from ASIC in early 2023, but only in mid-August received initial high-level comments from ASX.

JORC intends to incorporate modifications into the draft code documents to address the key issues raised by ASX and ASIC. JORC will provide an updated draft for a three month public comment period commencing late-October.

A second exposure draft will be shared, ahead of formalisation stages, in 2024.

In parallel with this review, JORC Parent Bodies formed a Joint Taskforce to review the requirements and procedures for nomination (including verification) of Competent Persons under the JORC Code. A series of discussion documents and recommendations have been circulated between the Joint Taskforce and the JORC Competent Person Working Group and are close to being available for stakeholder engagement.

The Joint Taskforce also commissioned a 'Baseline review' of competence under the JORC Code, including a comparison of requirements across the CRIRSCO codes and standards. This study was released on 6 October 2022 and was circulated to CRIRSCO representatives.

KCMI workshop assistance

JORC was able to assist CRIRSCO and KCMI in providing a facilitator for a workshop "Exploration Results, Mineral Resources, and Mineral Reserves Reporting" held as part of the Competent Person Indonesia Forum in Jakarta on March 1st, 2023. Roderick Carlson from JORC conducted the successful workshop. CRIRSCO provided the airfare and KCMI covered all other costs. KCMI generously divided the surplus with CRIRSCO.

AMEP - Strengthening Mongolia's Professional Associations for Mining

JORC was able to assist the Australia-Mongolia Extractives Program (AMEP) to support the strengthening of Mongolia's professional associations for mining by JORC Chair Steve Hunt presenting "Overview of the JORC Code and the Australian and international reporting environment" on 13 April via a one hour live video link.

3. BRAZIL – CBRR

José Ricardo Thibes Pisani, CBRR President
Edson Ribeiro, CRIRSCO Representative
Thomas Brenner, CRIRSCO Representative

This short report summarizes the CBRR activities between September 2022 and August 2023, with the intention of sharing information with other CRIRSCO members.

1. Support to CRIRSCO activities

CBRR has been actively engaged in supporting CRIRSCO with the organizational process and affiliation procedures for new potential country members.

Edson Ribeiro is more focused on the international collaboration. Member of the CRIRSCO Executive (Secretary 2018/19, Deputy Chairperson 2020/21, Chairperson 2022/23), the Standing Committee of External Relationships, Education & New Members and of the Working Groups for the admission of Indonesia, China, Colombia, Peru, Ecuador, and Argentina.

Thomas Brenner is more focused on the internal activities in Brazil, including the organization of seminars, short courses and the 2022 release of the CBRR Guide for Public Reporting. Leader of the CRIRSCO Standing Committee of Communication and Publicity and member of the Working Groups for the admission of Peru and Ecuador. In 2023 Thomas has dedicated valuable time for the development of the new CRIRSCO website.

2. Brazilian Legislation on Resources and Reserves

As reported last year, the normative act (Resolution 94/2022 of Feb. 7th, 2022) regards the Brazilian resources and reserves declaration was published by the Brazilian Mining Agency (ANM) on February 8th, 2022. It aligns Brazilian declaration to the international accepted standards and creates the Brazilian System of Mineral Resources and Reserves (SBRRM), which defines a group of norms and procedures for Exploration Results, Mineral Resource and Mineral Reserve disclosure, to be filed to ANM - technical restricted information.

The normative act also creates the document “Public Declaration”, which is optional to the companies - not mandatory. Public Declaration must contain the summary of information on Exploration Results, Mineral Resources and Mineral Reserves in each of the stages of mineral exploration carried out by the holder of the mineral right.

The Resolution text also considers “the international public reporting models for declaring exploration results, resources and reserves prepared by the Committee for Mineral Reserves International Reporting Standards (CRIRSCO), represented in Brazil by the Brazilian Commission of Resources and Reserves (CBRR)”.

ANM invited CBRR representatives to attend and contribute to their Participative Meeting number 5/2022, that took place in November 2022, within the scope of the Annual mining report (RAL Declaration 2022/2023). The main aim of the meeting was to collect specialized technical contributions in relation to the new concepts of mineral resources and reserves brought by ANM Resolution No. 94, with the purpose of presenting a declaration of mineral resources and reserves in

the Annual Mining report (RAL), from 2023 (base year 2022). CBRR representatives were glad to attend and were able to prepare a document with several suggestions for ANM team.

3. QP Registration

Between September 2022 and August 2023 CBRR received 56 applications for registration. After document analysis and interviews with the candidates and sponsors the Register Committee has approved 28 (in total or partially), one candidate declined (as was partially approved), 1 application was denied and 26 are still in process. Two QPs cancelled their registration, claiming they were no longer working with resources and reserves and one QP had his registration cancelled due to nonpayment of the annual fee.

Below is a chart showing the number of Registered Qualified Professionals of CBRR as per area of knowledge.

Table 1

| Area of knowledge | Number of Professionals |
|---|-------------------------|
| Mineral Exploration | 76 |
| Mineral Resources Estimation | 67 |
| Mineral Reserves Estimation | 45 |
| Mineral Processing | 12 |
| Mining Operation | 11 |
| Environment and Sustainability | 6 |
| Economic Evaluation of mineral assets | 4 |
| Brazilian Mining Regulation | 6 |
| Geotechnics | 6 |
| Total of CBRR Registered Qualified Professionals as of August 17th 2023 | 152 |

*A Registered Qualified Professional can be certified simultaneously in different areas of knowledge.

In terms of university degrees, the majority are geologists and mining engineers, and there are also some metallurgical engineers, chemical engineers, environmental engineers, civil engineers, and geologist engineers. So far, there is only one foreign QP registered at CBRR.

To date, CBRR has not received any notification that would lead to the opening of an investigation process by the Ethics Committee.

4. Invest Mining Network

As reported last year, at the end of 2021, it was created the “Invest Mining” Network, formed by representatives of public institutions and private entities, financing and regulatory agents, on a voluntary basis, which aims to promote mining activities in Brazil, as well as the expansion and

diversification of mineral production and increasing the amount of mining companies operating in the country, promoting actions that result in investments in mining and fundraising in the capital market.

CBRR is one of the supports of the Invest Mining network and José Ricardo, as CBRR's president, is attending several meetings, the main ones being: during Simexmin in Ouro Preto (MG) in November/22 and at the B³ Stock Exchange in São Paulo, in June/23, in addition to several virtual meetings and webinars.

The Invest Mining website was updated to make it more attractive to investors and to provide more information about the mining projects that need financial support.

5. CBRR participation on Mining Events

On November 2022, CBRR members (José Ricardo Thibes Pisani, Thomas Brenner, Beck Nader, Thiago Bonas, Glauca Cuchierato and Edson Ribeiro, as CRIRSCO chairperson) gave presentations at the X SIMEXMIN (X Brazilian symposium on mineral exploration), that took place in Ouro Preto, Minas Gerais state. The sessions discussed about CBRR Guide Update 2022 Edition – Main Changes, the growing importance of CBRR membership and actions to promote the QP development, CRIRSCO as a Governance System, mineral project life cycle, sources of investment for a mineral project and project development via Investment Funds.

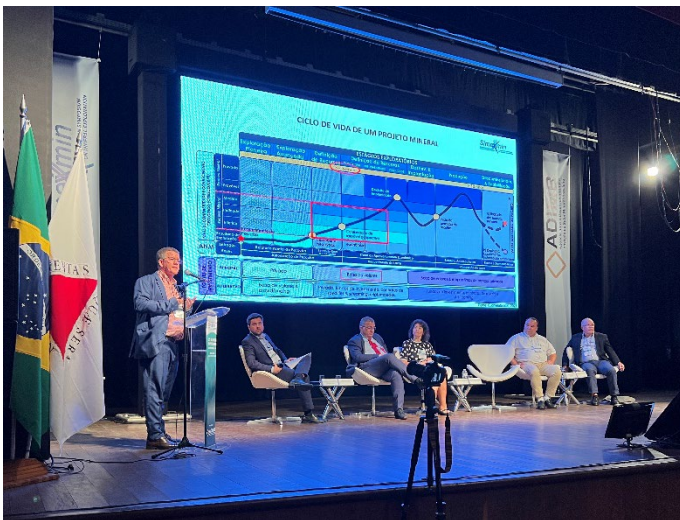


Figure 1



Figure 2



Figure 3

During the X Brazilian symposium on mineral exploration, CBRR organized a booth to divulgate CBRR. CBRR members took shifts to attend participants interested in more information about how to register as a QP and other information about CBRR.



Figure 4

6. CBRR new Guide 2022

CBRR submitted its new Guide to CRIRSCO in December 2022. After the positive recommendation from CRIRSCO code review working group, the Executive has circulated their report and CBRR new code to all Members and have not received any additional comment or request for clarifications. With this, CRIRSCO confirmed that the review of CBRR 2022 code has been completed and the new version of the CBRR Guide was approved by the Executive and all other NROs, in February 2023.

The major differences are highlighted below:

- New format like the CRIRSCO 2019 Template layout, with clear identification between Definitions, Codes and Guidance.
- Introduction of the title “Exploration Information”, encompassing the definitions “Exploration Result” and “Exploration Target”, aligned with the 2017 SME Guide.
- Replacement of the item “Environmental Aspects, Occupational Safety and Health” (Item 12 and Table 1) by the ESG definitions, following the 2021 Perc Reporting Standard. Figure 1 has been updated to include the ESG term in the modifying factors reference.
- Table 1 was modified to display distinct columns for Exploration, Mineral Resources and Mineral Reserves, reflecting the new CRIRSCO and PERC templates.
- Introduction of Table 2 – Guidance for Technical Studies (Scoping, Pre-Feasibility and Feasibility).
- Other Declaration sections included as Appendixes.
- Withdrawn of the Recognized Professional Organization list.

7. CBRR new Committee of Continuous Professional Development

During the period, the Continuous Professional Development Committee, responsible for fostering continuous professional development and promoting specific training programs for CBRR’s Qualified Professionals (QPs), promoted several online webinars about different topics to contribute to QPs development and to the mining community in general. Attendance is in general between 30 and 50 QPs, with one of the webinars reaching close to 100.

The topics of the webinars were:

- The Challenges and Perspectives of the Brazilian Mineral Sector and the Importance of Continuing Education, presented by the former Secretary of Geology and Mineral Transformation from the Mines and Energy Minister, Lilia Mascarenhas Sant' Agostino.
- Role of QPs and New Perspectives of action, presented by CRIRSCO Chairperson, Edson Ribeiro.
- How to fill the Annual mining report (RAL Declaration 2022/2023, based on the new concepts of mineral resources and reserves brought by ANM Resolution No. 94, presented by ANM (Brazilian Mining Agency) Technical team.
- Skills development model for the mineral resources' declaration process, presented by the member of the Continuous Professional Development Committee, Gláucia Cuchierato;
- Tips and Recommendations for requesting registration as a Qualified Professional at CBRR, presented by CBRR Register Committee member, Leonardo de Freitas Leite.
- The issue of density in the declaration of mineral resources: new methods for measuring and estimating, presented by CBRR Technical Committee member and UFRGS professor, João Felipe Coimbra Leite Costa.

The Continuous Professional Development Committee is now focusing in the elaboration of the CBRR Continuing Professional Development Guide that is going to be used to measure the QP's evolution.

8. CBRR meetings

On August 2023, CBRR president, José Ricardo Thibes Pisani and CBRR Register Committee member, Miguel Nery attended a meeting with the Secretary of Geology and Mineral Transformation from the Mines and Energy Minister, Victor Saback.

9. CBRR participation on the new CRIRSCO website initiative

By the end of 2022 Thomas Brenner assumed the coordination of the CRIRSCO website revamp task force in the Standing Committee of Communication and Publicity. After ICMM budget approval in mid-2023 and Launch Digital contract sign-off the first draft layout for the new CRIRSCO website was approved by CRIRSCO in early September. Gláucia Cuchierato from CBRR was contracted to assist and speed up the completion of new site.



10. CBRR and CCRR Reciprocity

A reciprocity agreement between CBRR and CCRR (Colombia) is being prepared. The first draft was originally prepared by CCRR and the Technical Committee from CBRR revised the document and included important details related to the Brazilian labour law. The Board of directors from CBRR approved the changes in the document and the draft was returned to CCRR president for approval.

We believe the agreement will be signed soon and it is going to be another positive aspect to expand the horizon of activity of South American QP's.

11. CBRR representatives

CBRR representatives with CRIRSCO will remain the same for another 1-year period: Mr. Edson Ribeiro and Mr. Thomas Brenner.

