JORC Stakeholders

**JORC Parent Bodies**
- JORC
- AusIMM
- MCA
- AIG

**JORC**
- CRIRSCO
- FinSIA
- Mines Departments
- Government Agencies
- International Societies
- AMEC
- NGO

**ASIC**
- Technical Professionals
- Consultants/Advisors
- (potential) Investors
- Company Executives
- Company Directors
- Public/Investor Relations
- Banking and Finance
- Legal
- Analysts
- Media
- ESG Professionals

**ASX**
The JORC Code provides a mandatory system for the classification of Exploration Results, Mineral Resources and Ore Reserves according to the levels of confidence in geological knowledge and technical and economic considerations in Public Reports.

Public Reports prepared in accordance with the JORC Code are reports prepared for the purpose of informing investors or potential investors and their advisors.

Public reporting in accordance with the Code requires the formal signoff of a Competent Person, who is a mining professional meeting specific qualification, experience, and professional membership requirements.
Why are we having a review?

It’s time

- 2012 code was introduced 12 years ago

Regulator feedback

- Discussions with ASIC & ASX flagged a range of issues for consideration when the code was updated

To improve the code

- A strength of the Code has been it’s evolution to address emerging issues and refine its application
- Align with CRIRSCO and international changes
Stakeholder engagement and consultation activities have included general feedback provided directly and indirectly via emails, meetings, and online survey with submissions from individuals, industry bodies, companies, and organisations.

A series of Working Groups (WG) were formed to review issues / opportunities raised from the online survey results, industry bodies and other organisational feedback.

Draft options of changes to the Code, including:
- Options of proposed changes to current wording of the Code
- Options for inclusion of proposed new sections or clauses to the Code
Will be circulated to key stakeholders for review and feedback.

A draft interim updated JORC Code will has been prepared for review by ASX and ASIC. This will be followed by Parent Body and all stakeholder consultation and feedback.

A final draft will be prepared for approval by Parent Bodies, then ASX for recommendation to ASIC for Ministerial approval.
Understanding of the Code

Overall understanding of the Code

- SIMPLE: 71%
- NEUTRAL: 25%
- DIFFICULT: 3%

Understanding the Principles of the Code

- Transparency: SIMPLE
- Materiality: SIMPLE
- Competence: SIMPLE
Respondents use of Reporting Codes

- CIM (NI 43-101), Canada
- SAMREC, South Africa
- CRIRSCO
- None
- KAZREC, Kazakhstan
- Other
- CIM (NI 43-101), Canada
- SAMREC, South Africa
- CRIRSCO
- None
- KAZREC, Kazakhstan
- Other
- CIM (NI 43-101), Canada
- SAMREC, South Africa
- CRIRSCO
- None
- KAZREC, Kazakhstan
- Other
- CIM (NI 43-101), Canada
- SAMREC, South Africa
- CRIRSCO
- None
- KAZREC, Kazakhstan
- Other
- CIM (NI 43-101), Canada
- SAMREC, South Africa
- CRIRSCO
- None
- KAZREC, Kazakhstan
- Other
- CIM (NI 43-101), Canada
- SAMREC, South Africa
- CRIRSCO
- None
- KAZREC, Kazakhstan
- Other
### Topics of interest flagged by the stakeholder survey

<table>
<thead>
<tr>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent Person</td>
</tr>
<tr>
<td>Reasonable Prospects (RPEEE)</td>
</tr>
<tr>
<td>Environmental, Social, Governance (ESG)</td>
</tr>
<tr>
<td>Reporting of Risks</td>
</tr>
<tr>
<td>Reconciliation performance</td>
</tr>
<tr>
<td>Guidance notes</td>
</tr>
<tr>
<td>Use of JORC Code for non reporting purposes</td>
</tr>
<tr>
<td>Relationship to ASX Listing Rules and/or to other codes</td>
</tr>
<tr>
<td>Other Issues</td>
</tr>
</tbody>
</table>
## Code Review Working Groups

