

Mineral Resource and Ore Reserve Reporting in Australia

The JORC Code
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**Ad Hoc Group of Experts on Harmonization of Energy Reserves
and Resources Terminology**
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Introduction

- **The JORC Code is one of the more successful Industry Resource and Reserve reporting codes in the world, it has been the model for other national reporting codes and also for other industry self regulatory codes.**
- **The incorporation of the JORC Code into the ASX Listing Rules (as Appendix 5A) in 1989 and the updating of the Code are the major strengths and the means for effective operation of the Code.**

Background of JORC Code

Australasian Joint Ore Reserves Committee (JORC)

- JORC in existence for over 30 years.
- Australasian Institute of Mining and Metallurgy
- Minerals Council of Australia
- Australian Institute of Geoscientists

- **Representation by invitation from:**
 - Australian Stock Exchange
 - Securities Institute of Australia
 - Others if deemed appropriate

What JORC Code Does

- Sets **minimum standards for public reporting (in Australia & New Zealand)** of Exploration Results, Mineral Resources and Ore Reserves
- Provides a mandatory system for **classification** of tonnage/grade estimates according to geological confidence and technical/economic considerations
- Provides **definitions** for mineral resource and ore reserve classes that are compatible with international agreements
- Requires Public Reports to be based on work undertaken by a **Competent Person**; describes the qualifications and type of experience required to be a Competent Person
- Provides extensive **guidelines** on the criteria to be considered when preparing reports on Exploration Results, Mineral Resources and Ore Reserves

What JORC Code Does Not Do

- Regulate the procedures used by Competent Persons to estimate and classify Mineral Resources and Ore Reserves (methodology)
- Regulate companies' **internal** classification or reporting systems
- Deal with breaches of the Code by companies (The ASX does)
- Deal with breaches by individuals, these are dealt with under code of ethics of AIG and AusIMM or the relevant ROPO

Principles of JORC Code

JORC style reporting is targeted at the public, investors, banks, analysts etc rather than governments

- **Transparency**

- clear and unambiguous presentation of information.