4. CANADA – CIM

Canadian Institute of Mining, Metallurgy and Petroleum

Representatives(s):

Garth Kirkham.
Deborah McCombe

Ongoing initiatives

- The development and updating of the following documents:
 - Mineral Resource and Mineral Reserve Definitions (2014)
 - PEA/Scoping Study Definitions
 - ESG Guidelines for Mineral Resource and Mineral Reserve Estimation
 - Coal Resources and Reserve Estimation Best Practices
 - Industrial Minerals Best Practices
 - Lithium Brine Guidance
 - Treatment and Disclosure of Streaming Agreements in MRMR Disclosure
 - Uranium Best Practices and Guidance
- French translation of the CIM Mineral Exploration Best Practice Guidelines.

Highlights since last report:

- Approval and adoption of the CIM ESG Guidelines in September 2023.
- Approval and adoption of Mineral Processing Best Practices in November 2022.

Items that CRIRSCO should be made aware of:

1. Review of the CRIRSCO suggested edits and changes to the Standards Definitions within the Template in progress and will be available for discussion at the CRIRSCO AGM in October 2023 in Brazil.

2. **Review and Update of Best Practice Guidelines for Industrial Minerals**

An update of these guidelines has been completed and the draft is now being reviewed by the Canadian Securities Administrators (CSA).

3. **Best Practice Guidelines for ESG**

The ESG Guidelines were completed by a Sub-Committee of the CIM Environmental and Social Responsibility Society (ESRS) and approved and adopted by CIM Council in September 2023.

4. **Best Practice Guidelines for Mineral Processing**

An update of these guidelines was completed, approved, and adopted by CIM Council.

5. **Coal Mineral Resource and Mineral Reserve Best Practice Guidelines**

There was a modernization and improvement initiative implemented for the Best Practices and Mineral Resources and Mineral Reserves guidelines for coal. The goal is to replace GSC Paper 88-21 with a target date of completion of Q2 2024.

6. **MRMR Definitions**

Several CIM MRMR definitions such as exploration target and PEA/Scoping Study are being reviewed and will be updated by the MRMR Committee by end of Q4 2023.

7. **Treatment of Royalty and Metal Streaming in Mineral Resources and Mineral Reserves**

A task group is studying the implications of metal streaming agreements within mineral resources and mineral reserves particularly related to cut-off grade. Ongoing.

8. **UNFC**

Ongoing participation and representation at the UNFC to ensure continuity and encourage communication. Bridging document has been completed and approved.

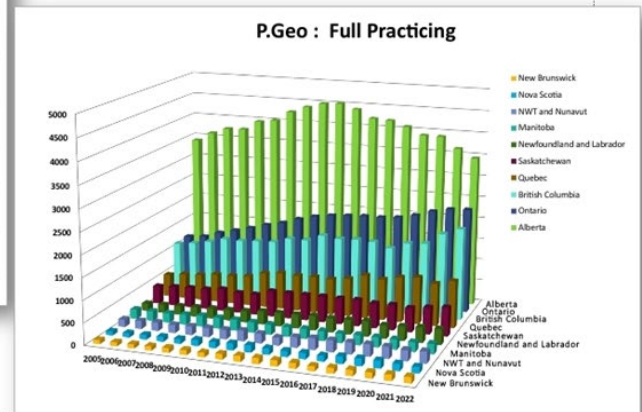
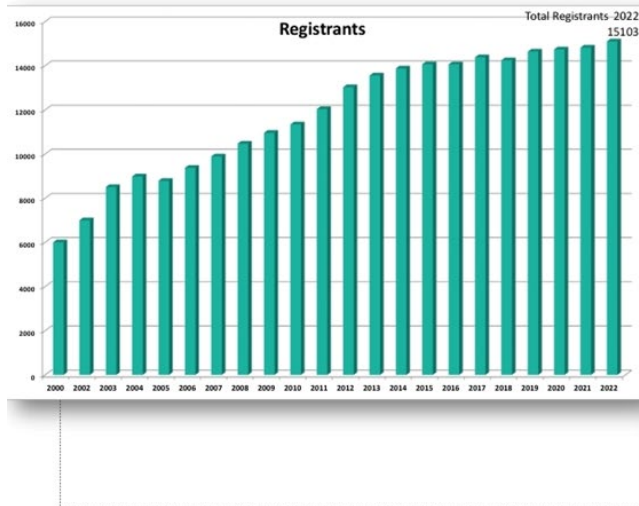
9. **CSA Initiatives**

The Canadian Securities Administrators (CSA) are observers on the MRMR Committee and have a 90-day review period for any changes to the CIM Standard Definitions or Guidelines that are developed. Requests and initiatives are communicated and addressed from time to time.

10. **Professional Registration**

CIM does not regulate the engineering and geoscience professions in Canada, nor does it regulate and administer “qualified persons” or “competent persons”. In Canada, the professions are regulated by provincial and territorial associations. Figure 1 illustrates the total registrants and trainees along with a breakdown by jurisdiction.

Geoscientist Licensure in Canada



5. CHILE – COMISION CHILENA

The Comision Minera Chile / Mining Commission (CM)

At year end 2022, 24 professionals joined CM as Competent Persons. As of August 31, 2023, 12 professionals were accepted as Competent Persons, and 6 applicants were rejected for not meeting the requirements. The Admissions Committee incorporated two brines R&R expert professionals to ensure fairness on new applicants' interviews.

In April 2024 the current Board of Directors must be renewed as stated at CM bylaws. CM's administration and operations are in charge of Industrial Engineer Ms. Ximena Caviedes.

2022 financial status is in good standing as stated in external audit by CCL AC Auditores Consultores Ltda. in March 2023.

1. Professional training initiatives organized by the NRO

CM successfully organized several professional training activities on various subjects of interest. Since the difficulties due to Covid19 all training activities were held through video conferences; except for the November 2022 Seminar, it was in hybrid format. All the presentations of seminars and workshops are available at www.comisionminera.cl.

| | |
|--------------|--|
| Agosto 2022 | Seminar: "Sustainability in Competent Persons' Reports" |
| October 2022 | Course: "Stock Markets and Project Financing". Planned as presential course. |
| April 2023 | Workshop: "Strategic Minerals: Opportunities and Challenges" |
| May 2023 | Course: "Quality Assurance and Quality Control in Exploration Geology" |
| August 2023 | Course: "Reportability of Mineral Resources and Reserves in Brine" |

2. List of other events

CM organizes every January a diploma ceremony for new Competent Persons. Chilean Mining authorities are always invited to these ceremonies, as seen here with Minister of Mines (center, sitting row)



In addition, CM sponsored Geomin Mineplanning (technical international seminars and conferences) and FEXMIN, a Mineral Exploration Conference held in Santiago, Chile on 29-31 August 2023.

3. Other key activities

In March 2023, CM released a document entitled “Methodological Guide for Life of Mine Reports”. It was developed both by SERNAGEOMIN and CM to help Competent Persons prepare comprehensive reports to support Mine Closure Guarantees.

Code CH 20235 update. It has been a team effort to review and update some chapters to comply with current CRIRSCO template. We expect it to be completed in the first quarter of 2024.

An update on the CM website made it easier to access, with clear sections and key information for applicants and public. Online payments were improved well.

6. COLOMBIA – CCRR

Colombian Commission of Mineral Resources and Reserves

Representatives:

CCRR Chairperson: Mónica Saldarriaga
CRIRSCO Representative: Wilfredo Lopez

INTRODUCTION

The Colombian Commission on Mineral Resources and Reserves CCRR® releases the management report for the period 2022-2023. This year, the CCRR® developed the agenda outlined and maintained its annual work program and its good name by highest level both in Colombia and internationally.

The purpose of this report is to report on the activities carried out and to inform the board of directors of CRIRSCO and other National Reporting Organizations (NROs) attached to this international organization of the activities carried out by the CCRR®.

CCRR® ACTIVITIES: AUGUST 2022- JULY 2023

The CCRR® actively participated in several national events, projects and courses focused on the training of PCs, students and professionals.

CCRR® EXTRA-ORDINARY ASSEMBLY

On the 1st of November 2022, an Extra-ordinary Assembly was held to vote the acceptance of The Association of Geological Engineers- ANIG, as a new associate to the CCRR®. ANIG was approved as a new associate.

THE CCRR® ANNUAL ORDINARY ASSEMBLY

The CCRR® Annual Ordinary Assembly was held on March 14, 2023, it was carried out through the Zoom platform, with the participation of the founding associates, as well as the support of the observer and advisory bodies.

EVENTS

- ✓ Mauricio Castañeda attended the National Mining Congress (ACM), on September 1 and 2, 2022.
- ✓ During September 15 and 16, Commissioner Marco Nieto participated in the Dassault

-
- ✓ Systemes event “International Mining Seminar” where he represented the CCRR®.
 - ✓ Paula Montoya attended the MetCoke Summit (Fenalcarbón), on September 22, 2022 in Barranquilla.
 - ✓ Mauricio Castañeda participated in the Europe Chair, held the week of October 17, 2022 at the Universidad del Norte, in Barranquilla.
 - ✓ Wilfredo López participated on November 25, in a meeting with the mining, academic and business sector of Ecuador, at the headquarters of the Universidad Central EERRM, as part of the support and accompaniment that CRIRSCO and the CCRR® are doing to Ecuador in its process to be a member of CRIRSCO.
 - ✓ Mauricio Castañeda and Wilfredo López attended the Brazilian Mining Exploration Symposium, X SIMEXMIN 2022, on behalf of the CCRR®, from November 27 to 30, 2022 in Ouro Preto, Brazil. In particular, they participated in the CRIRSCO Latin America Technical Session held on November 28, where a draft recognition agreement was reviewed to sign with the CBRR.
 - ✓ In-person meeting with the Vice President of Monitoring and Control of the ANM, Dr. Jimena Patricia Roa, on January 12, 2023. The objective of the meeting was to present the CCRR® and continue working together within the framework of the agreement.
 - ✓ Mauricio Castañeda participated in the public event “Central axes of mining in the country. Fundamentals for updating Colombia's mining policy”, carried out on January 30, 2023, in Medellín.
 - ✓ On May 4 and 5, Mónica Saldarriaga participated and talked about the CCRR® in the first Energy Transition Congress held at the Universidad de Los Andes.
 - ✓ Vice President Mauricio Castañeda participated in the Colombian Congress of Geology held in Santa Marta from August 16-18.

SHORT COURSES

The Academic Committee developed and agenda of short courses for this year. These courses of 6 to 8 hours are dictated by PC’s and professionals of the mining sector, who kindly donate their time to the CCRR® for this initiative. The courses have been well received with an average of 25 enrolled participants per course. The short courses that have been taught are:

- ✓ QAQC of databases for mining projects: December 16.
- ✓ Exploration in Polymetallic Deposits: February 14.
- ✓ Industrial Rocks and Minerals, uses and best practices: June 6.
- ✓ Statistics applied to the geochemical analysis of mineral deposits: July 14.
- ✓ Geostatistics applied to polymetallic mineral deposits: August 14.

REPORT OF COMPETENT PERSONS UNTIL SEPTEMBER 2023.

The CCRR® currently has 59 Active Competent Persons (PC), of which 48 are men and 11 are women.

On 2022, only 3 professionals were registered as PC.

To date, on 2023, 8 professionals have been registered as PC.

ACTIVITIES UNDER DEVELOPMENT 2023.

- ✓ The development of the Good Practice Guideline of Coal, Good Practice Guideline of Industrial Rocks and Minerals and Good Practice Guideline of Polymetallics, are in development in conjunction with the National Mining Agency (ANM). These guides have the support of several PC's, who are part of the CCRR®.
- ✓ Updating the ECRR®: The Technical Committee leads this initiative. To date, the latest corrections to the draft document are being made. The document is expected to be delivered to CRIRSCO for review at the end of this year.
- ✓ The last short course of the year is being scheduled for the end of November.

7. EUROPE – PERC

PERC Executive and Members 2023-2024

Following PERC’s AGM which was held in May 2022, the incoming PERC Executive is as follows:

- Chairperson – Edmund Sides
- Deputy Chairperson – Andy Birtles
- Secretary – Antonio Maldonado
- Treasurer – Owen Herod
- CRIRSCO representatives – Edmund Sides and Mark Burnett

The position of Treasurer, which had been left vacant when Ruth Allington stood down as at the 2022 AGM, has now been filled by Owen Herod. The other officers remained unchanged.

The names of all of the PERC Members and Trustees are available on the [PERC website](#).

PERC Sub-committees 2023 – 2024

PERC currently has five sub-committees with different areas of responsibilities, as indicated below:

| Sub-committee | Chairperson |
|---------------------------------------|-----------------|
| Standard Update | David Dingemans |
| Training | Mark Burnett |
| Finance & Regulatory | Mark Burnett |
| Dimension Stone & Industrial Minerals | Marco Cosi |
| Communications | Robert Palmer |

PERC 2023 AGM

PERC’s 2023 AGM was held on 21 April 2023 as a hybrid event with in-person attendance in a conference room in the INTRAW and EFG office at Rue de Pascale in Brussels, Belgium together with a large number of PERC members and observers joining online. It is likely that future AGMs and other PERC meetings and events will continue to be held as hybrid events, but steps need to be taken to encourage greater in-person participation.

