crirsco

COMMITTEE FOR MINERAL RESERVES INTERNATIONAL REPORTING STANDARDS

Principles of and requirements for public reporting of mining companies by securities regulators with the Australian example of JORC, ASIC and ASX.

Ian Goddard
Deputy Chairperson, CRIRSCO
JORC Representative

7th AMM Congress
Astana, Kazakhstan 16 June 2016

ICMM
International Council on Mining & Metals

CRIRSCO Membership Criteria

1. Produce and be responsible for maintaining a reporting standard that is compatible with the Template and which is recognised as the standard for Public Reporting, or has the wide support of professional bodies, in the country/region.

3. Include credible, self regulating, professional bodies that provide disciplinary systems and codes of ethics that govern the behaviour of Competent Persons or equivalents as defined in the Template.

CRIRSCO Members

- All CRIRSCO National Reporting Organisation (NROs) meet criterion 1.
- Many differences re recognition (or not) by regulators of companies or securities exchanges
- All have support of professional bodies
- All have professional bodies which have effective disciplinary processes for Competent Persons (Criterion 3)

CRIRSCO Member Comparison

	AUSTRALIA	BRAZIL	CANADA	CHILE	EUROPE	MONGOLIA	RUSSIA	SOUTH AFRICA	USA SME	USA SEC
CODE	JORC	CBRR	NI 3-101	CM	PERC	MRC	NAEN	SAMREC	SME Guide	IG7
LISTING RULES	X				X			X		
GOVERNMENT SECURITIES LAW			X	X		X	X			X
NATIONAL	X	X		X		X	X	X	X	X
PROVINCE/ STATE			X							

Australia

National Reporting Organisation is JORC

(Joint Ore Reserves Committee)

JORC
Joint Ore Reserves Committee

JORC

- Parents
- History
- Code
- Reporting environment

JORC Parents

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

JORC Associates and Observers

Associates

- Australian Securities Exchange (ASX)
- Securities Institute of Australia (SIA)

Observer

- Association of Mining and Exploration Companies (AMEC)

