

COMMITTEE FOR MINERAL RESERVES
INTERNATIONAL REPORTING STANDARDS





The development of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) and the International Reporting Template



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SA Representative CRIRSCO Maputo, October 25, 2016







CRIRSCO - Principle Objective

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.





History

- CMMI 1994 Sun City
- Denver Accord 1997
- UNECE agreement November 1999
- CRIRSCO formed in Cairns, Australia 2002
- Template initiated Reston VA 2003, published 2006
- First annual meeting London 2006 5 members
- Strategic alliance ICMM 2007



crirsco CRIRSCO - UNFC

- 1999 Geneva accord solid minerals only
- 2004 UNFC common definitions modified oil and gas added
- Member ad hoc group of experts Mapping Template, PRMS to UNFC 2004
- Member EGRC UNFC 2009 and Specifications task force II
- Member EGRC Bureau and TAG





crirsco CRIRSCO Founding Members

JORC Australasia:

Canada: CIM

UK: **IMMM**

South Africa: SAMREC

United States: SME





crirsco CRIRSCO Current Members

Australasia: JORC

Kazakhstan: KAZRC Ass

Brazil: CBRR

Mongolia: MPIGM

Canada: CIM

• United States: SME

Chile: Comisión Minera

• Europe: PERC

Russia OERN

South Africa: SAMREC





Securities Exchanges Recognition

ASIC Australasia: JORC Code

CSA Toronto Canada: NI-43101 with CIM Standards

Santiago SX Chile:

The Code for the certification of Exploration Prospects, Mineral Resources and Ore Reserves

ESMA W Europe and UK: CRIRSCO aligned with exceptions

• AIM: CIM,IMMM, JORC, NAEN,

SAMREC, SME





Securities Exchange Recognition

Hong Kong Exchanges (HKE): JORC, SAMREC NI 43-101

NYSE and NASDAQ: SEC Industry Guide 7

JSE South Africa: SAMREC Code

Moscow, Russia: NAEN Code





crirsco Potential Members

- Argentina
- China
- Columbia
- Indonesia
- Peru

- Philippines
- Scandinavia
- Turkey





SEC Modernisation

SUMMARY: We are proposing revisions to the property disclosure requirements for mining registrants, and related guidance, currently set forth in Item 102 of Regulation S-K under the Securities Act of 1933 and the Securities Exchange Act of 1934 and in Industry Guide 7.

Because of the widespread adoption of the CRIRSCO standards, industry participants have requested revisions to Guide 7. Among other matters these participants have urged the Commission to align its mining disclosure rules with the CRIRSCO-based codes by allowing a mining registrant to disclose both Mineral Resources and Reserves.





The Template

INTERNATIONAL REPORTING TEMPLATE

for the public reporting of

EXPLORATION RESULTS, MINERAL RESOURCES
AND MINERAL RESERVES
JULY 2006 - NOVEMBER 2013





Purpose

- Advisory only
- National Standards/Codes take precedence
- Model for the development of new codes
- First edition 2006
- Updated 2013
- Revision commenced Nov 2015





Recognised Professional Organisation (RPO)

- Self regulating body with enforceable Code of ethics
- Seeks reciprocity for its members
- Belongs to a National Reporting Organisation (NRO)





National Reporting Organizations (NROs)

Updates and New Codes

- JORC 2012
- PERC 2013
- MRC 2014
- SME Guide 2014
- CBRR Guide 2015
- SAMREC 2016
- KAZRC 2016





Principles

Materiality

All relevant information for a reasoned and balanced judgement

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





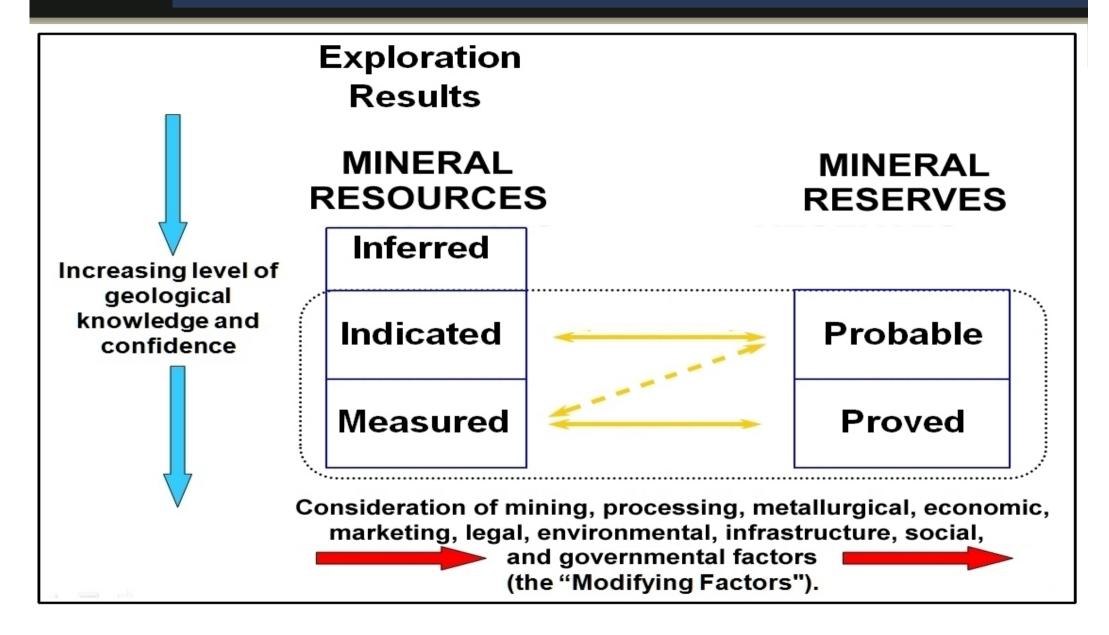
Disciplinary Procedure

- Complaints to National Reporting Organisation (NRO)
- Disciplinary action: Responsibility of Recognised Professional Organization (RPO)





General relationship between Exploration Results, Mineral Resources and Mineral Reserves







Standard Definitions

- 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



crirsco CRIRSCO - Ongoing Dialogue

Strategic Alliance - International Council on Mining and Metals

- United Nations Economic Commission for Europe (UNECE)
- Society of Petroleum Engineers (SPE)
- International Accounting Standards Board (IASB)
- International Atomic Energy Agency (IAEA)
- International Organization for Standardization (ISO)
- **International Seabed Authority**



crirsco Challenges

- Letting go of old systems
- Recognised Professional Organisations (RPOs)
- Competent Persons in-country
- Language interpretation and understanding
- Stock Exchange in-country
- **Africa**



crirsco Challenges

- Volume of work for volunteers
- Language of communication
- Funding model





Acknowledgements













ALL SLIDES

WWW.CRIRSCO.COM

