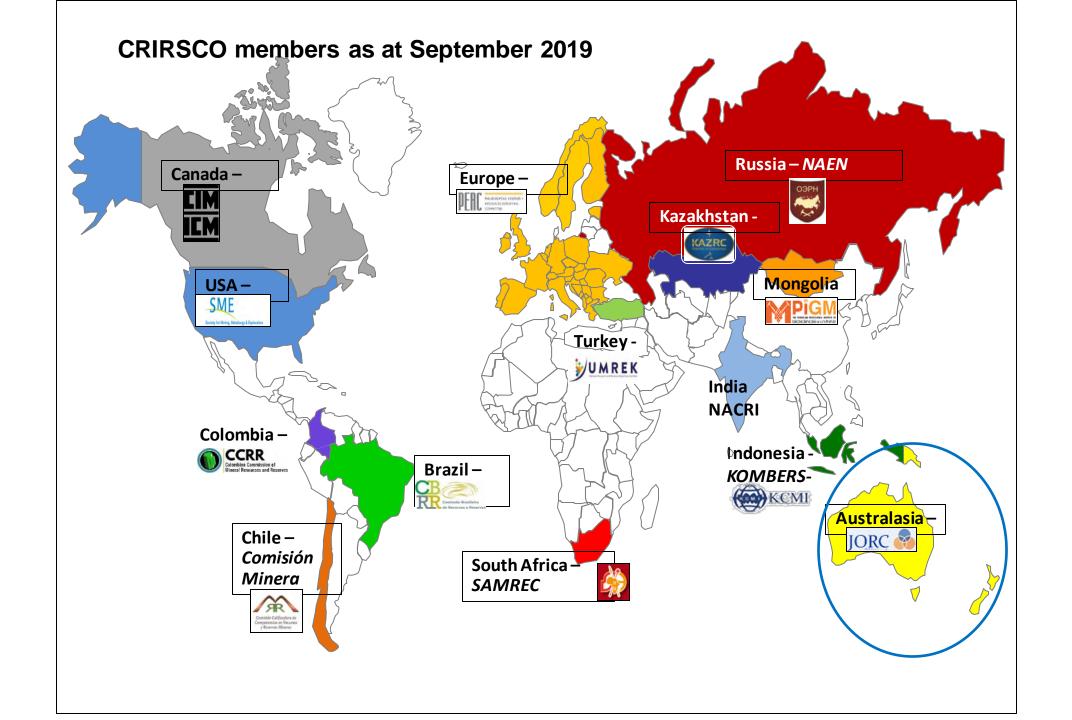


Joint Ore Reserves Committee (JORC)

Annual Report to CRIRSCO: Jul-19 to Jun-20



CRIRSCO Representatives

Peter Stoker



Geologist with 50 years experience in mine geology, mineral resource and ore reserve estimation, feasibility studies, project evaluation and mineral exploration.

Honorary FAusIMM and a Chartered Professional - Geology. Past Chair of the AusIMM's Geoscience Taskforce and a past Councillor, branch chairman and secretary. He is the current Deputy Chairman of JORC and was Chairman from 2005 to 2014, and Secretary from late 1999 to 2005.



• Stuart Masters Geologist/geostatistician with over 33 years experience in Exploration, Mining and Resource Geology in Open-pit, Underground and Alluvial environments and most metalliferous commodities, as well as diamonds and phosphates.

> FAusIMM, MAIG, and a Graduate Member of the Australian Institute of Company Directors (GAICD). Stuart has served on the Joint Ore Reserves Committee (JORC) since 2014.



Structure

The Committee comprises representatives of each of the three parent bodies:

- The Minerals Council of Australia (MCA),
- The Australasian Institute of Mining and Metallurgy (The AusIMM), and the
- Australian Institute of Geoscientists (AIG);

as well as representatives from the:

- Association of Mining and Exploration Companies (AMEC),
- Australian Securities Exchange (ASX),
- Financial Services Institute of Australasia (FinSIA), and the
- Accounting Profession.



Primary Responsibilities

• Established in 1971 and is sponsored by the Australian mining industry and its professional organisations.

Development and ongoing update of the JORC Code.

• JORC does not have professional members: Professional development and disciplinary matters related to Competent Persons are administered through the Parent Body of which they are a member of (i.e. The AusIMM and / or the AIG).



1. Registrations and Affiliations

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

2. Applications

- As above. Professionals involved in the public reporting of Exploration, Results, Mineral Resources or Ore Reserves must belong to:
 - i. The Australasian Institute of Mining Metallurgy (AusIMM); and / or the
 - ii. Australian Institute of Geoscientists (AIG), or
 - iii. A Recognised Professional Organisation (**RPO**, see https://www.asx.com.au/documents/regulation/list-recognised-professional-orgs-march-2014.pdf)



3. Complaints

• Complaints about individual members are made through their respective institute (The AuslMM or AIG). The following table summarizes these complaints in the 2019 reporting year.

