



COMMITTEE FOR MINERAL RESERVES
INTERNATIONAL REPORTING STANDARDS



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The CRIRSCO Template and the Competent Person

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- The CRIRSCO Template
- The Template is principles based
- Competence relies on the person preparing the report being competent to do that: the Competent or Qualified Person
- What is a Competent Person
- Am I a Competent Person
- Different systems same principles
- Common Definitions in the Template
- Figure 1 Classification
- Table 1

Purpose of the Template

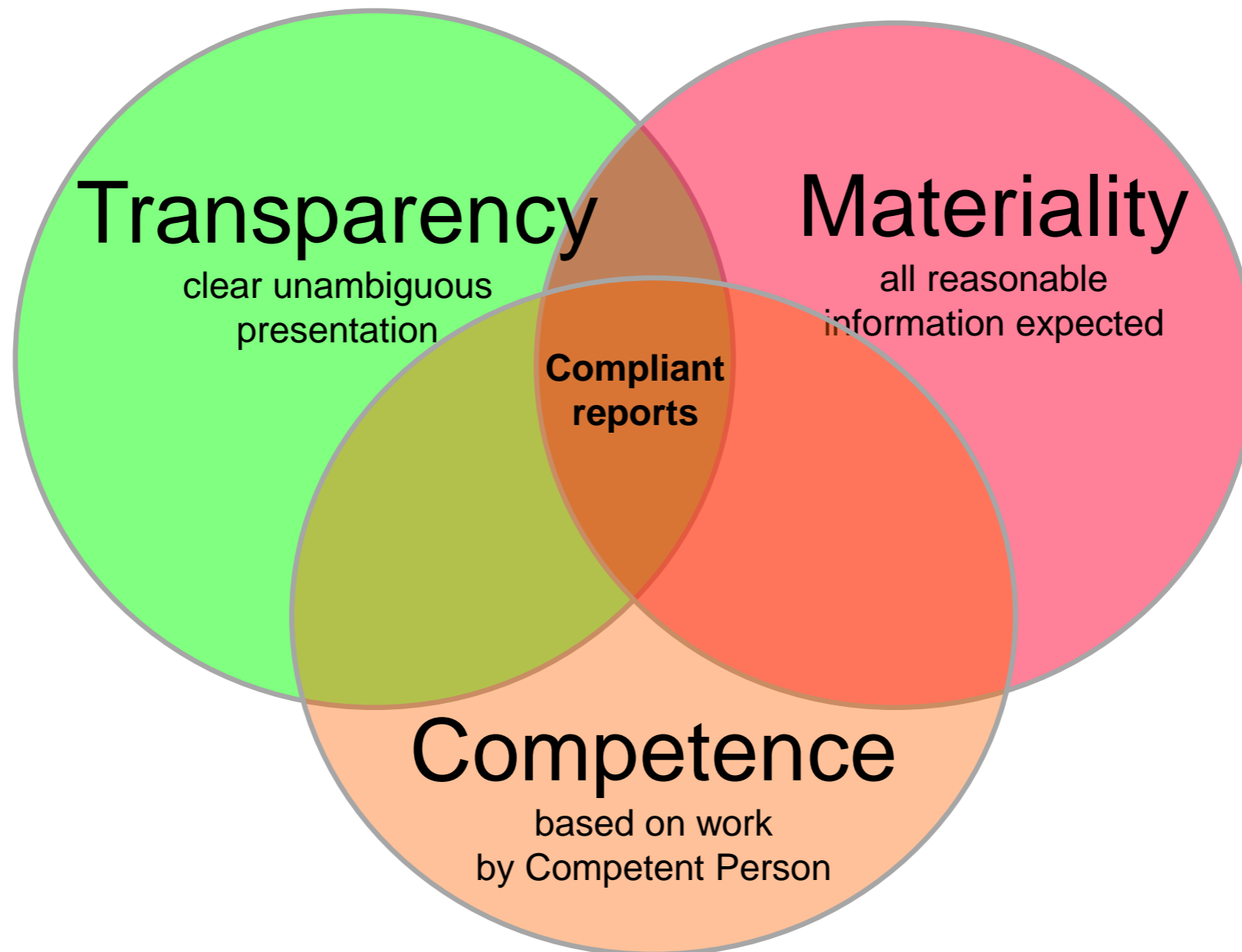
- Covers the public reporting of Exploration Results, Mineral Resources and Mineral Reserves
- Integrates the minimum standards being adopted in national reporting codes worldwide with recommendations and interpretive guidelines
- Contains definitions either identical to, or not materially different from those definitions used in the countries represented on the CRIRSCO committee.
- Specifically designed to assist development of new national codes, like the MRC code in Mongolia and the potential new Chinese code