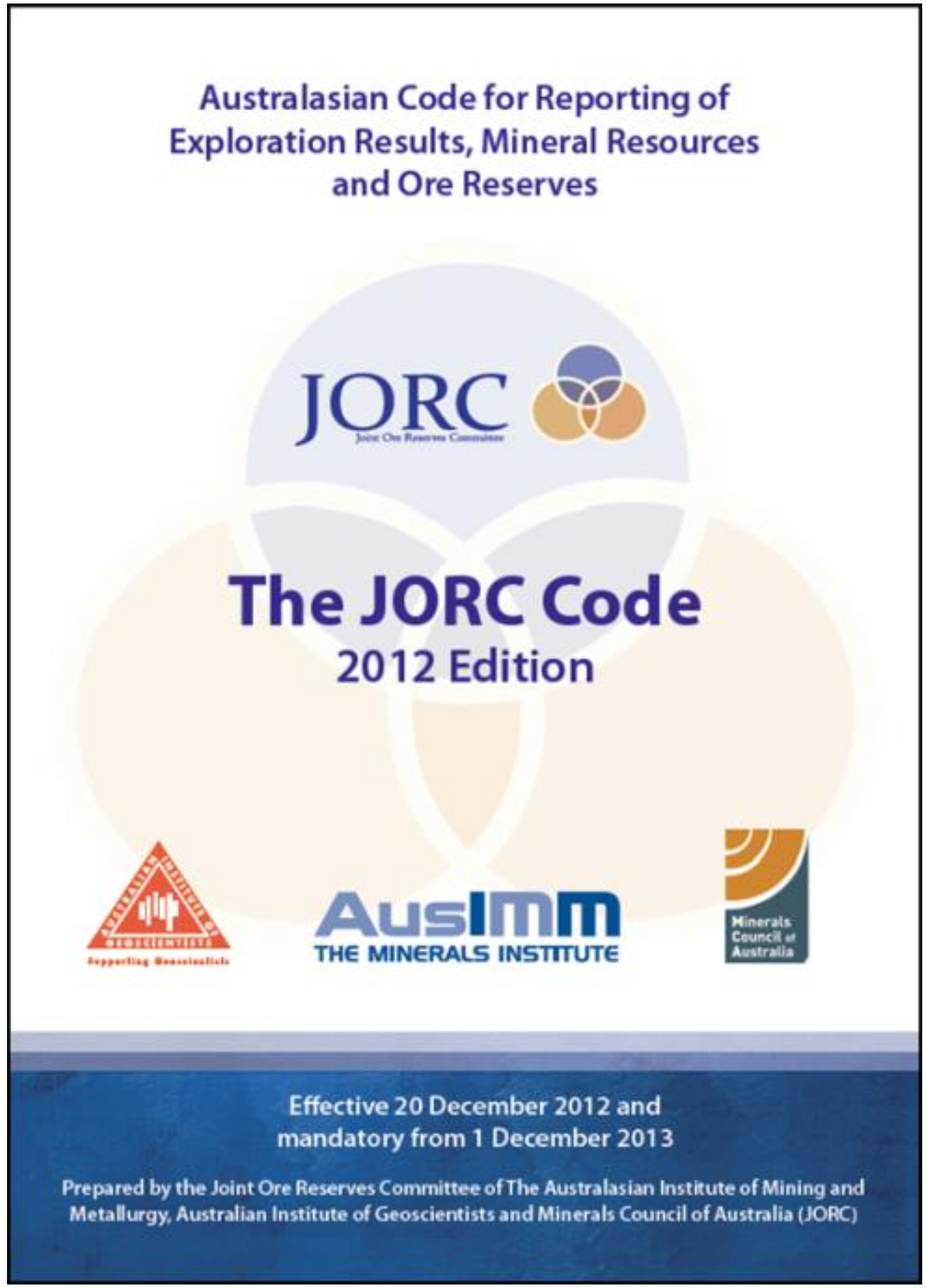
JORC History

- Excesses of 60s and 70s
- JORC formed 1971
- Competent Person 1972
- First JORC Code 1989
- Listing Rules of ASX
- AusIMM Code of Ethics
- Guidelines in 1990

JORC History