The Chairperson’s report, and reports from various participants provided an overview of PERC’s activities during the 2022/ 2023 year, a summary of which is given below. A copy of the full report is available on PERC’s file sharing system using the following link: [Chairperson’s report](#).

Chairperson's Report to the PERC 2023 AGM

Edmund Sides, the PERC Chairperson, provided a report to the AGM on PERC's activities for the year.

The PERC Chairperson's report on the year's activities, is summarised below.

Highlights for the year included the following:

- Owen Herod was appointed as Treasurer to fill the vacancy left when Ruth Allington stood down from this position at the 2022 AGM.
- The release of the PERC Summary Guide 2022, as well as translations of the PERC Definitions, into seven different European languages.
 - Finnish; French; German; Italian; Portuguese; Spanish and Swedish.
- Participation in several, well attended, training courses.
- Contribution to CRIRSCO activities.
- Additional activities carried out by the PERC sub-committees.

For the coming year, and in line with the PERC 2020 Strategic plan, the Executive and sub-committees will focus on the following priorities:

- Finalizing and submitting a PERC response to the EU's Critical Raw Materials Act (CRMA);
- Providing input to the updating of the CRIRSCO-UNFC Bridging Document;
- Developing presentations and training materials to raise awareness of the complementary nature of the CRIRSCO Reporting Template (and the reporting codes and standards which are aligned with it) and the UNFC classification system.
- Completing a register of companies in Europe that are using PERC, and a summary of European Stock Exchange regulations applicable to minerals companies.
- Seeking sponsorship from European mining companies and consultancies to support promotion of PERC within Europe.
- Arranging meetings with Stock Exchange and financial regulators in order to promote PERC.

Training & Promotional Activities (June.2022-Sep.2023)



Figure 0.1 Satisfied participants at the end of the Euroworkshop held in Belgrade (19-May-23)

A summary of the main training and promotional activities carried out by PERC during the period is provided below.

- 09-Aug-22 – Presentation (in Spanish) by Antonio Maldonado to a webinar organized by the Comisión Minera, Chile. Title: Incorporación de los aspectos ESG en el Estándar PERC de Octubre 2021 (Incorporation of ESG aspects in PERC 2021 reporting standard)
- 15-16 Sep-22 – PERC-BDG in person course held at Meggen, Germany as part of the Meggen Raw Material Days. In person presentations from Ed Sides and Marco Cosi, remote contributions (via GoTo Meeting) from five other presenters. Course title: The PERC Reporting Standard 2021 with special emphasis on industrial minerals, construction raw materials and dimension stones (33 participants)
- 17-Nov-22 – In person course organized by IMEB (in Spanish) in Madrid, Spain, presented by Ed Sides title: “El Estándar de Informes del PERC Introducción y Estado Actual” (41 participants)
- 24-Jan-23 – Participation of several members of PERC in an Expert Roundtable jointly organized by INTRAW-EFG-PERC, entitled: “*Expert Roundtable on UNFC and CRIRSCO standards*”
 - Summary report available at: <https://intrauw.eu/roundtable-unfc-crirSCO/>
- 20-Apr-23 – Hybrid workshop for PERC members with several different presenters entitled: “The use of PERC and other CRIRSCO Codes/Standards in conjunction with the UNFC system”
- 20-Apr-23 – Official release of the [PERC Summary Guide 2022](#). Hybrid presentation prior to the PERC AGM in Brussels
- 18-19 May 2023: EFG Euroworkshop in Belgrade Serbia presented by Ed Sides entitled: “PERC Reporting Standard: Context, Requirements and Application” (44 participants in person; 10 online participants)
- 6 June 2023: Presentation by Ed Sides to a meeting of the Norsk Bergforening (Norwegian Mining Association) and the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway entitled: “The development of the CRIRSCO Reporting Codes and Standards and their relevance in Europe”

- 13 September 2023: Mark Burnett presented for a Master’s course at the University of Witswaterand on the differences between the CRIRSCO reporting codes and standards.

In addition to the courses and webinars noted above, several individual PERC members also gave presentations on topics related to minerals reporting.

PERC Member Organisations - Complaints and confirmation requests

A summary of the number of complaints and confirmation requests received by PERC’s member professional organisations during the period May 2022 to May 2023 is given in the table below, based on information reported to the 2023 PERC AGM. An estimate of the number of professional members of these organisations who may be involved in Minerals Reporting is also provided, however this is quite speculative for the organisations with larger memberships as in general their members are not required to state whether they are actively in Minerals Reporting.

| Organisation | Complaints / disciplinary actions | Confirmation Requests (for CP/QP status) |
|--------------|------------------------------------|--|
| EFG | None related to minerals reporting | None |
| FAMMP | None | None |
| GSL | None related to minerals reporting | None |
| IGI | One (pending) | 4 |
| IMEB | None | None |
| IOM3 | None related to minerals reporting | 6 |

The EU’s Critical Raw Materials Act

The EU’ Critical Raw Materials Act (CRMA) is part of a major initiative to secure supplies of critical raw materials which European industries depend on. The background is summarized in the following text taken from [a briefing document prepared for the European Parliament](#):

The EU's ambition to become a climate-neutral economy by 2050, and its ability to sustain the green and digital transition and achieve strategic autonomy, all rely heavily on reliable, secure and resilient access to critical raw materials (CRMs). On 16 March 2023, the Commission put forward a proposal for a regulation on CRMs. It introduces the concept of strategic raw materials (SRMs), which are key for some strategic technologies and vulnerable to shortages. The general objective of the proposed regulation is to improve the functioning of the single market by establishing a framework to ensure the EU's access to a secure and sustainable supply of CRMs. To achieve this, the regulation would pursue four specific objectives: strengthening the whole SRM value chain; diversifying the EU's imports of SRMs (so that by 2030, no third country would provide more than 65 % of the EU's annual consumption of each SRM); improving the EU's ability to monitor and mitigate the CRM supply risk; ensuring the free movement of CRMs and products containing CRMs

placed on the EU market and ensuring a high level of environmental protection, by improving their circularity and sustainability.

PERC submitted responses to an initial public consultation on the Act which ran from 30 Sept. 2022 to 25 November 2022 (258 responses received); as well as feedback on the text of the EC's proposed Act during the feedback period which ran from 20 March to 30 June 2023 (310 valid responses received). PERC's submission with feedback on the Commission's proposed adoption can be viewed and downloaded from the EU website – [Submission reference F3425413](#)

A committee of the European Parliament subsequently reviewed the proposed Act and submitted a report to the European Parliament (including some recommended amendments) which was debated and approved on 13 September 2023. The next step before the Act in the process is a three-way discussion (trilogue) between the European Parliament, the Council of the European Union and the European Commission to agree on how the Act will be implemented.

The most recent version of the Act as amended and approved by the European Parliament is available at:

- https://www.europarl.europa.eu/doceo/document/TA-9-2023-0325_EN.pdf

Key elements of the Act (based on the above version of the text) include the following:

- An updated list of Critical Raw Materials (see Annex I, Section 1).
- A shorter list of Strategic Raw Materials (See Annex II, Section 1)
- A target that by 2030 no single country outside of the EU should produce >65% of the EU's consumption of each strategic raw material
- Additional benchmarks have been set for the domestic capacities of the EU with the following objectives to be achieved by 2030 for strategic raw materials:
 - to extract the ores, minerals or concentrates needed to produce at least 10% of the Union's annual consumption of strategic raw materials, to the extent that the Union's reserves allow;
 - to produce at least 50% of the Union's annual consumption of strategic raw materials; up to 20% of the Union's new processing capacity might be developed under strategic partnerships in emerging markets and developing;
 - Union recycling capacity, including for all intermediate recycling steps, is able to produce at least +10% volume of recycling capacity based on the 2020-2022 baseline for each strategic raw material to, at least collect, sort and process 45% of each strategic raw material contained in the Union's waste taking into account technical and economic feasibility.
- The Act also introduces the concept of Strategic Projects which will have access to streamlined permitting processes and improved access to financing. Applications for a project to be recognised as a Strategic Project by the European Commission include a requirement to submit a classification of the project based on the United Nations Framework Classification for Resources (UNFC). Such projects may be located in non-EU countries.
- Additional references to the UNFC are made with respect to requirements related to information provided to the Commission by national governments with respect to mineral occurrences; new mineral projects and closed extractive waste facilities.

- The Act also envisages that achievement of the targets may be facilitated through Strategic Partnerships with third countries which cover raw materials.

The CRMA has raised interest in the mining sector in Europe and is considered to present significant risks (both threats and opportunities) for PERC and CRIRSCO in a European context. Several companies with minerals projects in Europe and in countries which supply minerals to the EU (particularly those covered by strategic partnerships with the EU) have already shown interest in being recognised as strategic projects by the European Commission in order to enhance their attractiveness with the possibility of streamlined permitting and assistance with access to project financing.

Specific issues that PERC has noted as warranting further consideration include the following:

- The perception that the UNFC provides an alternative reporting mechanism to CRIRSCO-aligned standards which companies may already be using.
- A lack of knowledge and understanding of both the UNFC and CRIRSCO-aligned standards.
- Potential misuse of the existing CRIRSCO-UNFC Bridging Document.
- A widespread lack of understanding of the timelines involved in mineral exploration and the development of mineral projects.

8. INDIA – NACRI

Representatives:

K Madhusudhana, Co-Chair NACRI

Dr PV Rao, Co-Chair NACRI

1. **Professional Organisation (PO):** Mining Engineers' Association of India (MEAI)
2. **Reciprocity:** Between NACRI (India) and SME (USA)
3. **The number of applications in total, approved, rejected, partial (other)**
 - Number of Applications approved for RCP: 4
 - Number of Applications rejected for RCP: 0
4. **Complaints, number of complaints, how many are in progress, concluded with sanctions and concluded with no penalties**
 - Complaints received: NIL
 - NACRI meetings held : Two (2)
(29-10-2022 virtual meeting, 19-12-2022 in person meeting at Hospet)



NACRI Meeting in progress at Hospet on 19-12-2023

5. **Participation of NACRI Reps in the CRIRSCO committee meetings:** 100%
6. **Professional training initiatives taken up by the NRO:** ONE
 - IMIC training by NACRI held on 24-28, April 2023
 - 42 professionals attended

The NACRI Professional Development Program (PDP) Committee conducted an IMIC training program targeting the mineral industry professionals serving with the mining and consulting companies. The committee held a 5-day (40-hour) in person training

program during 24-28, April 2022 at MEAI Headquarters, Hyderabad. The content of the training program included IMIC (Indian Mineral Industry Code for reporting Mineral Resources and Reserves in India), mineral industry best practices and evaluation. The course faculties extended their services without remuneration, voluntarily.

The mining industry response to the IMIC training program was heartening. After the successful completion of the evaluation, all the 42 participants were declared successful and eligible for registration as Competent Persons (CP), subject to fulfilling all other requirements.

Certificates of successful completion of training were presented to all the candidates. Details of the successful candidates were sent to MEAI (PO) and maintained by the NACRI for future reference.



NACRI Co-Chair Mr K Madhusudhana



NACRI Co-Chair Dr PV Rao



Secretary General, MEAI in the program Concluding session



A view of Participants in IMIC training



4th IN-PERSON PROFESSIONAL TRAINING PROGRAM ON IMIC

24-28 April 2023

MEAI HQs, Hyderabad

Mining Engineers' Association of India (MEAI), the trusted voice of the Indian mineral industry, is the leading Professional Organisation (PO) recognised by the National Committee for Reporting Mineral Resources and Reserves in India (NACRI). MEAI accepts the obligation of offering professional development programs to its members, registering Competent Persons (CP) and supervising their ethical conduct. NACRI is the National Reporting Organisation (NRO) of India recognised by the Committee for Mineral Reserves International Reporting Standards (CRIRSCO).

The earlier three on-line training programs on IMIC were successfully concluded by NACRI in January 2021, April 2021, and April 2022 with the participation of over 25 professionals in each program, representing the mining companies, consulting companies and individuals from across the country and overseas. Most of the participants have successfully completed the training program and more than a third of them have registered as Competent Persons (RCP) with MEAI.

Prerequisites for registration of CP

RCP has been defined under Clause #9 of IMIC 2019 as follows:

RCP is a mineral industry professional who is a member of a professional organisation headquartered in India and approved by NACRI or a member of a 'Recognised Professional Organisation' (RPO), as included in a list of similar bodies headquartered outside India available on the NACRI website. These organisations have enforceable disciplinary processes including the powers to suspend or expel a member. An RCP must have a minimum of ten years professional experience, which includes five years relevant experience in the style of mineralisation or type of deposit under consideration, and in the activity which that person is undertaking.