History of the Template

- 1997 Denver Accord (Australia, South Africa, UK, USA, Canada)
- 2006 Template (Australia, South Africa, UK, USA, Canada, Chile)
- 2013 Template (Australia, South Africa, Europe, USA, Canada, Chile, Russia)
- Provides specifications/guidance for United Nations Framework Classification for mineral resources and reserves that are of commercial interest (2009)
- Recommended by IASB for use in developing an extractive industries disclosure standard (2010)

- Public reports include all disclosure: press releases, website postings, presentations, technical reports and technical disclosure accompanying financial reports (statements of Mineral Resources and Reserves)
- Public reporting must be material
- Public reporting must be transparent
- Public reports must be prepared by Competent Persons

The CRIRSCO Template: principles based, not prescriptive (Clause 4)



What is a Competent Person? (Clause 11)

“A Competent Person is a minerals industry professional (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 Ore Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Ore Reserves.”

Am I a Competent Person? (Self-test questions)

- Do I belong to an appropriate professional organisation?
 - Appropriate membership of the defined local Professional association (AusIMM or AIG for JORC), or a RPO.
- Do I have at least the required minimum relevant experience?
 - Must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and to the activity which that person is undertaking.
 - The key qualifier in the definition of a Competent or Qualified Person is the word “relevant”.
 - “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 or Qualified Person.
- Am I satisfied that I could face my 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.

- The aim of the RPO system is to enhance the Competent Person provisions of the JORC Code and ASX Listing Rules by promoting and facilitating international reciprocity of Competent Persons. RPO's:
 - Must be a self-regulatory organisation covering professionals in the mining and/or exploration industry;
 - Must admit members primarily on the basis of their academic qualifications and experience;
 - Must require compliance with the professional standards of competence and ethics established by the organisation; and
 - Must have disciplinary powers, including the power to suspend or expel a member.

Example RPO List JORC/ASX List

<http://www.jorc.org/competent.asp> 12 March 2014

Recognised professional organisation	Minimum membership class required
Institute of Materials, Minerals and Mining	Member (MIMMM) or Fellow (FIMMM)
Geological Society of London	Chartered Geologist (CGeol), Chartered Scientist (CSci) or European Geologist (EurGeol)
Institute of Geologists of Ireland	Professional Geologist (PGeo)
European Federation of Geologists	European Geologist (EurGeol)
Mining and Metallurgical Society of America	Qualified Professional (QP)
American Institute of Professional Geologists	Certified Professional Geologist (CPG)
Society for Mining, Metallurgy & Exploration	SME Registered Member
Engineering Council of South Africa	Professional Engineer (Pr Eng)
South African Council for Natural Scientific Professions	Professional Natural Scientist (Pr.Sci.Nat.)
Geological Society of South Africa	Member or Fellow
The Southern African Institute of Mining and Metallurgy	Member or Fellow
South African Council for Professional and Technical Surveyors	Mine Surveyors and Professional Mine Surveyors
Professional Engineers Ontario	P.Eng.
Association of Professional Engineers and Geoscientists of British Columbia	P.Geo, or P.Eng,
Association of Professional Engineers and Geoscientists of Manitoba	P.Geo, or P.Eng,
Association of Professional Geoscientists of Ontario	P.Geo., P.Geo.(limited), P.Geo.(Temporary)
Association of Professional Engineers and Geoscientists of Newfoundland and Labrador	P.Eng., P.Geo.
Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories	P.Eng, P.Geo (or P.Geol., P.Geoph.)
Association of Professional Geoscientists of Nova Scotia	P.Geo.
Association of Professional Engineers and Geoscientists of New Brunswick	P.Geo., P.Eng.
Association of Professional Engineers, Geologists and Geophysicists of Alberta	P.Eng., P.Geo., P.Geoph.
Association of Professional Engineers and Geoscientists of Saskatchewan	P.Geo. or P.Eng.
Ordre des Geologues du Québec	P.Geo., géo.
Ordre des Ingénieurs du Québec	P. Eng. or ing.
Comisión Calificadora de Competencias en Recursos y Reservas Mineras (Chilean Mining Commission or Comisión Minera)	Registered Member
Russian Society of Subsoil Use Experts (OERN)	Expert