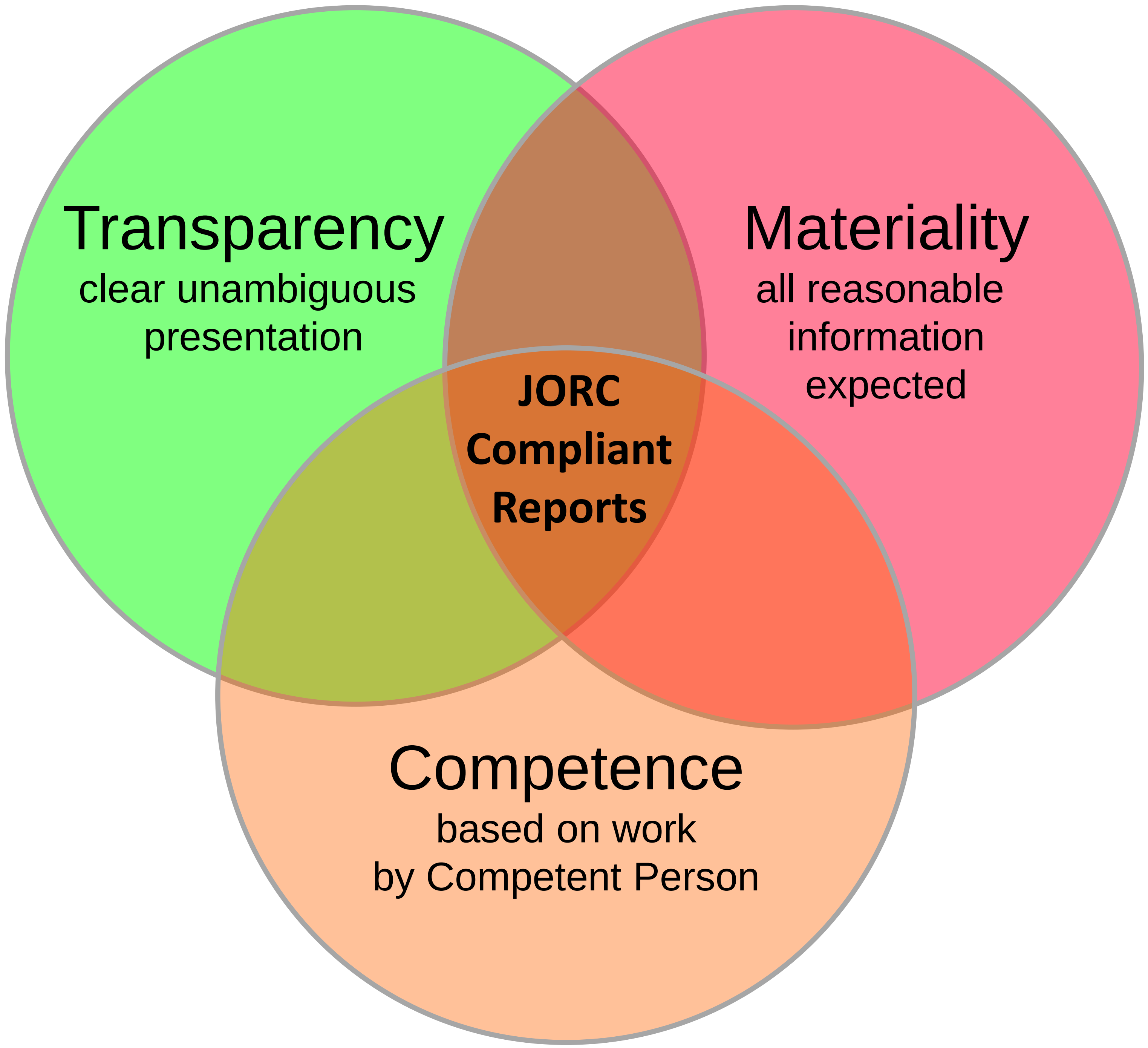
- 1992 AIG joins and includes in Code of Ethics
- 1992 New Zealand SX
- First JORC Code and Guidelines revision
- 6^{th} revision in 2012
- Widely accepted internationally
- More involvement of regulators