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andre Badenhorst</td>
<td>Geraldine McGuire</td>
<td>Kirsty Sheerin</td>
</tr>
<tr>
<td>Andrew Pocock</td>
<td>Godknows NJowa</td>
<td>Leslie M Watson</td>
</tr>
<tr>
<td>Beau Nicholls</td>
<td>Gregory MacDonald</td>
<td>Marco Orunesu Preiata</td>
</tr>
<tr>
<td>Bridget Alldridge</td>
<td>Harald Muller</td>
<td>Marcus Reston</td>
</tr>
<tr>
<td>Bruce Harvey</td>
<td>Heath Arvidson</td>
<td>Mark Adams</td>
</tr>
<tr>
<td>Bruce Sommerville</td>
<td>Ian Glacken</td>
<td>Mark Berry</td>
</tr>
<tr>
<td>Chris Davis</td>
<td>Ian Ritchie</td>
<td>Mark Murphy</td>
</tr>
<tr>
<td>Clint Ward</td>
<td>Ioannis Kapageridis</td>
<td>Peter Fairfield</td>
</tr>
<tr>
<td>Craig Morley</td>
<td>Ivy Chen</td>
<td>Rebecca Jackson</td>
</tr>
<tr>
<td>Deborah Lord</td>
<td>Jacinta Ireland</td>
<td>Sam Ulrich</td>
</tr>
<tr>
<td>Douglas Corley</td>
<td>Jeremy Peters</td>
<td>Selina Zoe Broun</td>
</tr>
<tr>
<td>Dr Paul Weber</td>
<td>John A. Rusnak</td>
<td>Shauna Martin</td>
</tr>
<tr>
<td>Emily Harris</td>
<td>Jon Crosbie</td>
<td>Tatum Woodroffe</td>
</tr>
<tr>
<td>Gabrielle Kirk</td>
<td>Jonathan Moore</td>
<td>Timothy O'Sullivan</td>
</tr>
<tr>
<td>Geoffrey Booth</td>
<td>Jonathon Trewartha</td>
<td>Todd McCracken</td>
</tr>
<tr>
<td><strong>Key Areas Reviewed – Notable recommendations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Structure &amp; Format</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reduction in embedded guidance; more comprehensive Guidance Document</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Better alignment of Code and Table 1 with CRIRSCO</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reasonable Prospects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• RPEEE vs RPEE; application of Modifying Factors throughout lifecycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ‘Initial Assessment’ of Modifying Factors to assess RPEE</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ESG</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Addition of specific section and clauses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Guidance Matrix of ESG related themes and impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risks &amp; Opportunities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Addition of specific section and clauses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Allow for project specific Risks to be disclosed and discussed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reconciliation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Addition of specific section and clauses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Align with ASX Listing Rules requirement for comparisons</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Competence &amp; Responsibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Inclusion of defined term ‘Specialist’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clarification of Company responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JORC Code Guidance improvements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-structuring of the code in a manner analogous to the ASX LR, GN and other supporting material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement to better define studies (including scoping studies), and alignment of terms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The need for Investor and practitioner tailored guidance with links to relevant ASIC, ASX guidance notes, FAQs, and other references</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional principles-based external guidance with worked examples and links to papers or references. Commodity guidance layers move external to code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential adoption of CRIRSCO Template Table 1 and Table 2 format allowing guidance by project development stage: Exploration, Resource and Reserve</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Disclosure about Reasonable Prospects for Economic Extraction

Quality and quantity of discussion of RPEE in Public Reports has been variable over the years.

Improved disclosure of Reasonable Prospects is considered desirable.

The concept of an Initial Assessment – to support and justify reasonable prospects for economic extraction is under debate.

• An ‘Initial Assessment’ refers to internal company Documentation which is the consideration and appropriate assessment by a Competent Person of reasonably assumed Modifying Factors that are likely to influence the reasonable prospects of economic extraction.

• An Initial Assessment Documentation must be prepared by the Competent Person to justify whether all or part of the mineralisation has reasonable prospects for economic extraction.

• The basis for the reasonable prospects for economic extraction is always a material matter, and must be explicitly disclosed and discussed by the Competent Person within the Public Report …

• The reasonable prospects disclosure must also include a discussion of the technical and economic support for the cut-off assumptions applied.
How to deal with ESG?

- New clause under review
- Integrated approach of ESG disclosure within Table 1 reporting requirements
- Balanced reporting across all the modifying factors, including ESG
- Guidance matrix for practitioners
ESG Disclosure & Considerations

• **Add a new Clause 5 for ESG**

- Material ESG considerations to be disclosed *as appropriate* to the study stage from Exploration results to Closure

- Calibrated Table 1 from baseline level disclosure at exploration stage through to detailed study supported at Ore Reserves level. Granularity aligned to study stage and materiality.

- Not about applying reserve maturity data to exploration prospects, applying available data which could be material to resource progression. Expected to reach maturity as with any all material modifying factors by Ore Reserves stage.
Requirement for the Competent Person to disclose material opportunities and threats for Exploration Targets, Mineral Resources and Ore Reserves

Options for a new table or section within Table 1 outlining disclosure criteria are being evaluated

As with ESG, Risks as at the project stage being reported, not crystal ball to future stages. Expected maturity as with any material modifying factor by Ore Reserves stage
Reporting on Reconciliation

It was recognised that the current Code was lacking in requirement to report reconciliation performance.

New clause recommended requiring disclosure of comparison of an estimate to a estimate, such as a Mineral Resource and/or an Ore Reserve, or alternatively, the reconciliation of the mined part of an estimate to the mine production results.

External guidance recommended to improve understanding and reporting in this area.
AusIMM & AIG have formed a Joint Taskforce to review options for improving the requirements to act as a Competent Person.

- Scope to move from self-nomination to a more robust process
- Competence, area of practice verification and/or accreditation processes
- Disciplinary process, enforceability and transparency
- Senior Competent Person and subsidiary technical specialist signoff model incorporated into code draft.
Why the Delay?