UK and Europe

USA

South Africa

Canada

Chile and Russia

Competent Person recognition

Different systems same principles

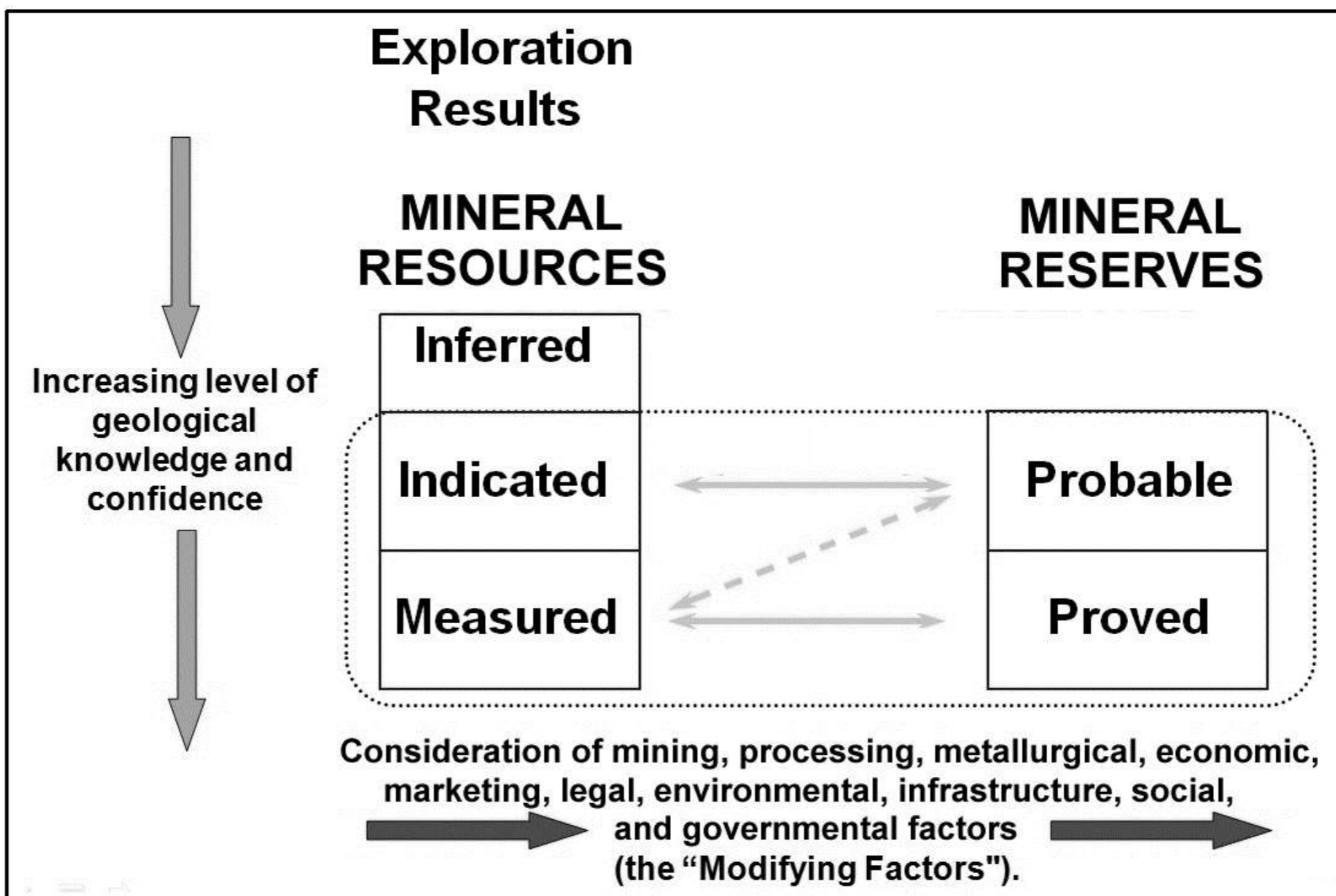
- Self declaration in Australasia, Southern Africa, Canada and PERC countries.
- Registration required in USA (for SME Guide), Chile, Russia, and in other countries not yet members of CRIRSCO but with CRIRSCO compatible Codes; The Philippines and Indonesia.
- The manner of recognition of Competent Persons is not mandated but must follow the CRIRSCO requirements if the NRO is to be admitted to CRIRSCO.

Summary of Competent Person issues

- Regulation of the estimator, not the estimation.
- Requirement for membership of a self-regulating professional body (for instance: AusIMM, AIG, Comisión Minera, SAIMM, APEGBC, or a RPO) provides mechanism to make the Competent Person accountable.
- The development of the CRIRSCO style Standards and Codes and their implementation has created a climate that minimises the likelihood of abuse.

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| <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 |
|--|---|

Linkage Between Definitions – Figure 1 Classification



Checklist of Assessment and Reporting Criteria (Table 1)

- Sampling techniques and data
- Reporting of Exploration Results
- Estimation and reporting of Mineral Resources
- Estimation and reporting of Mineral Reserves
- Estimation and reporting of diamonds and other gemstones



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Thank You