JORC Code



Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
JORC
The JORC Code
2012 Edition
AusIMM
THE MINERALS INSTITUTE
Minerals Council of Australia
Effective 20 December 2012 and mandatory from 1 December 2013
Prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC)

The JORC Code—Principles Based



Competent Person Statement

Public reports of Exploration Results, Mineral Resources and Ore Reserves for significant projects for the first time or when those results or estimates are materially changed must:

- Name the Competent Person and the Competent Person's firm or employer.
- State that the public report is based on the documentation compiled by the Competent Person; obtain the prior written consent of the Competent Person(s) to the "form and context" in which the public report refers to the information in the documentation prepared by the Competent Person; and
- Include a statement that this (prior written) consent has been obtained—this is now facilitated by the existence of the Competent Person Consent Form (available from the JORC website). The onus is on the company to obtain approval, but the Competent Person should encourage observation of the requirement.

Competent Person statement - example

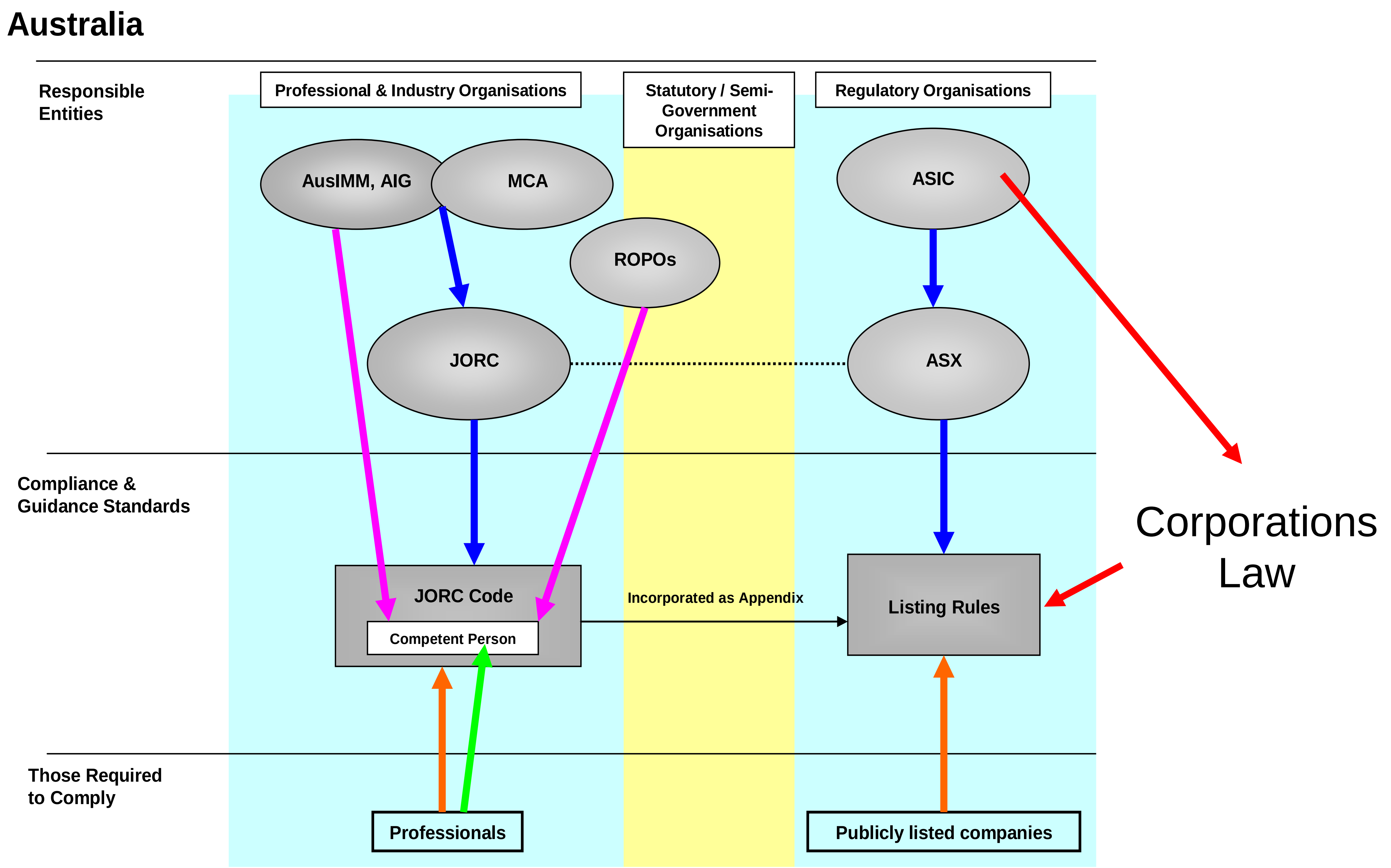
Mineral Resources

The data in this report that relate to Mineral Resources for Frieda River deposits (Horse-Ivaal-Trukai, Koki and Ekwai) are based on information reviewed by Mr Shaun Versace who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM).

Mr Versace is a full time employee of PanAust Limited. Mr Versace has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Mr Versace consents to the inclusion in the report of the Mineral Resources in the form and context in which they appear.

Australian Reporting Environment



Australian Securities Exchange (ASX)

- Principal securities exchange in Australia
- Minerals sector largest by number
- Over 700 companies
- Large, medium, small
- Reliance on equity funding
- Over 250 IPOs in last 6 years

ASX

JORC Code incorporated in ASX Listing Rules

- JORC Code is referred to in Chapter 5

  (Clauses 5.6 to 5.24)

- JORC Code is attached to the Listing Rules as Appendix 5A

ASX Listing Rule – Chapter 5

Chapter 5

Additional reporting on mining and oil and gas production and exploration activities

Table of contents

The main headings in this chapter	Rules
Quarterly reporting	5.1 - 5.5
Reporting on mining activities	5.6 - 5.24
Reporting on oil and gas activities	5.25 - 5.44
Terms of a +mining tenement and a +petroleum tenement joint venture	5.45
Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)	Appendix 5A
+Mining exploration entity and +oil and gas exploration entity quarterly report	Appendix 5B

Explanatory note

This chapter sets out additional reporting and disclosure requirements for +mining entities and +oil and gas entities, and other +entities reporting on mining and oil and gas activities.

Information to be given to ASX for release to the market must be given to ASX's +company announcements office.

ASX Listing Rule 5.6

Reporting on mining activities

Requirements applicable to all public reporting

5.6 Subject to rule 5.10, a public report prepared by an +entity must be prepared in accordance with rules 5.7 to 5.24 if applicable and Appendix 5A (JORC Code) if applicable if the report includes a statement relating to any of the following.

- +Exploration targets.
- +Exploration results.
- +Mineral resources or +ore reserves.
- +Production targets.

Note production targets are not included in the JORC Code

Note: the rules in this chapter relate to the reporting of exploration results, mineral resources, ore reserves, historical and foreign estimates and production targets. Appendix 5A (JORC Code) relates to the reporting of exploration targets, exploration results, mineral resources and ore reserves. This rule is not confined to reports under this chapter. It also applies to all public reports, including prospectuses, product disclosure statements, information memoranda, bidder's and target's statements, annual reports, financial statements, technical papers, presentations, website content and information given to ASX for release to the market under other chapters of these rules.