In addition to the above minimum professional experience required by the MEAI members for registration as RCP, the NACRI, vide Article 2.2.ii, further specifies that the potential RCP shall obtain at least 40 hours of mandatory professional development credits before making an application for registration and for certificate renewal every year the RCP should obtain at least 8-hour credits through participation in seminars, conferences, workshops, training programs or webinars, recognised by NACRI.

Accordingly, those eligible mineral industry professionals in India interested in registering as Competent Person under IMIC should be a Life Member of MEAI, attained at least 10 years of professional experience and acquired 40 hours of mandatory professional development credits on IMIC from the NACRI organised training program, at the time of making application to MEAI.

RCP certification shall be valid for a period of one year from the date of issue of the certificate and the same may be renewed thereafter. The annual CP registration as well as the renewal fee has been fixed at Rs 5,000 (Rupees five thousand only + GST @ 18%) and payable to MEAI.

7.0 Registration of Competent Persons (RCP)

The RCP admissions committee constituted by the PO, after necessary review, approved 4 applications that met the educational and industry experience requirements and also fulfilled the mandatory training criterion. The successful candidates were presented with the RCP certificates.

8.0 International conference “Mining: Vision 2047” held at Ahmedabad on 25-27 August 2023: Technical paper presentation on behalf of NACRI.

Mining Engineers’ Association of India-Ahmedabad Chapter organized an International conference at Ahmedabad. On an invitation from the Conference organizers, I made a paper presentation, on behalf of NACRI, entitled “Importance of implementing CRIRSCO compliant Indian Mineral Industry Code (IMIC) in attracting global investments in the Resources Sector”.



Abstract

Importance of implementing CRIRSCO approved Indian Mineral Industry Code (IMIC) in attracting global investments in the Resources Sector

Dr PV Rao, FAusIMM
Co-Chair NACRI
Editor, Mining Engineers’ Journal (MEJ), India

The reassuring role played by the key stakeholders viz. policy makers, regulators, professional bodies, and investors have a distinct bearing in attracting investments in exploration and mining for a sustainable growth of the Indian Resources sector.

It is for the lawmakers to legislate a vibrant National Mineral Policy (NMP) and National Mineral Exploration Policy (NMEP) and the government organizations to assure their effective enforcement. The reigning mineral policies envisage the necessity to motivate global investors and establish an investor friendly business environment. The extant Mineral Auction Rules and Minerals (Evidence of Mineral Contents) Rules for granting Composite Licences (CL) and Mining Leases (ML) of minerals are yet to demonstrate accomplishment of this vital objective of enticing massive global investments in the Resources sector.

Securities Exchange Board of India (SEBI) has a significant role to play in enabling the exploration and mining companies to raise capital through listing in the stock exchanges while ensuring protection of investors' interests. Prominent stock exchanges in the world have already established exclusive disclosure rules for the listing of exploration and mining companies to boost investors' participation. These global stock exchanges recognise only the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) compliant public reporting standards, including IMIC, for disclosure of Mineral Resources and Reserves. Taking hint from this international best practice, SEBI may make it mandatory for the exploration and mining companies to adopt the 'Made in India' public reporting standard 'IMIC' for disclosure of Mineral Resources and Reserves.

The mineral industry professionals and their professional bodies are obliged to follow code of ethics while producing trustworthy technical reports built on reliable geoscientific, technical, commercial and financial data. The mineral industry professionals should strive to upgrade their technical competencies regularly and acquire desired professional qualification and experience to act as Competent Person under IMIC. Stability in the business environment and the risk mitigation mechanism associated with investments in the country could prove to be the game changer in boosting the investments in the Resources sector.

Presentation of exploration data/ reports by Competent Person transparently and in an easy to understand and internationally recognised CRIRSCO International Template would go a long way in instilling and increasing investors' confidence. This proposition has been well substantiated with appropriate citations from the literature/ documents accessible in the public domain.

9. "MEGECON 2022" - All India Geologists Conference held at Hospet, India

The following NACRI founder members presented technical papers on 21-22 December 2022 in the All India Geologists Conference 'MEGECON' organised by MEAI at Hospet, India.

9.1 "International Standards for reporting Exploration Targets & Results" by Mr TR Rajasekar



9.2 “Implicit Modelling - A Modern Approach in Resource Evaluation” by Mr Kuldeep Singh Solanki et.al, Hindustan Zinc Limited, Rajasthan, India



9.3 “Importance of the ESG Aspects in Reporting of Mineral Resources” by Mr Shameek Chattopadhyay, Director and Principal Consultant (Resource Geology), SRK Consulting, India



10. Correspondence with stakeholders

MEAI and NACRI approached the Indian government authorities and the regulators with a request to recognise the IMIC as the standard for reporting Exploration Results, Mineral resources and Mineral Reserves in India and awaiting their positive response.

11. CRIRSCO letters to Indian authorities

CRIRSCO Chairperson Mr Edson Ribeiro, in response to our request, wrote letters to the Indian Government authorities (Prime Minister, Minister of Mines, Secretary Mines, NITI Aayog) and Regulators (SEBI, IBM) on 19-9-2023, to impress upon them on the immediate need in adopting CRIRSCO compliant International reporting standards to attract investments in exploration and mining. Response awaited.

9. INDONESIA – KCM I

Board of Directors:

| | |
|------------------------------|---|
| Lufi Rachmad | Chairman, Kombers KCM I, CRIRSCO Representative |
| Robby Rafianto | Vice Chairman Kombers |
| KCM I Arif Zardi | Secretary I, Kombers |
| KCM I Jimmy Gunarso | Secretary II, Kombers |
| KCM I Dudy Setyandaka | CRIRSCO Representative |

KCM I Report to CRIRSCO Annual Meeting, October 2023

This report summarizes the various Komite Cadangan Mineral Indonesia (KCM I) activities from October 2022 – September 2023.

Kombers KCM I Committee Meeting

A series of meetings were held on

- 08 November 2022,
- 21 February 2023, and
- 26 September 2023

Kombers KCM I has scheduled to have at least four meetings or quarterly meetings every year for all members.

Guidelines to KCM I Code 2017

Guidelines have been finalized: Guidelines for Nickel Laterite and Coal, published at CPI (Competent Person Indonesia) Forum on 01 March 2023.



Registered Competent Person

From 114 applicants between October 2022 and September 2023, the KCMi verified 47 professionals to its Competent Person register/Competent Person Indonesia (CPI), where thirty are for CPI PERHAPI and twenty-seven for CPI IAGI. The verifications were conducted hybrid and online during this period due to COVID-19 concerns. As of September 2023, the total number of KCMi registered competent persons is 505 (248 CPI IAGI + 257 CPI PERHAPI).

| Date | Subject |
|---------------------------|--|
| 24 November 2023 | Verification CPI IAGI (13 registered, 10 passed) |
| 22 February 2023 | Verification CPI IAGI (11 registered, 7 passed) |
| 25 May 2023 | Verification CPI IAGI (10 registered, 7 passed) |
| 24-25 September 2022 | Verification CPI PERHAPI (20 registered, 7 passed) |
| 26 November 2022 | Verification CPI PERHAPI (22 registered, 5 passed) |
| 28 January 2023 | Verification CPI PERHAPI (11 registered, 4 passed) |
| 18 March 2023 | Verification CPI PERHAPI (11 registered, 6 passed) |
| 27 May 2023 | Verification CPI PERHAPI (10 registered, 1 passed) |
| 29 July and 5 August 2023 | Verification CPI PERHAPI (6 registered, 0 passed) |

CPI Forum 2023

The Competent Person Indonesia Forum is an annual event that brings together industry professionals to discuss the latest developments and trends in the mining sector. This year, the theme of the CPI Forum is "KCMi: Now and Beyond," and the event's topic focused on the challenges in mineral resources and reserve estimation. The total attendees were 348 people. On behalf of CRIRSCO, Mr. Edson Ribeiro gave the keynote speech.



Workshop

A workshop titled “The Necessity of Exploration Result and Mineral Resources Reporting’ was held as part of the CPI Forum event. The workshop is a collaboration between Kombers KCMi and CRIRSCO, given by Mr. Rod Carlson. The total attendees were 36 people. This event was a profit share event, and CRIRSCO’s share was USD 4,177.



Report of Suspect of Code Breach Case by CPI

There was no additional breach reported during this period.

Meeting with Stakeholders

To socialize and promote the implementation of the KCMC Code, KCMC has been actively meeting with its stakeholders. The following meetings were held during September 2022 – September 2023:

| Date | Subject |
|-----------------|--|
| 19 August 2022 | Coordination Meeting to discuss the follow-up of CPI RKAB Batubara |
| 22 August 2022 | Komers KCMC has submitted the Second Batch of the Gap Analysis Process on Lead and Manganese IUP data and documents to DJMB. |
| 6 October 2022 | Coordination Meeting with the Directorate of Coal Business Development (Dir. Pembinaan Perusahaan Batubara) regarding the inclusion of CPI's name as an estimator of Coal Resources and Reserves in the 2022 RKAB. |
| 20 October 2022 | Attended the CRIRSCO Annual Meeting in Johannesburg |
| 5 December 2022 | Collaborated with LDP PERHAPI to organize Rocks Workshop (Workshop Batuan) |
| 14 March 2023 | Speaker at the Resources and Reserves Consignment (Kegiatan Konsinyering Sumber Daya dan Cadangan) organized by MIND ID |
| 11 April 2023 | Invited to an interview with CNBC Indonesia |
| 11 June 2023 | Audience with the Head of Geological Agency |
| 23 June 2023 | Represented by Mr. Alan Matano, Speaker and attended FGD Benchmarking of PHE, ES, and EC methods and CPI of the Minerba sector against the Geothermal sector |

| | |
|--------------------------|---|
| 3 August 2023 | Coordination Meeting on Resolving Manganese Downstream Issues in Kupang, East Nusa Tenggara, organized by Deputy I of the Presidential Chief of Staff with the participation of BKPM, Ministry of Energy and Mineral Resources, East Nusa Tenggara Regional Government, National Police, and Attorney General's Office. |
| 7 August 2023 | Sent a representative to be a resource person at the Central Kalimantan High Prosecutor's Office |
| 25-26 August 2023 | Speaker for Geological Agency Staff for PHE topic |
| 14 September 2023 | Discussion with Minerba (Directorate of Engineering and Environment and Directorate of Business) on the "burden" of Minerba on the number of IUP/KK/PKP2B vs. the number of CPs. |

Other Recent KCMi Activities

Other KCMi Activities between October 2022 and September 2023 are listed in the table below:

| Date | Subject |
|-------------------------|--|
| 28 February 2023 | "The Necessity of Exploration Result and Mineral Resources Reporting" Workshop, in collaboration with CRIRSCO |
| 1 March 2023 | CPI 2023 Forum and publication of Guidebook for Coal and Nickel Laterite Commodities (Buku Panduan untuk Komoditas Batubara dan Komoditas Nikel Laterit) |
| 24 August 2023 | Competency GAP on reporting exploration results for Geological Agency staff |

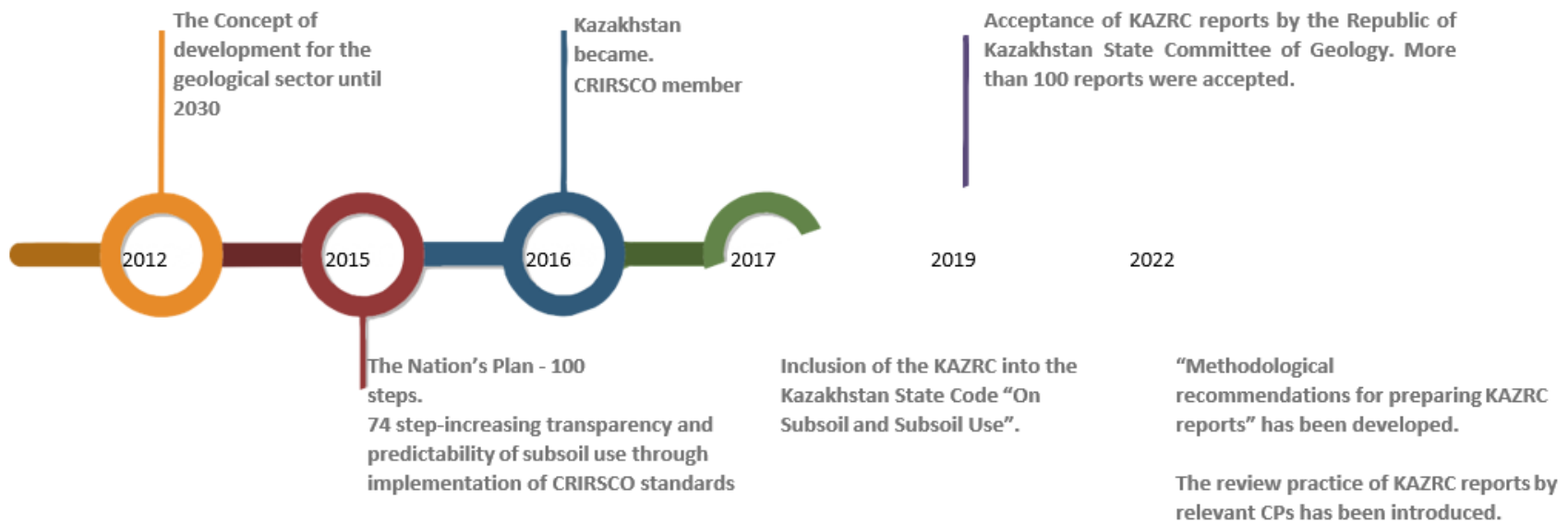
10. KAZAKHSTAN – KARZRC

Georgly-Freiman

Saule -Urazayeva. CRIRSCO Representative

Nicolai-Yenshin. CRIRSCO Representative

The timeline of the implementation of the KAZRC Code



Membership in PONEN

Total number of PONEN members as of September 1, 2023

366 specialists:

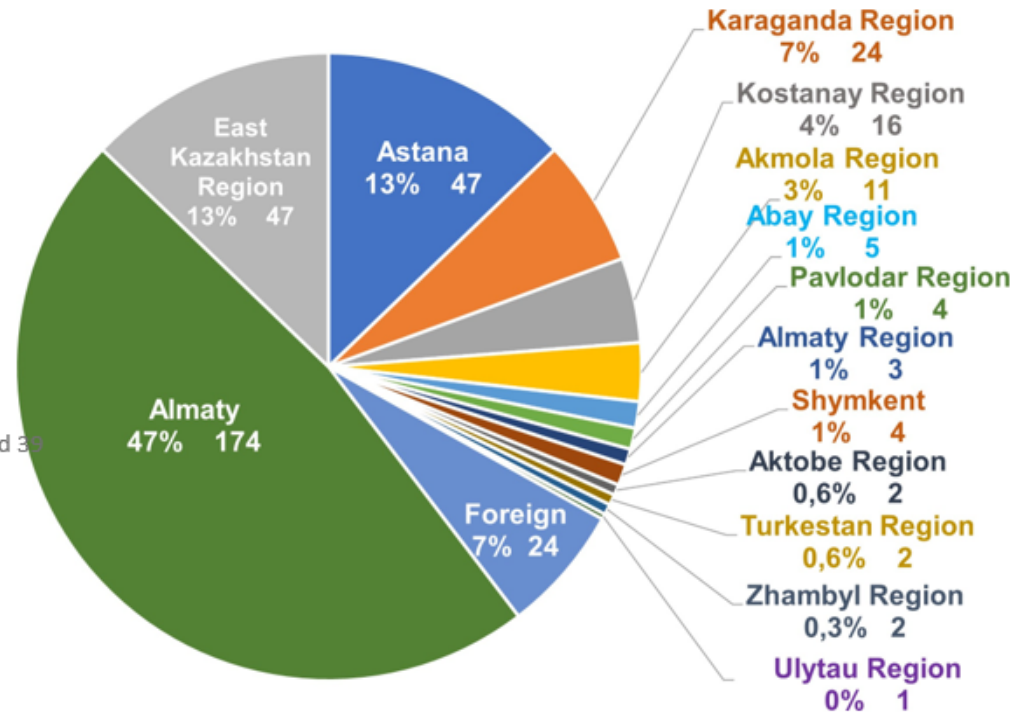
- 99 –number of active FPONEN members.
- 173 – Recognized MPONEN members.
- 53 – Associated APONEN members.
- 41 – Student SPONEN members.

In 2022 PONEN admitted 46 specialists.

In the first 8 months of 2023, PONEN admitted 55 specialists and 39 students.

Foreign specialists – 24 Kazakhstan has 17 regions.

There are no PONEN members in 6 Kazakhstani regions.



Competent persons of PONEN/QMR



Following best other CRIRSCO RPOs PONEN introduced QMR (Qualified for Minerals Reporting) accreditation [in order to](#) get a Competent Person status.

Current Competent Persons requested to resubmit documents and re-register.

New Competent Persons are admitted through interviews process.

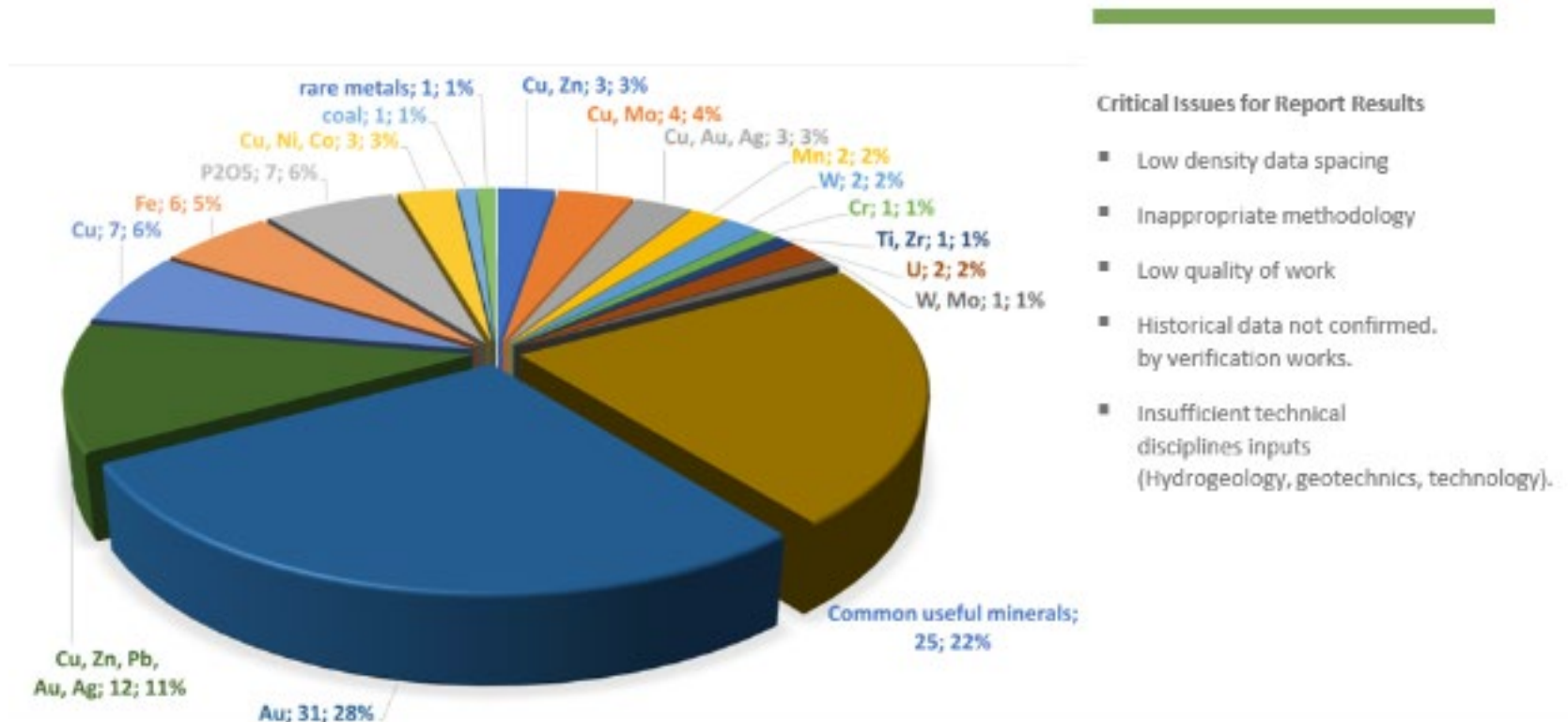


105 Competent Persons

| 1. Reports on the Results of Geological Exploration Works | | |
|---|--|---|
| No. | Types of mineral raw materials (mineral resources) | Geological and industrial types of deposits |
| 1 | | |
| 2 | | |
| ... | | |
| 2. Reports on Mineral Resources | | |
| | Types of mineral raw materials (mineral resources) | Geological and industrial types of deposits |
| 1. | | |
| 2. | | |
| ... | | |
| 3. Reports on Mineral Reserves | | |
| | Types of mineral raw materials (mineral resources) | Development methods |
| 1. | | |
| 2. | | |
| ... | | |

KAZRC reports accepted by the State Committee of Geology

113 KAZRC reports for 18 commodity types



Critical Issues for Report Results

- Low density data spacing
- Inappropriate methodology
- Low quality of work
- Historical data not confirmed by verification works.
- Insufficient technical disciplines inputs (Hydrogeology, geotechnics, technology).

The Methodological recommendations for KAZRC reports



The Methodological recommendations for preparation of KAZRC reports on the results of geological exploration, Mineral Resources and Mineral Reserves in accordance with the KAZRC Code as amended in 2022¹ and appendices to them by type of geological exploration work have been developed



**Training for PONEN members
and other mining industry specialists**



Conducting training seminars:

- Main target is to explain KAZRC standards to industry specialists, including representatives of government agencies, universities, and research institutes.



Active assistance in this work:

- from the biggest technical university in Kazakhstan - KazNITU



During



Support for the implementation of KAZRC by the country's leadership



In the Decree of the President of the Republic of Kazakhstan dated September 13, [2021](#) No. 659 On measures to implement the Address of the Head of State to the people of Kazakhstan dated September 1, [2021](#) in Clause 10

“Implementation of the international reporting standards system for solid mineral resources and reserves based on the CRIRSCO template and the principle of first application for subsoil use licenses throughout the territory of the Republic of Kazakhstan.”

The roadmap for a complete transition to KAZRC starting from January 1, 2024.

According to the Code on Subsoil and Subsoil Use, the transitional period from standards of the State Commission for Reserves to KAZRC ends on December 31, 2023. Starting from January 1, 2024, the reporting on resources and reserves of solid mineral resources provided by subsoil users must be prepared in accordance with the KAZRC Code.

The Committee of Geology has established 3 Working Groups as part of the roadmap:

1. Working Group on rectifying deficiencies in the application of the CRIRSCO reporting standard, including distortions of geological information.
2. Working Group on adjusting requirements for state geological study of subsoil considering the application of KAZRC.
3. Working Group on applying KAZRC to industrial minerals.

Unfortunately, these working groups have not conducted full-fledged work over the course of a year.

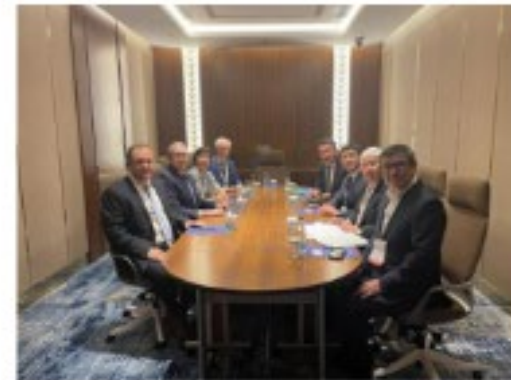
CRIRSCO support

The Chairman of CRIRSCO, Mr. Edson Ribeiro personally took part in ASTANA MINING & METALLURGY Forum and provided great assistance in explaining the role, goals and objectives of CRIRSCO (including KAZRC) to a wide audience within the framework of the named forum.

In addition to the official speech by the Chairman of CRIRSCO at the AMM panel session and more presentations, a series of meetings were also held between him and the leaders of the mining industry, government, NCE Atameken, AIFC.

There are still numerous old State Commission for Reserves system supporters continue to actively oppose the transition to KAZRC, including by contacting government agencies with a request to extend the transition period to 10 years.

So Mr. Edson Ribeiro participation was certainly of great importance for supporting the further process of transition to international CRIRSCO reporting standards.



Message of the President of the Republic of Kazakhstan dated September 01, 2023

“Geological exploration requires special attention. In 2018, new legislation was adopted to manage the mining sector with the aim of replenishing the mineral resource base. However, it has not been fully implemented.

As a result, in our resource-rich country, there have been no significant geological discoveries for a long time. This situation needs to be changed urgently. It is necessary to modernize the management system of the mining sector in the shortest possible time.

In most countries, the main drivers of the industry are private companies. Therefore, attracting significant private investments will largely help unlock the industry’s potential. To achieve this, flexible regulatory and fiscal conditions are necessary.”

 [Kassym-Jomart Tokayev](#):

“It is necessary to provide investors conducting geological exploration at their own expense with a priority right to subsoil use. Reduce project approval timelines and procedures by half through the implementation of comprehensive state expertise and full digitalization of the process.

