



COMMITTEE FOR MINERAL RESERVES
INTERNATIONAL REPORTING STANDARDS

The CRIRSCO INTERNATIONAL REPORTING TEMPLATE AND THE ROLE OF THE COMPETENT PERSON

Harry Parker, Past Chairperson CRIRSCO
Annual CRIRSCO Meeting
Jaipur, India
7 November 2016

- First modern antecedent was 1989 Joint Ore Reserve Committee (JORC) Code from Australasia
- This was followed by Society of Mining, Metallurgy and Exploration (SME) Guide from USA (1992)
- There was also a standard issued by the Institution of Mining and Metallurgy (IMM) in the early 1990s
- South Africa and Canada were also interested in preparing standards at the same time

- In 1994 a committee was formed as part of the Council of Mining and Metallurgical Institutions to develop common standards. Members were AusIMM (Australia), SME (USA), SAIMM (South Africa) CIM (Canada) and IMM (UK)
 - IMM later became part of Pan European Reserves and Resources Reporting Committee Committee (PERC)

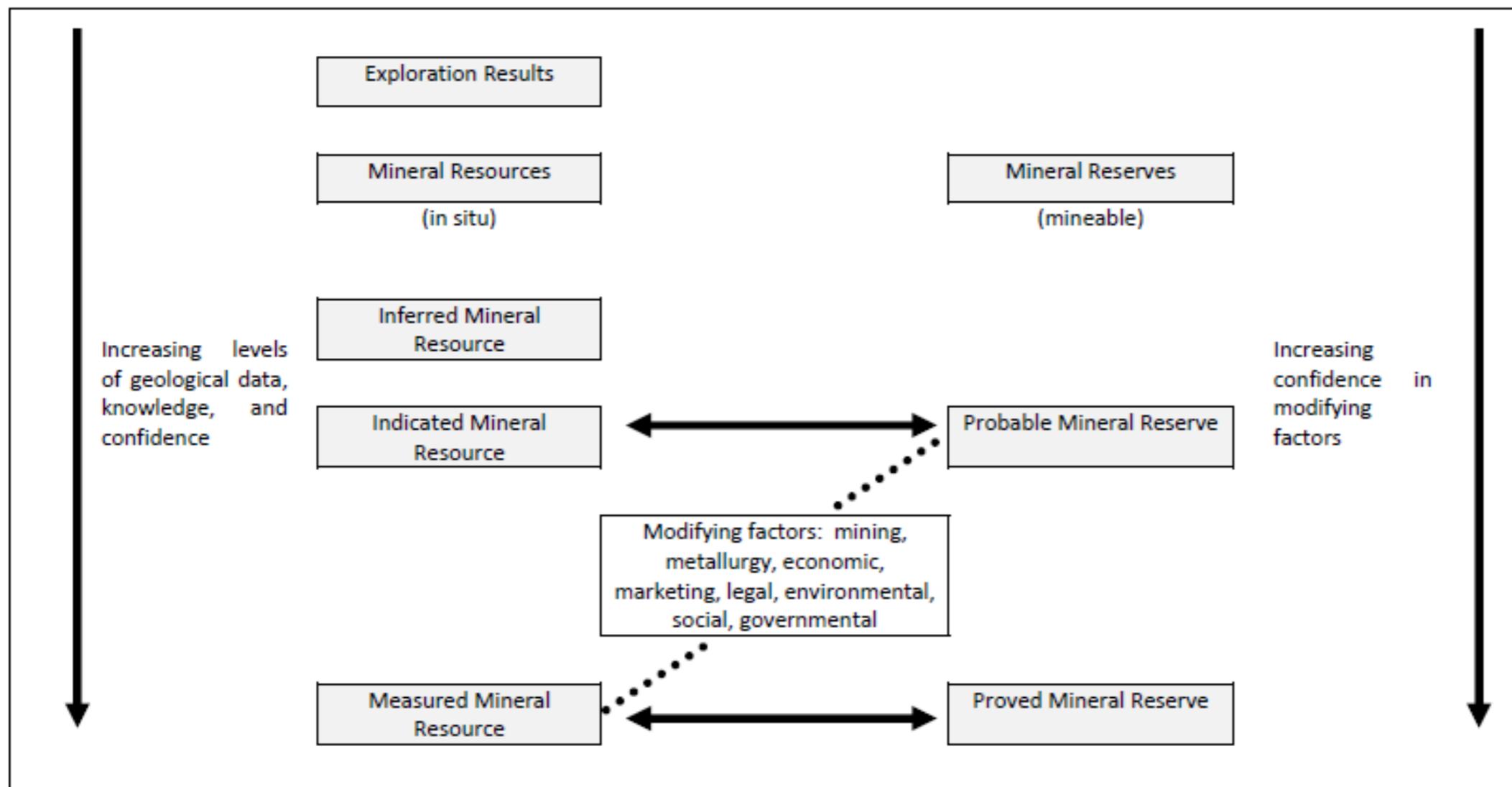
Denver Accord (1997)

- AusIMM, CIM, IMM, SME, SAIMM represented as members of Council of Mining and Metallurgical Institutions (CMMI)