ASX

- ASX representatives on JORC
- Close working relationship
- Significant consultation on JORC 2012
- Ongoing consultation on monitoring, education and improvements to practice
- Guidance Notes and FAQ

crirsco

ASX Guidance Note

ASX

ASX LISTING RULES
Guidance Note 31

REPORTING ON MINING ACTIVITIES

The purpose of this Guidance Note	• To assist listed entities to understand and comply with the reporting requirements for mining activities in Chapter 5 of the Listing Rules
The main points it covers	• The quarterly reporting obligations that apply to mining entities • The general requirements that apply to all public reports of ore reserves or mineral resources • The requirements that apply to public reports with information about a geophysical survey • The reporting requirements that apply to public reports of exploration results for material mining projects • The requirements that apply to public reports with an estimate of mineral resources or ore reserves for material mining projects • The requirements that apply to public reports of historical and foreign estimates of mineralisation for material mining projects • The requirements that apply to public reports of certain production targets and forecast financial information derived from those production targets • The interaction between Chapter 5 and other reporting obligations, including the obligation to give market sensitive information to ASX immediately • The requirement for mining exploration entities to include a list of mining tenements in their annual report • The requirement for mining entities to include a mineral resources and ore reserves statement in their annual report • Competent person requirements
Related materials you should read	• Appendix 5A of the Listing Rules (the JORC Code) • Guidance Note 8: *Continuous Disclosure: Listing Rules 3.1 – 3.1B*

History: Guidance Note 31 introduced [DD/MM/13].

Important notice: ASX has published this Guidance Note to assist listed entities to understand and comply with their obligations under the Listing Rules. Nothing in this Guidance Note necessarily binds ASX in the application of the Listing Rules in a particular case. In issuing this Guidance Note, ASX is not providing legal advice and listed entities should obtain their own advice from a qualified professional person in respect of their obligations. ASX may withdraw or replace this Guidance Note at any time without further notice to any person.

ASX FAQ

ASX MINING REPORTING RULES FOR MINING ENTITIES: FREQUENTLY ASKED QUESTIONS

Transition to new disclosure rules

Reference material: ASX Listing Rules Guidance Note 31.

1. When do the JORC Code 2012 and the new rules relating to the reporting of mining activities in Chapter 5 of the ASX Listing Rules (together, the "new disclosure rules") come into effect?

With one exception, the JORC Code 2012 and the new disclosure rules in Chapter 5 of the Listing Rules come into effect on 1 December 2013.

The one exception relates to the requirements for a study at the Pre-Feasibility or Feasibility level to be completed in order to declare an Ore Reserve in clause 29 of the JORC Code 2012 and Listing Rule 5.9.1, which do not come into effect until 1 December 2014.

2. Can entities continue to report Exploration Results, Mineral Resource or Ore Reserve estimates prepared under the JORC Code 2004 post-transition (ie, after 1 December 2013) or do they need to update the information to comply with the new disclosure rules?

The new disclosure rules establish an enhanced 'if not, why not' disclosure regime based around Table 1 of the JORC Code. They apply whenever:

- *new results or estimates are reported for the first time post-transition; or*
- *there are material changes post-transition to previously reported results or estimates,*

in the case of the JORC Code 2012 for a 'significant project' and, in the case of the ASX Listing Rules, for a 'material mining project' (see below).

Accordingly, results or estimates that were prepared in accordance with the 2004 Code and reported pre-transition can continue to be referred to in Public Reports post-transition without being updated to comply with the new disclosure rules, provided there has been no material change in those results or estimates.

However, as soon as there is a material change in those results or estimates, if they relate to a 'significant project' (JORC) or 'material mining project' (ASX), the information will need to be updated to comply with the new disclosure rules.

To avoid misleading readers, an entity that reports results or estimates post-transition for a significant/material mining project that were originally reported under the 2004 JORC Code and have not been updated since to comply with the new disclosure rules should make it clear that the information has been prepared in accordance with the 2004 Code rather than the new disclosure rules. A statement along the following lines should suffice:

Australian Securities and Investment Commission (ASIC)

- Australian Securities and Investment Commission
- Recognises JORC Code
- Improved relationship in last few years
- Differing perspectives
- Role of Directors
- Regulatory Guides/ Information sheets
- Forward looking statements

ASIC acknowledges JORC Code

Industry codes

The obligation to have reasonable grounds for forward-looking statements is a legal requirement separate to any industry code. However, as forward-looking statements such as production targets, forecast financial information and income-based cash flow valuations relate to exploration targets, exploration results, mineral resources or ore reserves, you must take into account the relevant professional and industry standards in assessing whether reasonable grounds exist. For mining and exploration reporting in Australia, the industry standard is the JORC Code; and for technical expert reports, the VALMIN Code.