- ASIC and ASX review of draft still in progress; interplay with listing rules and expanded scope considerations.
- The 90-day Industry and Public comment period to follow once JORC can review the regulatory feedback – no change of response process, 3 months October to December.
- Competent Person review process running in parallel.
- Second exposure draft to be shared, ahead of formalisation stages 2024.
Next phase of stakeholder engagement

Regulator Review
- First Draft shared with ASIC & ASX
- Initial ASIC feedback received
- ASX review and detailed markup complete

Organisation Review
- JORC Parents - AusIMM, AIG & MCA
- CRIRSCO

Industry & Public Feedback
- 90-day open period
- Web form or downloadable
- Survey tool to be used to managed feedback
<table>
<thead>
<tr>
<th><strong>Nature of Regulator feedback</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ESG</strong></td>
</tr>
<tr>
<td>Discussion of how to narrow the scope to specific mining issues and Competent Person considerations</td>
</tr>
<tr>
<td><strong>Competent Persons</strong></td>
</tr>
<tr>
<td>Clarification of instructions to Competent Persons versus company obligations</td>
</tr>
<tr>
<td><strong>Concept of an Initial Assessment</strong></td>
</tr>
<tr>
<td>better guidance on the strictly internal nature of this type of documentation</td>
</tr>
<tr>
<td><strong>Exploration Targets</strong></td>
</tr>
<tr>
<td>discussion of reasonable prospects</td>
</tr>
<tr>
<td><strong>Complaints</strong></td>
</tr>
<tr>
<td>Clarification of process</td>
</tr>
<tr>
<td><strong>Legals aspects</strong></td>
</tr>
<tr>
<td>ensure the consistent use of language, defined terms and concepts throughout the Code</td>
</tr>
<tr>
<td><strong>Materiality</strong></td>
</tr>
<tr>
<td>Need to address the varying uses of the concept of Materiality throughout the Code</td>
</tr>
<tr>
<td><strong>Treatment of historical results</strong></td>
</tr>
<tr>
<td>Potential inconsistencies between various rules &amp; guidance</td>
</tr>
<tr>
<td><strong>Commercially sensitive information</strong></td>
</tr>
<tr>
<td>Harmonisation of various rules, FAQs, and guidance</td>
</tr>
<tr>
<td><strong>Annual Reviews</strong></td>
</tr>
<tr>
<td>Scope for improved disclosure and alignment of ASX Listing Rules and the code</td>
</tr>
</tbody>
</table>
The recent CRIRSCO meeting in Brazil in October 2023 agreed to various changes, updates, deletions and additions to Standard Definitions; the implications of these changes require consideration by JORC.

Terms under consideration were:

- Mineral
- Public Reports
- Competent Person
- Specialist
- Modifying Factors
- Exploration Targets
- Exploration Results
- Mineral Resources
- Inferred Mineral Resources
- Indicated Mineral Resources
- Measured Mineral Resources
- Mineral Reserves
- Life of Mine Plan (LoMP)
- Probable Mineral Reserves
- Proved Mineral Reserves
- Scoping Study
- Pre-feasibility Study
- Feasibility Study
The Review Process: Engagement

2020 - 21
- General Engagement
- ASIC and ASX
- Online Survey

Summary of Key Issues

2022
- Code Review
  - Direct Consultation
  - Working Groups
  - JORC
- Competent Person Review
  - Joint Taskforce
  - Parent Bodies / JORC

2022 - 23
- Draft Options (JORC Code)
  - including proposed changes to current wording and drafting of new sections of the Code
- Pending Parent Body review

Aug - Oct 2023
- ASIC and ASX review and feedback
- CRIRSCO consultation and feedback

Now Nov 2023
- Draft Options (JORC Code)
  - including proposed changes to current wording and drafting of new sections of the Code
- Draft Options (Competent Person)
  - including proposed changes to relevant sections of the Code

Jan - Apr 2024
- Draft Update JORC Code public review
  - including all proposed changes, additions and options
- Institute member engagement process
**Code Update Plan - progress**

- **2020**: Engagement and Online Survey
- **JUNE 2021**: Release of Summary of Key Issues and Work Plan
- **JULY-DEC 2021**: Working Groups and targeted engagement
- **Q4 2021**: Draft JORC Code update
  - **Q2 2022 - Q4 2023**: Feedback on draft code
  - **Mid 2024**: Final Draft
  - **Mid-late 2024**: Approval Process Parents / ASX / ASIC / Minister
  - **Late 2024**: JORC 202X Code release
Stay Informed

**Code Update Contact:**
Project Manager – JORC Review: [update@jorc.org](mailto:update@jorc.org)
JORC chair [chair@jorc.org](mailto:chair@jorc.org)

[JORC](http://www.jorc.org)
[LinkedIn](https://www.linkedin.com/company/australian-joint-ore-reserves-committee)