The government’s task is to increase the area of geological and geophysical exploration from the current 1.5 million square kilometers to no less than 2.2 million square kilometers by 2026. One of the priority tasks should be the development of deposits of rare and rare-earth metals, essentially becoming the “new oil”. Countries that can realize their potential in this field will shape the direction of technological progress worldwide.

By the end of this year, we should develop a comprehensive vision for the industry’s development. To support the processing industry, foreign and domestic investors should be exempt from taxes and other mandatory payments for the first three years. This is a fundamental point that should provide a significant boost to the processing industry.”

t.me/agorda_resmi

11. RUSSIA – OERN

A Russian National Reporting Organization is called the Russian Society of Subsoil Use Experts (in short it is called OERN).

It is a non-profit organization that is an association of highly professional specialists (mining engineers, geologists, mining economists and other specialists related to subsoil use).

OERN has a Charter, a Code of professional ethics and disciplinary procedures.

OERN has its territorial branches in 14 different regions of Russia: Kemerovo, Krasnoyarsk, Perm, Irkutsk, Samara, Rostov-on-Don, Chita, Yakutsk, Magadan, Anadyr (Chukotka), Khabarovsk, Vladivostok, in St. Petersburg and Moscow. OERN has 1 410 members including 698 members in the field of solid minerals. 25 OERN members were accredited as CP's as well.

New versions of the Regulations on Competent Persons and the Code of Professional Ethics of a member of the NGO "OERN" have been adopted. The Regulations on competent Persons and the Code of Professional Ethics of a member of the NGO "OERN" are published on the organization's website.

In 2021, following the recommendations of CRIRSCO, OERN received the status of a legal entity.

1. OERN recognition as RPO by NROs

Today OERN is recognized by:

Comision Minera – there is the reciprocal agreement.

Pan-European Reserves and Resources Reporting Committee (PERC) - included OERN in the list of Recognised Professional Organisations in the PERC REPORTING STANDARD 2013.

The South African Committee SAMREC/SAMVAL recognized OERN.

The SME has granted the experts of the OERN status as Competent Persons.

JORC committee included OERN in the list of Recognised Professional Organisations.

Canada (CSA) included OERN in the List of Foreign Associations and Membership Designations (Appendix A "Acceptable Foreign Associations and Membership Designations").

OERN and PONEN RK exchanged by letters of mutual recognition.

Igor Svintitsky (OERN) took part in a meeting in Astana (Kazakhstan) with the delegation of Kyrgyzstan, as a candidate country for joining CRIRSCO, together with Edson Ribeiro, Saule Urazayeva (KAZRC, Kazakhstan) and Nikolai Yenshin (KAZRC, Kazakhstan).

OERN, within the framework of the agreement on cooperation and mutual recognition of experts, continues to interact with ECOIN (the Eurasian Union of Experts on Subsoil Use, a professional organization created to ensure an objective state examination of mineral reserves, primarily oil and gas).

In 2023, OERN worked closely with the National Association of Subsoil Use Audit (NAEN), whose members are large mining companies in Russia.

The joint activity is aimed at the implementation of international standards and reporting rules in the practice of Russian subsurface use, the national code of the NAEN/OERN, to support the development of the Russian institute of competent persons.

2. NAEN Code recognition

NAEN Code was approved in 2011.

The NAEN Code was recognized European Securities and Markets Authority (ESMA). The Code was included in the list of acceptable internationally recognized mineral standards.

The NAEN Code was accepted by the Canadian Securities Commission for reporting under NI 43-101, subject to the restrictions and provisions of Part 7 of NI 43-101 that apply to all foreign codes. And also CSA included NAEN Code in the list of acceptable foreign codes.

3. Next NAEN Code update

NAEN Code has been revised since it was developed and approved in 2011. The date of the last version is 2013.

This version was updated. OERN is continued its work on an update of the NAEN code according to the CRIRSCO Template 2019. The final version of the updated code has been approved by the OERN Executive committee and will be submitted to CRIRSCO members for consideration by the end of 2023.

Seminars, conferences and other activities

OERN members have participated in conferences with presentations about international classification standards, CRIRSCO Template and National reporting systems.


OERN were provide in 2023 Annual international mining and geological forum "MINGEO Siberia 2023"- "mining and geology" in the Krasnoyarsk city (Central Siberia) <https://2023.mingeforum.ru/> .
<https://mingeforum.ru/mingeo-sibir/arkhiv-foruma/fotogalereya/2023>

The forum was dedicated to modern innovative technologies in the mining business, logistics issues, changes in Russian legislation in the field of prospecting, exploration and development of mineral resources.



OERN continues to conduct seminars on the implementation of best practices in geostatistics.

ОЭРН one of the program developer and main organizer Geowebinar's Platform of knowledge: www.geowebinar.com. A new format of seminars is the regular, two time per week - Tuesday and Friday, holding of geo-webinars on a wide range of topics of geology, subsoil use, mining, metallurgy, ecology and geoscientists. In 2023 a series of geo webinars about the history of the creation and practice of the CRIRSCO family of Codes has been launched.



О платформе

Платформа Геовиняры - это ресурс для обмена знаниями, опытом и идеями среди профессионалов горнодобывающей и нефтегазовой отраслей.

Платформа создана при участии авторитетных горнодобывающих компаний и научных учреждений.

На платформе Геовиняры на постоянной основе проводятся онлайн конференции и лекции, а также ведется прием на курсы повышения квалификации по отраслевым специальностям.

8792 пользователя из **582** компаний уже присоединились

О платформе
Геовиняры
Библиотека
Выставка

Achievements - 2020 – 2023. 10 000+ users, 50+Countries, 582 Companies. The audience of the project has been formed, which is based on mining professionals from around the world.

A unique library of almost 1700 reports has been created. Extensive experience in holding industry-specific online and hybrid events has been gained.

Also the members of the OERN continue to publish articles related to international standards, the CRIRSCO template and the NAEN Code.

Members of the OERN continue to work in the expert technical Council of the State Commission on reserves (GKZ).

4. New members

OERN has continued granting its membership to new members, in 2023 OERN accepted 24 new members

5. Conclusion

Future plans. OERN is going:

- to continue working on development of the Russian society of Competent persons;
- to continue working on the NAEN Code improvement and make amendments bring it to the today's reality;
- to continue education program for students and professional skills development of OERN members– webinars, seminars, conferences and workshops;
- to continue working on harmonization of Russian and international reporting systems in more details
- to continue working on the creation of the Russian Mineral Asset Valuation Code.

12. SOUTH AFRICA – SAMREC

SOUTH AFRICA – SAMREC

Report on Activities of SAMREC Committee (August 2022 – August 2023)

Ken Lomborg, Chairman – SAMREC Committee, CRIRSCO Representative

1. Meetings

Meetings were held on, 24 November 2022, 23 February 2023, 25 May 2023 and 24 August 2023. All meetings were held as virtual meetings (Zoom). This enabled contributions from individuals previously not able to attend. Face to Face meeting have become difficult to constitute due to the additional time requirement and the potential of excluding people who are not close to the chosen venue.

2. Technical Aspects discussed.

An important aspects of the quarterly meetings is to raise technical aspects of the reporting codes for discussion and to assist where the opinion of other CPs would be beneficial. The following topics were discussed at these meetings.

- The JORC Document summarising the requirements of CPs and QPs in the various CRIRSCO codes.
- Aspects of Industrial Minerals and whether listed companies should be reporting in terms of the SAMREC Code
- Discussion of the ESG definitions as requested by the CRIRSCO ESG working group.
- Discussion on the impact of Off take agreements that were not renewed.
- Discussion on the declaration of a Mineral Resource that is outside of the Mineral Reserve and would be sterilised after the Mineral Reserve had been mined out.
- Aspects of inclusive and exclusive reporting, with particular relevance to the SK-1300 requirements.
- Discussion on respect of “eventual” as part of RPEE

3. Smart Phone App

The SAMCODES App which includes the SAMREC Code, The SAMVAL Code, The SAMESG Guidelines, The Diamond Guidelines and Listing Requirements of the JSE was completed for android phones. The current focus is optimise the App, getting it as an Apple version of the app. and trying to understand more about our community and the use of the app via the analytics.

The App is poorly supported. In order to try and boost contributions, quizzes have been prepared to engage more with the app users and community. The take up was poorer than we had hoped.

4. Courses/Conferences to be held.

4.1. SAMCODES Training – 15 and 22 March 2023

SAMCODES held a 2-day virtual training course in March. The course is aimed at new or novice CPs to ensure they are familiar with SAMREC and SAMVAL. Various CPs presented aspects of the codes and aspects of compliance. Approx 50 people attended.

4.2. Compliance and Reporting Rules – The University of the Witwatersrand 11 – 15 September 2023

This annual Course was coordinated by Dr Tania Marshall. She recruits a number of eminent practitioners - 30 to present the various aspects of the SAMREC Code that is included in the curriculum. Some 15 people attended the course. The course includes an exam. The knowledge of

SAMREC and the other Codes is generally poor. An outcome of this course was the confirmed need for more training.

4.3. Mineral Asset Valuation Course at the University of Cape Town (UCT) Q1

Various aspects of the SAMREC Code were included in the curriculum in support of the valuation approaches and the use of the SAMVAL Code.

5. ESG Working Group

This group has met regularly during the year with the following activities. The feedback included the distribution of papers and articles that various committee members had prepared.

The major activity was an extensive report back conducted on 11 July 2023 (<https://www.youtube.com/watch?v=4kaDlaMhlyo&t=7894s>). The programme included aspects addressing the ESG Landscape, Stakeholder Requirements, SAMREC & ESG, SAMREC TABLE 1, SAMVAL & ESG, SAMESG GUIDELINE and a PANEL DISCUSSION which dealt with ESG Practitioner Registration, Criteria for defining/assessing ESG risk/materiality, Future challenges/applications.

The Working Group has put out a draft of its proposals in respect of the SAMREC Code and SAMESG guideline. The draft will be finalised before being distributed for broader industry comment.

6. Implications of S-K1300 regulations and disclosures for dual-listed companies on the JSE and NYSE

A group of interested people has been formed to support the various companies involved and the practitioners who prepare the SEC S-K 1300 reporting including the filing of TRS documentation as exhibits to annual disclosure.

7. CRIRSCO ESG Definitions

The CRIRSCO working group on ESG requested feedback on the proposed definitions for ESG aspects. The SAMREC Committee has reviewed these and provided feedback.

8. SAMREC Code revision

The topic of revising/updating the SAMREC Code (2016) has been highlighted. It is considered important and will in time be undertaken. No firm timeline has been suggested at this point.

9. Activities for CRIRSCO

- Roger Dixon and Ken Lomborg continue to contribute to CRIRSCO activities.
- Ken Lomborg is now the Immediate Past Chairperson of CRIRSCO for the 2023 year.

SAMREC hosted the CRIRSCO AGM in September 2022. The meeting included an open day to which local mining professionals were invited. The feedback was that the invitation was appreciated and being included was beneficial. In addition a visit to a local platinum mine was arranged with appreciation expressed by those who attended.

Ken Lomborg, as Immediate Past Chairman, attended the Mines and Money Meeting in London on 25 and 26 April 2023. The visit to London included a meeting with ICMM and the executive as an initiative to bolster our relationship with ICMM and to ensure CRIRSCO momentum throughout the year.

10. Membership

The SAMREC Code is supported by its patrons the Geological Society of South Africa (GSSA) and the Southern African Institute of Mining and Metallurgy (SAIMM). The GSSA has introduced a Chartered Geologist membership category specifically for Competent Persons. Neither the SAIMM nor the Institute of Mine Surveyors of South Africa (IMSSA) have a specific CP category. The statutory organizations –

South African Council for Natural Science Professions (SACNASP), Engineering Council of South Africa (ECSA) and the South African Geomatics Council (SAGC) require registration for professionals but do not have a category for CPs.

11. Complaints

- One complaint was received and completely addressed.
- There are no on-going complaints.
- A CPR reviewed by the JSE has been rejected.

This remains an area of concern that no complaints are made. It reflects the issues relating to the small community of SAMREC practitioners and the reluctance to point our colleagues out for not reporting in accordance with the Code properly, even for significant breaches of the Code.

13. TURKEY – UMREK

The National Resources and Reserves Reporting Committee of Turkey (UMREK) has been incorporated as a private, non-profit organization to act specifically as the Turkish National Reporting Organization (NRO) in CRIRSCO and mainly focuses on establishing, promoting, and managing the efforts to develop the Turkish mining sector. UMREK was established with the aim of accurate, reliable, and transparent reporting of exploration results, mineral resources and mineral reserves in accordance with international reporting standards based on the article 14 of Mining Law No.3213, published on September 7, 2016, in the official gazette No.29824. The core of this endeavor consists of utilizing the best engineering and global geoscientific practices for the exploration of mineral resources and the application of reporting guidelines in accordance with CRIRSCO standards and the certification process of the Competent Persons.