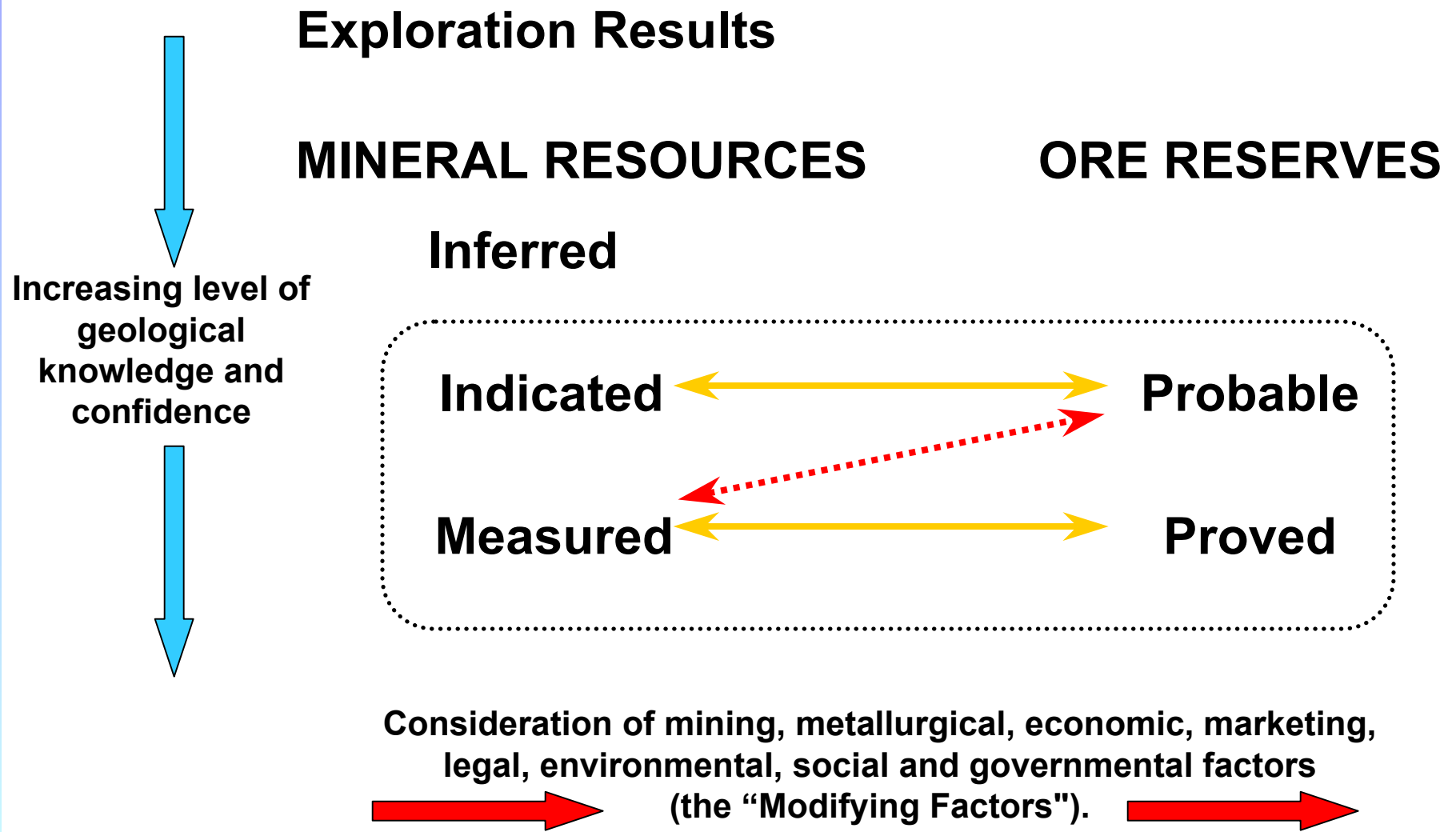
- **Materiality**

- all the information reasonably required and expected

- **Competence**

- public reports based on work undertaken by Competent Persons

General relationship between Exploration Results, Mineral Resources & Ore Reserves



JORC Stakeholders

**Resource &
Reserve
Estimators**

**Mining
Company
Management**

**JORC CODE
& Capital Market Regulations**

**Investment
Community**

**Financing
Community**

Recognised Overseas Professional Organisations (ROPOs)

- A system for mutual recognition of professional bodies internationally
- Designed to enable Competent Persons to report Mineral Resources and Ore Reserves in countries outside Australia
- Recognises the international nature of the mining business
- Many organisations now on the ROPO list with more being added

Current list of ROPOs

- **Institute of Materials, Minerals and Mining**
- **Geological Society of London**
- **Institute of Geologists of Ireland**
- **European Federation of Geologists**
- **American Institute of Professional Geologists**
- **Engineering Council of South Africa**
- **South African Council for Natural Scientific Professions**
- **Geological Society of South Africa**
- **South African Institute of Mining and Metallurgy**
- **South African Council for Professional and Technical Surveyors**
- **Professional Engineers Ontario**
- **Association of Professional Engineers and Geoscientists of British Columbia**
- **Association of Professional Engineers and Geoscientists of Manitoba**
- **Association of Professional Geoscientists of Ontario**
- **Association of Professional Engineers and Geoscientists of Newfoundland**
- **Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories**
- **Ordre des Geologues du Quebec**

International developments

- Times are changing and further developments in Resource/Reserve reporting issues will increasingly be driven by international forces, principally overseas regulators the IASB and the United Nations
- Australia has led the international negotiations through the the success of the JORC Code and is a committed member of CRIRSCO. We need to remain involved and committed, as international developments will inevitably impact on Australia.