Figure 3 Representatives at the Denver CMMI meeting on international definitions for reporting mineral reserves and resources: (from left to right) Eur Ing Gordon Riddler (IMM), Dr Ferdie Camisani-Cacolari (SAIMM), David Armstrong (SME), Norman Miskelly (Australasian JORC and CMMI), John Postle (CIM), Jean-Michel Benda (SME) and Dr Kadri Dagdelen (SME)

Denver Accord 1997) – Defined Terms



- The SAMREC Code was established in South Africa in 2000
- The CIM Standard Definitions were established in Canada in 2001
- The CMMI was dissolved in 2002
- The Committee for Mineral Reserves International Reporting Standards (CRIRSCO) was established to replace the CMMI Resources and Reserves Committee
- The Chilean Code was established in 2004

The Need for the Template

- In 2003 CRIRSCO recognizes the need for an International Reporting Template
- A trend towards tighter corporate governance and regulation demands the application of good practice in mineral reserve management as well as high standards of public reporting by responsible, experienced persons.
- The purpose of the International Reporting Template is to assist with the dissemination and promotion of effective, well-tried, good practice for public reporting of Exploration Results, Mineral Resources and Mineral Reserves already widely adopted through national reporting codes.

What Does the International Template Do ?

- The International Template is advisory only, and where national codes already exist, these will take precedence
- The International Template is intended to assist those countries that either do not have a reporting code or whose code is outdated, to produce a new code consistent with international best practice
- It also provides a consolidated version of national codes that reflects their compatible international components and may thus be used in comparisons with other international reporting systems. **The word 'Template' is used advisedly to indicate that this document is a model for code development and does not in itself constitute a 'code' which implies that it has legal or other regulatory force**

- Original International Reporting Template was published in 2006
- Template has been used to establish national codes by:
 - Russia (2011)
 - Mongolia (2014)
 - Brazil (2015)
 - Kazakhstan (2016)

Template Updates

- Original template issued in 2006
- 2013 Updates and adds to core definitions

<ul style="list-style-type: none"> • Public reports • Competent Person • Modifying Factors • Exploration Target • Exploration Results • Mineral Resource • Inferred Resource • Indicated Resource 	<ul style="list-style-type: none"> • Measured Resource • Mineral Reserve • Probable Reserve • Proved Reserve • Scoping Study • Pre-Feasibility Study • Feasibility Study
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New definitions highlighted

- Guidance is being updated (2015-2017)

- National reporting codes of CRIRSCO members must be compatible with the Template. Bridging documents to other older codes can be useful but are not acceptable in place of a Template-compatible reporting code.
- Other bodies like UNFC, IASB are looking to the CRIRSCO Template as providing international standards
- It is a tribute to the 10 members of CRIRSCO that the national codes follow the Template, and prospective members codes are carefully evaluated as part of the Terms of Reference new members must follow

What is a Competent Persons Report?

- The CRIRSCO family of “codes” define public reports to include all disclosures from press releases and website postings, to technical reports, which may be of various sizes.
- The reports should name a **Competent Person who takes responsibility for the disclosure.**
- Securities regulators can have specific requirements for disclosure in a “Technical Report” which is prepared by Qualified Persons (e.g. Canada) or Competent Persons elsewhere.
- Most large mining companies have Competent Persons Reports to support their annual declarations of Mineral Resources and Mineral Reserves. These reports sometimes take the format of strategic business plans.

General Principles

(Drawn from the CRIRSCO Template)

- **Transparency** requires that the reader of a public report is provided with sufficient information, the presentation of which is clear and unambiguous, so as to understand the report and not to be misled.
- **Materiality** requires that a public report contains all the relevant information which investors and their professional advisers would reasonably require, and reasonably expect to find in a public report, for the purpose of making a **reasoned and balanced judgment regarding the Exploration Results, Mineral Resources or Mineral Reserves being reported.**
- **Competence** requires that the public report be based on work that is the responsibility of **suitably qualified and experienced *Competent Persons*** who are subject to an enforceable professional code of ethics and rules of conduct.

Main Requirements for the Competent Person (from the Template)

- A Competent Person is a minerals industry professional (National Reporting Organization (NRO) to insert appropriate membership class and organisation including Recognised Professional Organisations) with enforceable disciplinary processes including the powers to suspend or expel a member.
- A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking.

- If the Competent Person is preparing a report on Exploration Results, the relevant experience must be in exploration.
- If the Competent Person is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources.
- If the Competent Person is estimating, or supervising the estimation of Mineral Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Mineral Reserves.

- The key word 'relevant' also means that it is not always necessary for a person to have five years' experience in each and every type of deposit in order to act as a Competent Person **if** that person has relevant experience in other deposit types.
- In addition to experience in the style of mineralisation, a Competent Person taking responsibility for the compilation of Exploration Results or Mineral Resource estimates should have sufficient experience in the sampling and analytical techniques relevant to the deposit under consideration to be aware of problems which could affect the reliability of data. Some appreciation of extraction and processing techniques applicable to that deposit type is also important

Important Guidance for the Competent Person to Consider

- As a general guide, persons being called upon to act as Competent Persons should be clearly satisfied in their own minds that they could face their peers and demonstrate competence in the commodity, type of deposit and situation under consideration.
- If doubt exists, the person should either seek opinions from appropriately experienced colleagues or should decline to act as a Competent Person.

Thank You