UMREK has been responsible for:

- I. Preparing the Turkish National Reporting Code, standards, and guidelines,
- II. Developing and implementing policies and strategies regarding the Turkish Code for Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves (UMREK Code),
- III. Improving and updating the reporting standards while ensuring compliance with the CRIRSCO template,
- IV. Cooperating and collaborating with CRIRSCO members,
- V. Participating in CRIRSCO organizations, meetings, and events,
- VI. Establishing, developing and implementing the required system, policy, strategy, and objectives for the national resources and reserves reporting by considering the financial aspects,
- VII. Determining the criteria for Competent Person applications and issuing competency certificates.

UMREK convened at least once a month between October 2022 and September 2023 and held 12 meetings in total. The first meeting in this period was the 66th Committee meeting held on October 4, 2022, and the 77th meeting held on September 6, 2023, was the last one.

In the period 2022-2023, UMREK focused primarily on implementing its three-year strategic plan for all stakeholders in the Turkish mining sector. Also, as it's also intended to be applicable, as per the Dimension Stone & Construction Materials sector, it's widely agreed that the PERC collaboration will be undertaken. Considerable mileage has been achieved in enhancing the official website. Since the current UMREK website is not user-friendly and outdated in terms of design and interface, initiatives have been taken to create a more modern website in terms of both visuals and content. Apart from that, Competent Person certificates will be issued as e-certificates and have reached the final stage of completion.

a. UMREK Committee Members

The committee, of which five members were appointed for the first time, is listed in **Table 1**. They were selected for three (3) years, effective from September 24, 2020. Following the appointment, Prof. Dr. Atiye TUGRUL was selected as vice chairperson of the Committee by a unanimous vote of the members. Cem YÜCEER was also co-opted by the committee as the CRIRSCO representative for Türkiye, together with Mrs. TUGRUL.

Table 1. The Current Committee members.

| Committee Member | Institution | Title |
|---|--|------------------|
| Cevat GENC | Mining Engineer - General Manager of General Directorate of Mining and Petroleum Affairs (MAPEG) | Chairperson |
| Prof. Dr. Atiye TUGRUL CRIRSCO Representative | Geological Engineer - Academician at İstanbul University-Cerrahpaşa | Vice Chairperson |
| Cem YUCEER CRIRSCO Representative | Geological Engineer – General Manager of Artvin Mining Enterprises Inc. | Member |
| Muhammet ERİSEN | Lawyer- Vice Chairman of Banking Regulation and Supervision of Agency of Turkey (BBDK) | Member |
| Abdulkerim AYDINDAG | Geological Engineer- Deputy General Manager of General Directorate of Mineral Research and Exploration (MTA) | Member |
| Prof. Dr. Recep BILDIK | Finance and Capital Markets Expert- Academician at İstanbul Ticaret University | Member |
| Sehmus YILDIRIM | Geophysical Engineer – Chairman of DAYK Group | Member |
| İbrahim Halil KIRSAN | Mining Engineer- TOBB Turkey Mining Council President | Member |
| Veli DOGAN | Mining Engineer- Board Member and Director at Lidya Mining | Member |

b. UMREK Working Groups or Subcommittees

UMREK has seven working groups or subcommittees dealing with different topics for the fulfillment of the tasks. Each committee member leads different working groups as a chairperson. The working groups of UMREK consist of several mining professionals representing industry and government and have a good representation of different mining and geoscience disciplines. Each of these deals with aspects of mining issues concerning international reporting standards, UMREK, the Turkish mining sector and legislation about mining. The current studies being carried on by each working group/subcommittee are given below:

I. The Working Group on Legislation and Reporting Standards Preparation

The 2nd version of the UMREK Code (2023), developed by the working group based on the CRIRSCO Template updated in 2019, was adopted by the Committee in April 2022 and submitted to CRIRSCO for approval. The UMREK Code (2023) was accepted by CRIRSCO in February. Accordingly, Competent Persons were informed and the second version of the UMREK Code (2023) was published on the UMREK website.

The 2nd version of the UMREK Code has the following revisions indicated below:

- The section of the Reporting of Exploration Results, Mineral Resources and Mineral Reserves for Industrial Minerals, Cement Feed Materials and Construction Raw Materials (Aggregates) was revised, and it is more definitive for the users and much more reflective of current Turkish conditions in that specific area. The UMREK Code (2018) has separate chapters for industrial minerals, cement feed materials, and construction raw materials. However, the new version of the Code (2022) merges these two chapters to be compatible with the CRIRSCO Template (2019).
- The section of the Reporting of Exploration Results, Mineral Resources and Mineral Reserves for Dimension Stone, Ornamental and Decorative Stone was revised, and it is more definitive for the users and will be much more reflective of current Turkish conditions in that specific area.
- The format type of the Code is the same as the CRIRSCO Template (2019), and the Code was prepared by merging the information contained in both the previous version of the UMREK Code (2018) and the Template.
- Both the English and Turkish editions were fixed for grammar and spelling mistakes.
- The terminology of the resource/reserve classification system was revised and more proper terms and descriptions are used in the Turkish edition. As part of this study, several mining professionals representing industry and government agencies, such as the Turkish Linguistic Society (TDK), the General Directorate of Mineral Research and Exploration (MTA), and the General Directorate of Mining and Petroleum Affairs (MAPEG) have participated in the working group.

II. Training and Certification Working Group

- It is planned to organize a second workshop about UMREK and studies on this subject are continuing. Details will become clear in a very short time.
- The Working Group's agenda includes converting the training organized for UMREK Competent Persons into video format.
- Trainings on exploration activities proceed in the Exploration Camps of the General Directorate of Mineral Research and Exploration.
- A plaque ceremony was held for 17 members, including the head of the working group, who contributed to the working group, and UMREK thanked for their contribution.
- While 4 meetings were held in 2022 in the working group, 1 meeting was held in 2023 until September.

III. The Subcommittee on Valuation of Mineral Properties (UMVAL)

- The subcommittee aims to prepare the Mineral Properties Valuation Code of Turkey (the UMVAL Code). The subcommittee initiated the procedure in December 2020 and since then, nine meetings have been held. UMVAL Subcommittee is composed of sector professionals who are experts in the field of Valuation and represent different disciplines.
- The subcommittee drafted the UMVAL Code, using the other valuation codes of several countries as references, and submitted it to UMREK. After the approval of the UMREK, the UMVAL Code was sent to nine related organizations/ institutions in August 2022 for their review. The code, which was updated upon the reviews sent, had reached the final stage with a great effort and dedication put forth by the UMVAL Subcommittee. Proofreading studies regarding the Turkish version have been concluded in December, 2022 and the Code was published on the official UMREK website.
- One meeting was held in 2023 and three meetings were held in 2022 until October.

- On the other hand, the English version of the UIVAL Code has also been completed and published on the official UMREK website in September, 2023.

IV. Ethics Committee

- The committee aims to regulate the procedures and principles regarding the ethical rules that should be followed by Competent Persons and the complaints to be made regarding these rules.
- One complaint file that reached to the Committee during the year was completely closed by making necessary notifications to the parties. The proceedings of a complaint file regarding a coal reserve report are still in progress.
- In this Committee, 6 meetings were held in 2022. In 2023, a meeting has not yet been held until September. Even if the meeting is not held, the committee members are in constant communication with each other.
- A plaque ceremony was organized by UMREK for 5 committee members, including the committee chairman, for their contributions to the Committee.
- Studies are continuing to amend the UMREK Ethics Communiqué.

V. The Subcommittee on Environmental, Social and Governance (ESG) Matters

- In 2022, the ESG subcommittee held five online meetings, discussing predominantly the SAMESG Guideline and framing the national ESG Guideline.
- In 2023, UMREK ESG Guideline draft was prepared based on SAMESG Guideline. After the draft was completed, online meetings were held with the Chairperson at SAMESG Committee, Teresa Steele-Schober. It was discussed that, as the SAMESG Guideline has been being updated, and if the ESG subcommittee approves, the UMREK ESG Guideline may need to be updated as well.
- The subcommittee aims to present an ESG guideline that is compliant and applicable to the conditions of the Turkish mining sector as soon as possible. The UMREK ESG Guideline is planned to be finalized after analyzing the updates on SAMESG Guideline and interpreting and applying them to UMREK ESG Guideline considering dynamics and needs of Turkish mining sector.

VI. The Subcommittee on Sectoral Relations

- A study report has been prepared and published, examining the changes between the first version UMREK Code (2018) and the second version UMREK Code (2023) which is compatible with CRIRSCO Template (2019).
- Mr. Veli Dogan, member of the UMREK Commission, and Dr. Metin Aktan, UMREK Competent Person, made a presentation on the important changes in the second version of the UMREK Code (2023) (Figure 1).
- A presentation on International Best Practices for the Economical Evaluation of Mineral Projects presented by Gert Kriel and Iaan Myburgh was organized by Mining and Metallurgy Professionals of Türkiye, YERMAM. Prior to the presentation, Prof.Dr. Recep Bildik, member of the UMREK Commission, and Mrs. Tugba Ozcan, the coordinator of UMREK secretariat, took the floor and informed the participants about UMREK and UIVAL Code.



Figure 2. Presentation on the important changes in the second version of the UMREK Code (2023).

VII. The Subcommittee on Relations with Professional Organizations

- The subcommittee aims to strengthen cooperative relations and possible collaborations and to develop close ties with professional organizations and unions such as the United Nations Framework Classification for Resources (UNFC), the European Federation of Geologists (EFG), the Geological Society of London (GSL) and the Institute of Materials, Minerals and Mining (IOM³), etc. that share similar interests regarding the mining industry and high standard reporting of mineral resources and reserves.
- The subcommittee organized an online meeting with the Australasian Institute of Mining and Metallurgy (AusIMM) on March 9, 2022. During this meeting, introductory presentations were made by UMREK and YERMAM. YERMAM was represented by Prof. Dr. Yılmaz OZCELİK, chairperson of the Board of Directors and Nuri CEYHAN, member of the Board of Directors. Prof. Dr. Atiye TUGRUL and Cem YUCEER, representing UMREK, also joined the meeting. During the meeting, ideas were shared about future collaborations. It was decided to hold a second meeting to exchange information between the organizations on professional ethical standards, mineral resources, and reserves reporting codes and training for CPs' professional development.

c. UMREK Regular Meetings

The Committee members regularly meet at least once a month to discuss several subjects related to the national reporting standards and guidelines and the financial aspects of reporting. UMREK held 12 meetings in total between October 2022 and September 2023. The main subjects of these meetings have been:

- Receiving Competent Persons' applications online to make the process easier for CPs via the professional organization, the Association of Geosciences, Mining and Metallurgy Professionals of Türkiye (YERMAM) website,
- Evaluation of Prof. Dr. Atiye Tugrul being the Chairperson of CRIRSCO Dimension Stone and Aggregates Working Group,
- Publication of the 2nd version of the UMREK Code,
- Organizing a webinar explaining the differences the first and second versions of the UMREK Code.
- Publication of the Mineral Properties Valuation Code of Türkiye (the UMVAL Code) and sending the Code to IMVAL for their approval,
- Recognizing YERMAM defined in the UMVAL Code as a Professional Organization recognized by UMREK,
- Organizing promotional event for the UMVAL Code for different elements of the mining and exploration industry to raise the recognition of the UMVAL Code
- Finalizing the UMREK ESG guideline,
- Regarding the determination of Competent Valuers within the scope of the UMVAL Code; It was decided to establish a commission within YERMAM to assess candidate CVs and then recommend them to UMREK.

Apart from that, according to the Committee's decisions CP candidates to be notified to UMREK will be subjected to compulsory training by YERMAM. The certificates of five CPs were revoked due to the loss of the necessary criteria. The certificate of a CP, who did not submit continuous professional development (CPD) form, was suspended for a year.

YERMAM

YERMAM submitted 45 professional membership files for CP applicants to the UMREK between October 2022 and September 2023. 39 applicants among them have become entitled to get a CP certificate between this term. YERMAM continuously submits more applications based on CP criteria for the committee's review. As of September 2023, the total number of CPs is 190. In addition, YERMAM requested from 135 CPs, who received the certificate in 2019, 2020, 2021 and 2022 to fill out a Continuous Professional Development (CPD) form for the term 2022.

Table 2 indicates a summary of information about CPs' applications, and **Figure 2** also presents the percentage distribution of CPs' professions in a pie chart. According to the chart, 102 CPs out of 182 are geological engineers; 62 CPs are mining engineers; 5 of them are hydrogeological engineers; 5 of them are geophysics engineers; 3 of them are geologists; 2 CPs are environmental engineer; 1 CP is a survey engineer; and 2 CPs have a double major.

