

CIM – Canadian Institute of Mining, Metallurgy and Petroleum

Paul Bankes November 20, 2013





Topics for Discussion

- Update of "CIM Definition Standards"
- Global Mining Standards and Guidelines
- CIM Best Practice Guidelines





Standing Committee on Mineral Reserve and Mineral Resource Definitions

Committee Mandate:

- Unlike other CRIRSCO codes, NI43-101 references the "CIM Definition Standards" for major reserve and resource definitions, definition guidance and classification schemes.
- CIM Council created the CIM Standing Committee on Mineral Reserve and Mineral Resource Definitions to:
 - maintain and update the "CIM Definition Standards"
 - represent the CIM on CRIRSCO





CIM Definition Background

- Over time, the major definitions maintained by CRIRSCO members have drifted from the common 1997 definitions
- CIM Definition Standards
 - last major update November 2005
 - update in 2010 included Feasibility and Pre-feasibility
- Over the last two years, the Standing Committee has modified *draft* definitions and guidance for the 10 definitions currently referenced to the CIM.
- The revised draft definitions address recent changes in NI43-101, CSA, CRIRSCO and UN requests.





CIM Draft Definitions

The 10 revised *draft* definitions are listed below:

Pre-Feasibility Study Measured Mineral Resource

Feasibility Study Mineral Reserve

Modifying Factors Probable Mineral Reserve

Mineral Resource Proven (Proved) Mineral Reserve

Inferred Mineral Resource

Indicated Mineral Resource





CIM Definitions Work Plan

- The Standing Committee has worked with CIM staff to develop a process for Industry and CIM member consultation. Status:
 - ✓ CIM staff completed Web Site where members shared comments
 - Sent notice to advise CIM members of process.
 - ✓ Published an article and "call to web" in CIM Magazine May issue
 - 90 day period for member and industry consultation May to August
 - O Incorporate and respond to comments September to December





crirsco CIM - Industry Consultation

- The Standing Committee has received a very favorable response to the proposed revisions to the *draft* definitions. In almost all cases, the industry comments:
 - Proposed minor revisions to the current *draft* wording.
 - Requested additional CIM definition clarification and guidance.
- The results from the industry consultation have been distilled into 27 comments and suggestions which are being investigated by the committee.





CIM - Industry Comments

Pre-Feasibility Study

Feasibility Study

Modifying Factors

Mineral Resource

Inferred Resource

Indicated Resource

Measured Resource

Mineral Reserve

Probable Reserve

Proven Reserve

- 1 comment

1 comment

4 comments

9 comments

9 comments

- no issues

1 comment

1 comment

1 comment

no issues





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Global Mining Standards and Guidelines

Global Mining Standards and Guidelines Group









Global mining collaboration on solutions to common industry problems, needs & technology through standards, guidelines, & best practices.

Objectives:

- 1. Centre of facilitation
- 2. Information & knowledge
- Identification/utilization of existing standards & practices
- Drive/support standards
 & guidelines development
 where value is identified

Member Companies: 28

Participating Companies: 98

Members-at-large: 400

Budget: \$260K (2013)

Member Companies (@\$5000) Partners (@\$25,000)

Global Outreach

- ✓ Canada, USA, Australia, South Africa
- South American Strategy





Global Mining Standards and Guidelines

Global Mining Standards and Guidelines Group

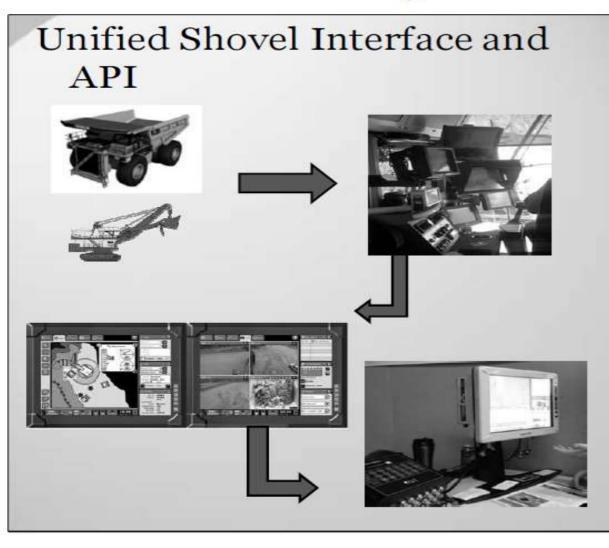








Current Projects



- Access to onboard real time systems and data
- ✓ Operational data requirements and common KPIs
- ✓ Underground Communications Infrastructure
- ✓ Leading Indicators practical guidelines to support ICMM document
- ✓ Energy consumption in communition
- ✓ Strategic development





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CIM - Best Practice Committee

- The Committee is developing industry guidance for the preparation of "Feasibility" and "Prefeasibility studies".
- Committee has begun the first major update of "Best Practice Guidelines" since 2005.