JORC Code

The JORC Code provides directors, shareholders, investors and their professional advisers with an internationally accepted standard to help assess and compare disclosure by different companies that is often highly technical. Disclosure under the JORC Code is governed by the principles of transparency, materiality and competence.

See clauses 4 and 9 of the JORC Code

The materiality principle requires disclosure of 'all the relevant information that investors and their professional advisers would reasonably require, and reasonably expect to find in the report, for the purpose of making a reasoned and balanced judgement'.

The competence principle requires disclosure on exploration targets, exploration results, mineral resources and ore reserves to be 'based on, and fairly reflect, the information and supporting documentation prepared by a competent person'. A competent person 'must have a minimum of five years relevant experience' and be a member of an appropriate professional organisation, such as the Australasian Institute of Mining and Metallurgy (AusIMM), Australian Institute of Geoscientists (AIG) or a recognised professional organisation as published by ASX.

ASIC Information Sheet

ASIC
Australian Securities & Investments Commission

Mining and resources - Forward-looking statements

It is common for investors in mining and resources companies to put a lot of emphasis on 'forward-looking statements' when considering an investment. In mining, these predictive statements generally include:

- production targets (i.e. projections or forecasts of the amount of minerals to be extracted from mining tenements for periods that extend past the current and forthcoming year.)
- forecast financial information
- income-based discounted cash flow valuations.

Companies that publish forward-looking statements that do not comply with the legal requirements take legal and reputational risks, and so care is needed.

This information sheet (INFO 214) aims to give stakeholders a better understanding of the existing rules that apply to forward-looking statements, thereby improving compliance and reducing any risk of litigation or regulatory action.

This guidance explains the existing reference sources that apply to forward-looking statements and gives practical advice and examples of how to comply with the existing legal obligations. In particular, it covers:

- the legal requirement that forward-looking statements must be based on reasonable grounds
- the application of relevant industry codes, ASX Listing Rules and ASIC guidance
- what constitutes a forward-looking statement, and how these are different from aspirational statements (which do not need to be based on reasonable grounds)
- that for reasonable grounds to be established, the JORC Code mineral resource estimates used must be based on a sufficient level of geological knowledge and confidence, and all JORC Code modifying factors must be sufficiently progressed
- how the legal requirement to have reasonable grounds applies to ore reserve and mineral resource estimations
- how the reasonable grounds requirement applies to the JORC Code's 'economic' modifying factor if secured funding is not in place
- what the disclosure requirements are for forward-looking statements
- what you can disclose if you do not have reasonable grounds for forward-looking statements
- what the requirements are for updating forward-looking statements when your company's circumstances change or a project changes hands
- what areas ASIC focuses on when assessing forward-looking statements.

Reference sources

ASIC uses all of the existing reference sources listed in the appendix to assess whether publicly available forward-looking statements comply with the law. This information sheet is based on, and should be read together with, the sources listed.

Forward looking statement

A forward-looking statement is a statement about a future matter and is not just a statement about your company's present intention.

For mining or exploration companies, production targets (i.e. projections or forecasts of the amount of minerals to be extracted from mining tenements for periods that extend past the current and forthcoming year), forecast financial information, and income-based valuations are forward-looking statements because they comprise, or are based on, statements about future matters.

Forward looking statements - example

Certain statements made in this announcement contain or comprise certain forward-looking statements. Although Metallica believes that the visual interpretation and other estimates and expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements in this release.

JORC Code Breaches

- JORC not a policeman
- Competent Person - AusIMM and AIG
- Company - ASX
- Company - ASIC

Ethics Breaches

CODE OF ETHICS

AUSTRALIAN INSTITUTE OF GEOSCIENTISTS

Supporting Geoscientists

1. Definitions
For the purposes of this Code, unless the context otherwise requires, member shall mean any person admitted to any grade of membership of the Institute; Institute shall mean the Australian Institute of geoscientists; Council shall mean the board of directors and governing council of the Institute; Ethics and Standards Committee shall mean the Ethics and Standards Committee duly constituted and regulated by the Council under Article 55 of the Institute's Articles of Association; the male gender shall include the female gender and the singular shall include the plural, and vice versa.