	Institute		
Complaints	AusIMM	AIG	Total
Received	5 by Professional Conduct Committee	0	5
In progress	3 (Ethics Committee)	0	3
Concluded with sanctions	0	0	0
Concluded with no penalties	1 – The Competent Person asked to update report and undertake further reporting	0	1
penalties	education i.e. On-line JORC course		
Withdrawn	1	0	1



4. Professional training initiatives organized by JORC

 JORC does not organize professional training. Such training is organized by the AIG and The AusIMM. However, several JORC committee members contributed their time and skills to the development and implementation of the AusIMM course, independently of their JORC membership, and others through a JORC sub-committee involved with program design and monitoring.

AusIMM

- The AuslMM has conducted four (4) of its 'Online Professional Certificate in JORC Code Reporting' courses for almost 400 attendees in the reporting period with 99.3% strongly recommending the experience for aspiring and current Competent Persons.
- The AuslMM will deliver the 5th intake of the course in September 2020, with 120 registrations, and a further 60 pre-booked for the next intake. 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/



4. Professional training initiatives organized by JORC

· AIG

- The AIG conducted two (2) of its 'Five Workshop JORC Code Webinars' for 87 registrations and 82 completions. Twenty-three (23) of these completed the additional on-line assessment to receive a formal Certificate of Completion, with the remainder receiving a formal Certificate of Attendance.
- https://www.aig.org.au/wp-content/uploads/2020/07/aig JORC-online-course a4-flyer 02.pdf

5. Events

Not applicable as JORC doesn't organize these types of events.



6. Other Key Activities

- Formalization and Update of JORC Operating Rules (including the JORC Charter and Terms of Reference)
- The final draft has been referred to JORC's parent bodies and is currently being reviewed.
- Committee Renewal
- The previous CRIRSCO representative (**lan Goddard**) retired from JORC and **Stuart Masters** (an AIG Representative) became the CRIRSCO representative. This was the only change to the JORC Executive in this reporting year. The Committee has recruited, and is recruiting, new members to fill other vacancies such that the prescribed membership balance between the bodies is maintained.

New Representatives: Dean David (metallurgist), Kevin Gleeson (geologist), Andrew Hall (mining engineer)

Retirements: Ian Goddard, Bill Shaw, Nicole Brooke, Kate Somerville

• The Committee is looking for 'apprentices' who can get involved with JORC (mainly with the proposed update) with a view to becoming a member when a vacancy arises.



6. Other Key Activities

Code Update

• JORC was aiming for a 2020 Code update but COVID19, coupled with the complexity of some issues to be addressed, has delayed that, with the update now scheduled in 2021. Engagement with primary stakeholders (AIG, AusIMM, MCA, ASX and ASIC) is well underway. An on-line survey will be used to capture feedback on the Code. The survey is nearing final draft design for submission to primary stakeholders for review in September 2020. Once finalized, the survey will be made available for completion to all stakeholders. Following a period of receiving responses, the data will be analyzed with sub-groups established to address key issues.

JORC and GA

 Consultations continue with Geoscience Australia (GA) regarding "economically viable" inputs to Australia's Identified Mineral Resources.



6. Other Key Activities

- Formulation National Reporting code (Malaysia)
- Presently the Malaysians believe the best forward path is approval as an RPO and are seeking guidance in relation to their professional association by-laws, membership conditions and complaints guidelines. It is likely that the membership level will be at that of professional geologist.
- They are hopeful to be able to apply for RPO status enabling their members to work using a JORC sign off. Full CRIRSCO membership as a second stage in this process may follow at some future point. JORC has provided advice to the Malaysian contingent during the reporting year.

RPO List

• Several other applications for addition to the JORC/ASX list are under review with the aim of revising the list during 2020.



The Committee

JORC Committee executive members

Member	Affiliation / Representing	Professional Background
Steve Hunt, Chairman	MCA	Geologist
Peter Stoker, Deputy Chair	AusIMM	Geologist
Graham Jeffress	AIG	Geologist
Stuart Masters	CRIRSCO / AIG	Geologist
Jillian Terry	MCA	Geologist

JORC Committee ex-officio members

Member	Affiliation/Representing	Professional Background
John Barber	MCA	Economist
René Sterk	AusIMM	Geologist
Matthew Cobb	AIG	Geologist

JORC Committee non-executive members

Member	Affiliation / Representing	Professional Background
Chris Cairns	AIG	Geologist
Vacant^	AIG	-
Ivor Jones	AusIMM%	Geologist
Dean David	AusIMM	Metallurgist
Jared Broome	MCA#	Geologist
Vacant	Accounting Profession	-
James Rowe	ASX	Lawyer
Chris Brown	FinSIA	Geologist / Economist
Neil van Drunen	AMEC	Economist

[^] Dr Jacqui Coombes resigned from JORC in August 2020. The AIG is currently seeking a replacement for her.

% Andrew Hall (Mining Engineer) became an additional AusIMM representative in August 2020

[#] Kevin Gleeson (Geologist) became an additional MCA representative in August 2020