Table 2. A summary table about CPs' applications and complaints.

| Total CP Applicants | Rejected | Pending | Revoked CP Certificate | Approved | Complaints handled during the year |
|---------------------|----------|---------|------------------------|----------|------------------------------------|
| 227 | 23 | 14 | 8 | 190 | 2 |

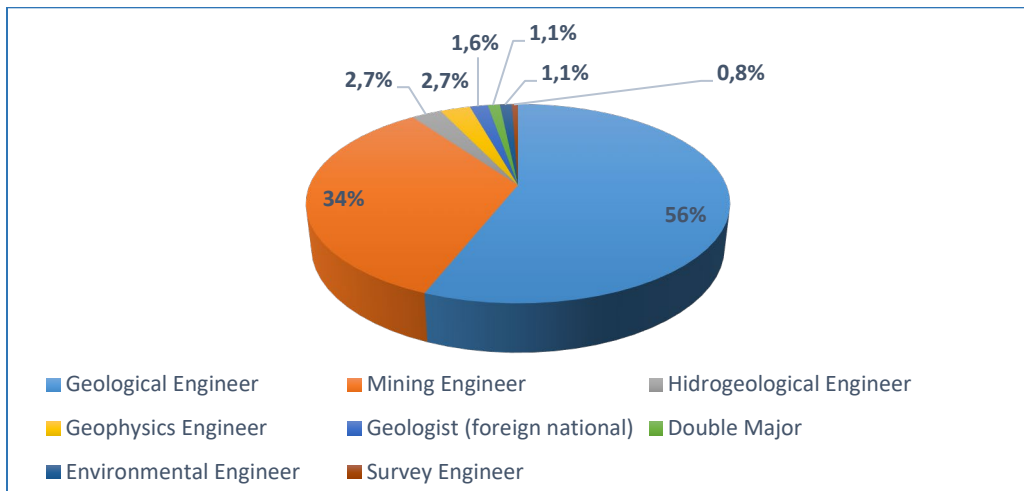


Figure 3. The percentage distribution of CPs' professions.

7. Professional Training Initiatives

Competent Persons must engage in a personal program of continuous professional development (CPD) activities to maintain ongoing certification. These CPD activities and programs have been organized by the professional organization, YERMAM. The curriculum and formats of these programs have also been discussed with the training and certification working group. In addition, YERMAM has been working cooperatively with the Turkish Association of Economic Geologists (MJD) to organize these training programs for CPs. A summary of the training programs organized from September 2022 to 2023 is provided in **Table 3** below.

Table 3. A summary of the training programs.

| Course Title | Course Date | Course Duration |
|---|---------------|-----------------|
| Mining In Turkey: Land Use and License Fees, State Rights & Operating and Investment Expenses | February 2022 | 2 hours |
| Airborne Electromagnetic and Airborne Gravity Gradiometry Systems and Case Studies in Mining | February 2022 | 2 hours |

| | | |
|---|------------------|----------------|
| Technical Assessment Methods for Mining Investment Projects and Sources of Risk and Uncertainty for Projects | March 2022 | 2 hours |
| High Resolution Imaging of Geological Settings with Surface Source and Downhole Receiver Seismic Methods | April 2022 | 2 hours |
| The UMREK Code (Scope and Principles, Exploration Results, Mineral Resource and Mineral Reserve Reporting) | May 2022 | 8 hours |
| The UMREK Code (Scope and Principles, Exploration Results, Mineral Resource and Mineral Reserve Reporting) | June 2022 | 8 hours |
| International Best Practices for Economical Valuation of Mining Projects | November 2022 | 2 hours |
| Professional Ethics | December 2022 | 2 hours |
| The UMREK Code (Scope and Principles, Exploration Results, Mineral Resource and Mineral Reserve Reporting) | November 2022 | 8 hours |
| The Role of Geostatistical Methods in Mineral Resource and Mineral Reserve Estimation | February 2023 | 2 hours |
| Hanönü Volcanogenic Massif Sulphide Mineralization | March 2023 | 2 hours |
| The UMREK Code (Scope and Principles, Exploration Results, Mineral Resource and Mineral Reserve Reporting) | March 2023 | 8 hours |
| Important Changes in the UMREK Code (2023) | June 2023 | 2 hours |

**8. List of other events, conferences, etc.
75th Geological Congress of Türkiye:**

Between the dates 10.04.2023 and 14.04.2023, 75th Geological Congress of Türkiye was held at Mineral Research and Exploration General Directorate of Türkiye (Figure 3).

Mr. Rene Sterk, UMREK Competent Person from New Zealand, made a presentation about the JORC Code.

Mrs. Tugba OZCAN, the coordinator of UMREK secretariat, made a presentation on reporting and current developments in UMREK Code.

Mr. Recep Bildik, UMREK Commission member, made a presentation on Mineral Properties Valuation Code of Türkiye (the UMVAL Code).

Mr. Mehmet Ali Akbaba, Deputy General Manager of Dama Engineering, made a presentation on Classification of Mineral Resources According to CRIRSCO Compliant Reporting Standards.

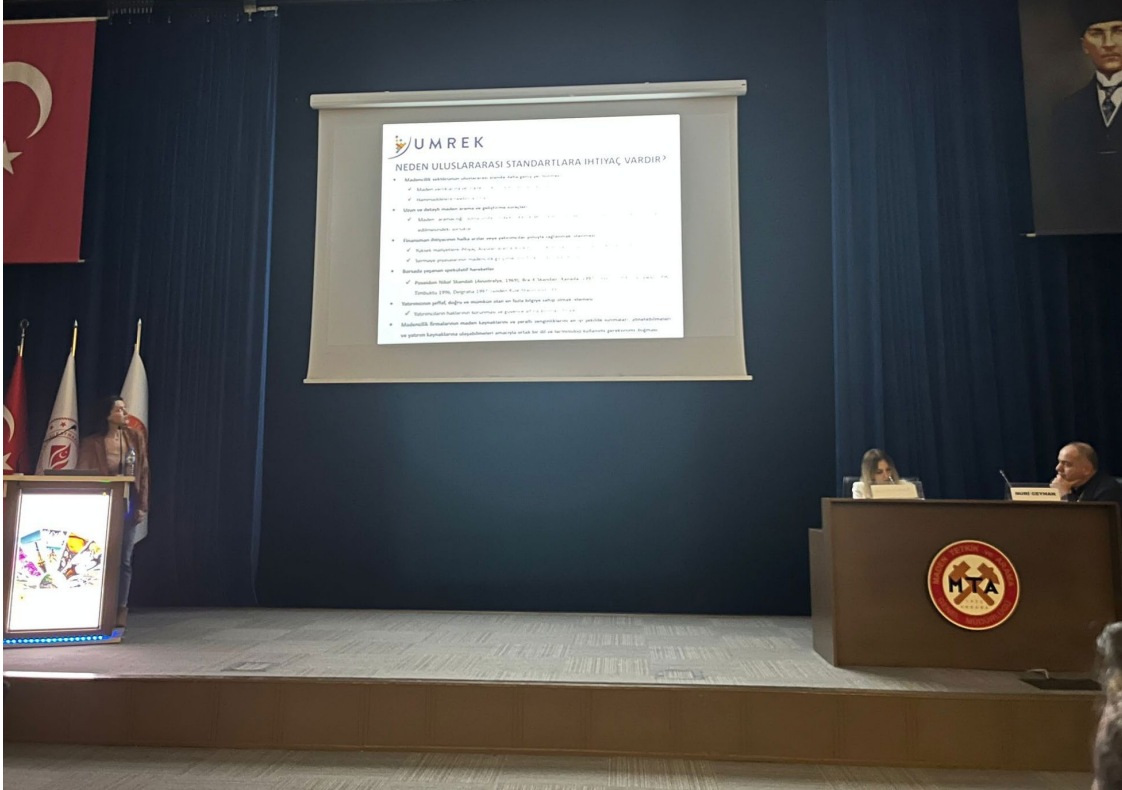


Figure 4. Photo of the 75th Geological Congress of Türkiye held on April 2023.

International Environmental Communication Summit:

An international environmental communication summit was held at Ankara Sheraton Hotel on 6-7 December 2022 (Figure 4).

Prof. Dr. Atiye Tugrul, UMREK Vice President, gave general information about importance of UMREK and made a short explanatory presentation about UMREK.



Figure 5. Photo of the International Environmental Communication Summit held on December 2022.

9. Other Key Activities

There are eleven (11) released reports that are publicly compliant with the UMREK standards by five listed mining companies. A summary of the released reports compliant with the Code is provided in Table 4 below:

Table 4. A summary of the released reports compliant with the UMREK Code.

| Company | Report Type |
|--|---|
| <p>Koza Gold Corporation</p> | <p>The Resource Estimation Report of Karapınar Gold-Silver Project in Çanakkale province (December 31, 2019) <i>*The 1st press release published in accordance with the UMREK Code.</i></p> |
| | <p>2019 Annual Report (February 10, 2021)</p> |
| | <p>2020 Annual Report (December 12, 2021)</p> |
| | <p>2021 Annual Report (January 1, 2023)</p> |
| | <p>2022 Annual Report (March 3, 2023)</p> |
| <p>AVOD Gold Mining Industry and Trade Inc.</p> | <p>The Resource Estimation Report for Copper Project in Çorum province (June 1, 2020) Technical Report on the Mineral Resource</p> |

| Company | Report Type |
|--|--|
| | Estimate for the Çorum Copper Project (September 21,2022) Technical Report on the Scoping Study for the Çorum Copper Project (September 21, 2022) |
| Gübretaş Mining Investments Inc. | The Resource and Reserve Press Release of Söğüt Gold Project in Bilecik province (January 19, 2021) |
| TÜMAD Mining Inc. | The Resource Estimation Report for İvrindi Gold-Silver Project in Balıkesir province (August 2021) |
| Park Electricity Production Mining Inc. | The Resource Estimation Report for Iğın Coal Project in Konya province (January 10, 2022) |

Code Update

The studies for the UMREK Code's second version, officially accepted by CRIRSCO in February 2023, have been completed by the Legislation and Reporting Standards Preparation Working Group, with tremendous effort and dedication. The Code has been published on the official UMREK website. The first version of the UMREK Code (2018) is currently in force and will remain in effect until December 31, 2023. As of January 1, 2024, only the 2nd version of the UMREK Code is going to be considered.

RPO List

There has been no change to the list of recognized professional organizations (RPOs) regarding the UMREK during the year. YERMAM is the only professional organization recognized by UMREK and also to act as a Competent Person the required membership class of YERMAM is professional membership.

On the other hand, YERMAM has been recognized as the Recognized Professional Organization specified in the UMVAL Code by the UMREK decision dated 03.05.2023 and numbered 2023/08.

14. UNITED STATES OF AMERICA – SME

SME Mineral Reserve Reporting Committee Report

1. Committee

The SME MRR Committee is currently composed of 41 members. Brian Groff and Donald Hulse serve as the co-chairs. The full committee met at the SME Annual Meeting in February in Denver Colorado. Additional meetings were held in September and October.

During the year, working groups and sub-committees meet on an as needed basis, and key leadership meet every 4-6 weeks on an ad hoc basis.

2. Accomplishments since the SME Midyear Meeting or Annual Meeting

The meeting was held at the SME annual meeting in Denver in February. Several key notes.

Executive session in July 2023 agreed that a complete rewrite of the Guide to reflect SEC rules is a heavy lift and that the committee should work chapter by chapter to better focus effort.

A meeting to discuss Chapters 1 and 2, occurred in September. Both Chapters are in a final draft stage and will be shared with CRIRSCO shortly.

3. Future / Upcoming Activities

Short Term Goals:

Get committee acceptance of Chapter 1 (History) and Ch. 2 (Definitions). Many thanks to David Abbott and Stella S. for advancing this.

Develop Plan for execution for Chap 3 and 4 (“Competence and Responsibility”; and “Technical Studies”).

Include all historical SME Guides on the SME website for reference.

Long Term Goals:

Develop prioritized schedule for the other chapters. The more technical chapters should be easier as the technical standards are largely consistent with CRIRSCO standards.

Success Measures:

Bringing the Guide forward in time, and aligning the Guide to help QP’s and US Registrants comply with CRIRSCO practice in the overall framework of SK-1300.

4. Other

2024 SME Annual Meeting/Expo is scheduled for DATE in Phoenix, AZ.

15. CRIRSCO BOARD OF DIRECTORS 2022-23

| | | | |
|----------------------------|-----------------|---------|--------------|
| Chairperson: | Edson Riveiro. | CBRR. | BRAZIL |
| Deputy Chairperson: | Garth Kirkham. | CIM. | CANADA |
| Treasurer: | Peter Stocker. | JORC. | AUSTRALASIA |
| Secretary: | Wilfredo Lopez. | CCRR. | COLOMBIA |
| Past Chairperson: | Ken Lomborg. | SAMREC. | SOUTH AFRICA |