2. Principle
Members shall discharge their duties with fidelity to the public, their employers and clients, and at all times in their professional or employed capacities carry out their work with competence, integrity and professional responsibility.

3. Applications
This Code shall apply to all members including Graduates, Members, Fellows and Registered Professional Geoscientists of the Institute.

4. Duties
In all working decisions and recommendations, a member shall have due regard for the welfare and safety of the community which may be affected by the work for which he is responsible or which may result from his recommendations. All members are required to conform to this Code so as to uphold the dignity of their profession and to maintain the highest possible level of conduct in all professional matters.

5. Matters of Fact
A member shall avoid and discourage exaggerated and unwarranted statements. If called upon to give evidence or otherwise to speak on a matter of fact a member shall state what he believes to be the truth with scrupulous impartiality.

6. Matters of Opinion
Provided that the matter is clearly expressed as an opinion, a member may, where require, give a considered professional opinion based on facts, experience, interpretation, extrapolation or a combination of these.

7. Public Comment
In any public written or verbal comment, a member shall be careful to state whether the statements or assertions made therein represent facts, an interpretation of facts, an opinion, or a belief. In all such circumstances, a member shall act only with propriety in criticising the ability, opinion or integrity of another member, person or organisation.

8. Intra-Professional Conduct
A member shall neither intentionally nor negligently do anything to injure, directly or indirectly, the reputation, prospects or business of another member. However, if he considers a member to be guilty of unethical, illegal or unfair practice, it is his duty to present his views and the relevant information to the Council.

9. Unfair Advantage
A member shall not use the advantages of former or present status or position to compete unfairly with members in private practice, nor use unfairly the advantages of private practice to the detriment of salaried members.

10. Limitation
A member shall engage or advise his employer or client to engage, and cooperate with, other experts and specialists whenever the employer's or client's interests would be best served by such service. He shall not accept a concealed fee for referring a client or employer to a specialist or for recommending services other than his own.

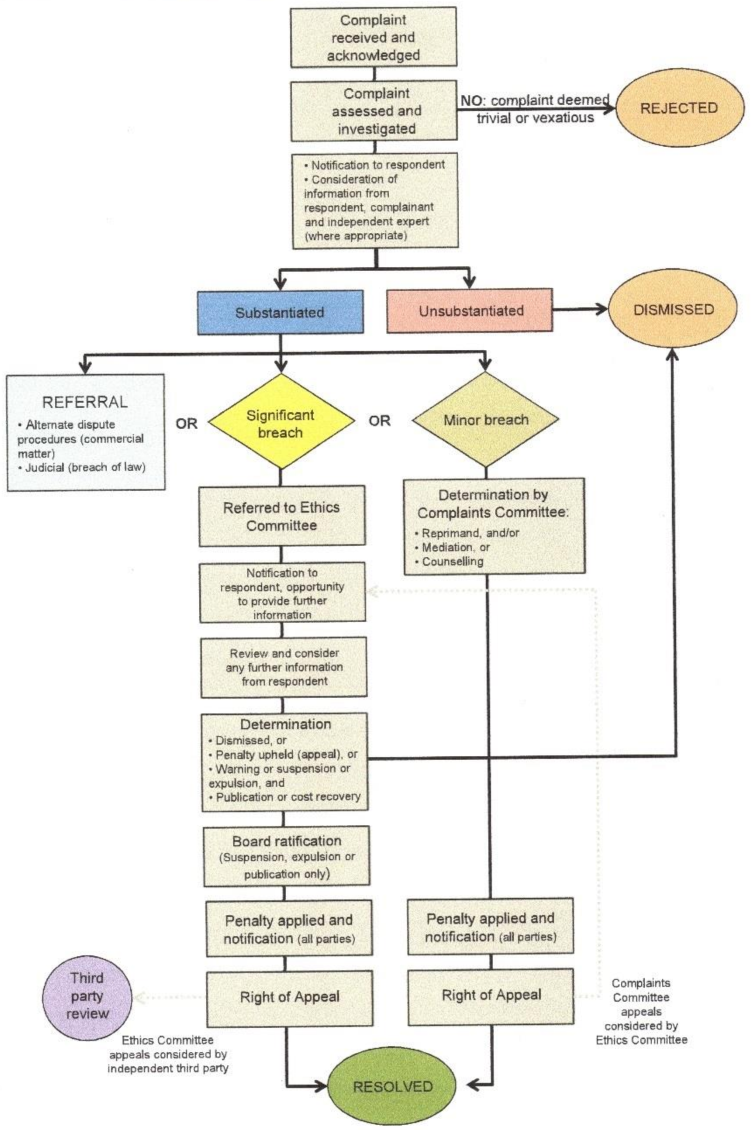
11. Training of Subordinates
When in a position of authority over other members of the profession, a member shall take care to see that those under his direction are afforded every reasonable opportunity to advance their knowledge and experience.

