



COMMITTEE FOR MINERAL RESERVES
INTERNATIONAL REPORTING STANDARDS



An overview of the CRIRSCO International Reporting Template

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- Principle objective of CRIRSCO
- The International Reporting Template
 - Purpose
 - Principles
 - Standard Definitions
 - Competent Person
 - Fundamental Framework

To promote best practice in the international public reporting of Mineral Exploration Results, Mineral Resources and Mineral Reserves.

CRIRSCO is an international advisory body without legal authority, relying on its constituent members to ensure regulatory and disciplinary oversight at a national level.

It recognises the truly global nature of the minerals industry and the agreed need for international consensus on reporting standards.

INTERNATIONAL REPORTING TEMPLATE

for the public reporting of

EXPLORATION RESULTS, MINERAL RESOURCES
AND MINERAL RESERVES

NOVEMBER 2013

- Advisory only
- National Standards/Codes take precedence
- Model for development of new codes

Materiality

All relevant information for a reasoned and balanced judgement by investor or advisors

Transparency

Sufficient information clear and unambiguous in order that the reader is not misled

Competency

Based on the work of suitably qualified and experienced persons who are subject to an enforceable professional code of ethics

- Public Reports
- Competent Person
- **Modifying Factors**
- **Exploration Target**
- Exploration Results
- Mineral Resource
- Inferred Resource
- Indicated Resource
- Measured Resource
- Mineral Reserve
- Probable Reserve
- Proved Reserve
- **Scoping Study**
- **Pre-Feasibility Study**
- **Feasibility study**

- Reports prepared for investors or potential investors
- Annual Reports
- Quarterly Reports
- Information Memoranda
- Websites
- Public Presentations
- Stock Exchange Information Systems

- Is a minerals industry professional who is a member of a Recognised Professional Organisation (RPO) with enforceable disciplinary processes including the powers to suspend or expel a member
- Minimum Five (5) years **relevant** experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking.

Team approach allowed - leader signs off.

Satisfied in own mind able to face peers and demonstrate competence in the commodity, type of deposit and situation.

Lead CP to be satisfied with the work of others

SAMREC
JORC

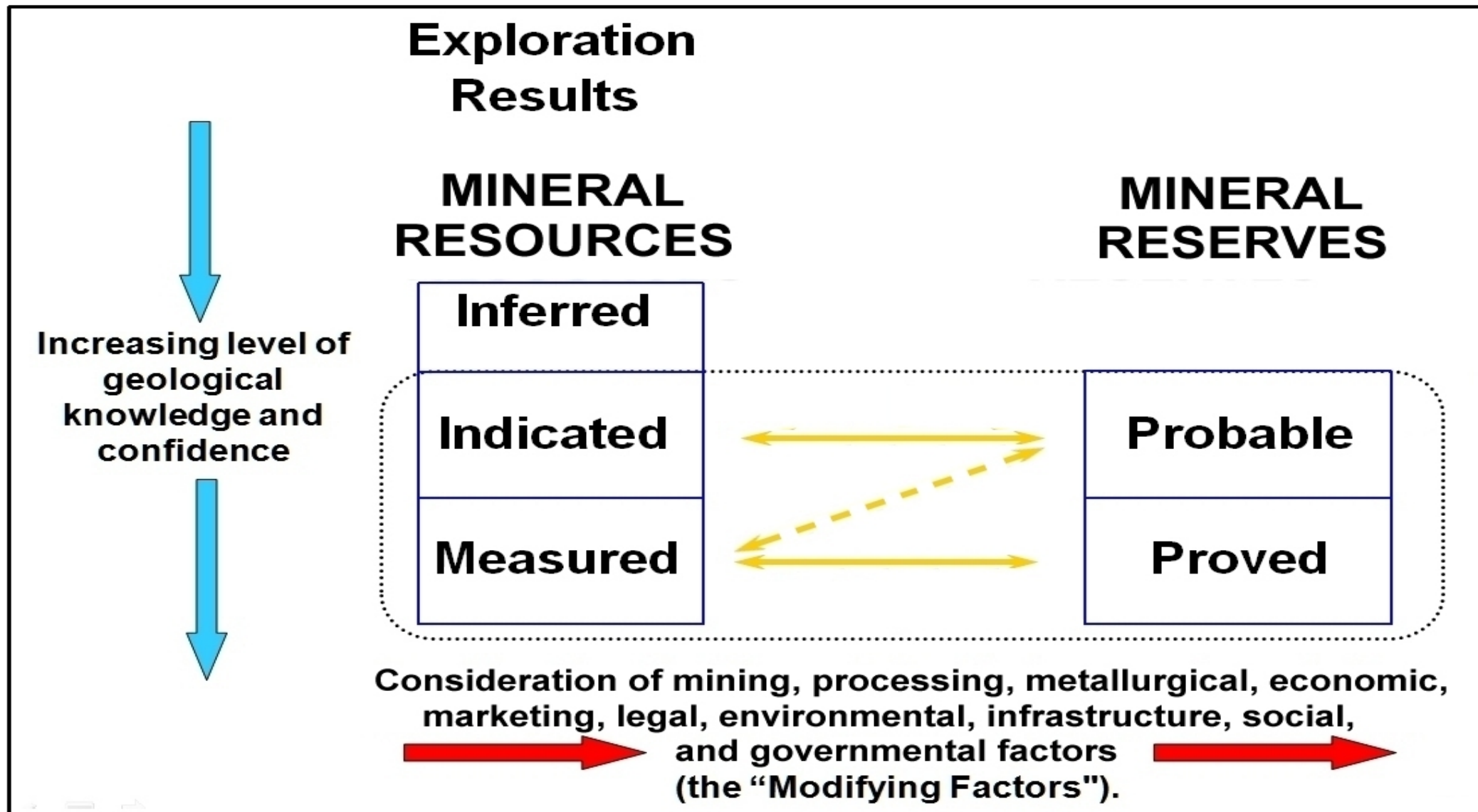
- Responsibility of National Reporting Organization (NRO)

SAIMM
AusIMM

- International reciprocity agreements through Recognized Professional Organizations (RPO)

Recognised Professional Organisations (RPOs)

Australasian Institute of Mining and Metallurgy	AusIMM
Australian Institute of Geoscientists	AIG
Canadian Council of Professional Geoscientists	CCPG
European Federation of Geologists	EFG
The Geological Society	GS
Institute of Geologists of Ireland	IGI
Institute of Materials Minerals and Mining	IMMM
Mining and Metallurgical Society of America	MMSA
Society for Mining Metallurgy and Exploration	SME



- Mining
- Processing
- Metallurgical
- Economic
- Marketing
- Legal
- Environmental
- Social
- Infrastructure
- Governmental

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust **in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.**

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

A Mineral Reserve is the **economically mineable** part of a Measured and/or Indicated Mineral Resource.

It **includes diluting materials** and allowances for losses, which may occur when the material is mined or extracted and is **defined by studies at Pre-Feasibility or Feasibility level** as appropriate that include application of Modifying Factors.

Such studies demonstrate that, **at the time of reporting**, extraction could reasonably be justified.

The **reference point** at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

- Must be clearly stated Mineral Resources are ***inclusive or exclusive*** of Mineral Reserves
- Two should never be added together
- If inclusive relevant details of unmodified resources should be reported

ALL SLIDES

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