12. Credit to Others
A member shall ensure that proper credit is given to any associate, subordinate or otherwise, who has contributed to work for which he is responsible or whose work is being reviewed.

13. Acceptance of Favours
A member shall avoid placing himself under any obligation to any person or organisation who might deal with his employer or client. He shall not accept any substantial favours from such person or organisation.

26/07/2014

ATTACHMENT 1: AUSIMM COMPLAINTS PROCESS



The Australasian Institute of Mining and Metallurgy

Code of Ethics

PREAMBLE

The Australasian Institute of Mining and Metallurgy membership comprises professionally qualified individuals, technicians and students employed in, or undertaking training for a role in the minerals sector. The AusIMM is recognized internationally and widely regarded as the premier organization in Australasia representing a range of qualified scientists and engineers and other professionally qualified individuals involved in the full range of activities associated with the minerals sector. Many of its members reside outside Australasia. Student membership of The AusIMM encourages ongoing industry participation.

The AusIMM expects and promotes the highest professional and ethical standards of its members, having regard to the well-being of the community, the natural environment and the reputation of the international minerals industry.

This Code of Ethics represents the core values of The AusIMM and has been endorsed by all members. Members, on admission, commit to the principles set out in the Code. A breach of this Code reported to The AusIMM, shall be treated as provided for in the By-Laws in a manner that conforms with principles of equity, independence, reasonableness and fairness.

The purpose of the Code of Ethics is to commit members to uphold and enhance both their personal integrity and the integrity of the profession, and to ensure the highest standing of The AusIMM and of its members in the community is sustained.

No single provision within the Code of Ethics should be construed as imposing any constraint which might be interpreted as anti-competitive behaviour.

CODE OF ETHICS

1. The safety, health and welfare of the community shall be the prime responsibility of members of The AusIMM in the conduct of their professional activities.
2. Members of The AusIMM shall deal with clients, colleagues and the community in a manner that upholds the principles of anti-discrimination, and of equity.
3. Members of The AusIMM shall, on all occasions, act in a manner which upholds and enhances the honour, integrity, honesty and dignity of the profession.
4. Members of The AusIMM shall perform work only in their areas of competence.
5. Members of The AusIMM shall build their professional reputation on merit and performance, and shall not compete unfairly.
6. Members of The AusIMM shall at all times apply their professional skill and knowledge in the interests of their employer or client, except that members shall under no circumstances compromise their professional and ethical standards.
7. All statements made by a member of The AusIMM in a professional capacity shall be made objectively, truthfully and free of any influence which may compromise their professional judgment, and shall only be made within the member's area of professional competence.
8. Members of The AusIMM shall continue their professional development throughout their careers and shall actively assist and encourage those under their direction to also advance their knowledge and experience.
9. Members of The AusIMM shall comply with all laws and government regulations relating to the minerals sector and shall keep up to date with relevant laws in jurisdictions in which they conduct business, and members dealing with public companies shall comply with the rules, regulations and practices governing such companies as are published by the relevant stock exchange from time to time.

ASX Actions

- Consultation
- Censure
- Monetary Penalty
- Action against employee
- Withdrawal and replacement of Report
- Trading halt
- Delisting
- Referral to ASIC

ASIC Actions

- Consultation
- Legal action against Directors/officers
- Particularly interested in forward looking statements

CONCLUSION

- JORC has long history
- Constantly evolving
- Benefit of CRIRSCO input
- JORC Code based on the 3 basic principles – Competence, Transparency and Materiality
- Self regulating, but need to consult AIG, AusIMM, MCA, ASX and ASIC on changes.

crirsco

COMMITTEE FOR MINERAL RESERVES INTERNATIONAL REPORTING STANDARDS

Gratefully acknowledge:

Government of Kazakhstan and KAZRC Association

Polymetal

CRIRSCO colleagues

JORC colleagues

ICMM

ICMM International Council on Mining & Metals

crirsco

COMMITTEE FOR MINERAL RESERVES INTERNATIONAL REPORTING STANDARDS

ICMM
International Council on Mining & Metals