

Report of Specifications Task Force
Stakeholder Requirements for Specifications
Summary and Recommendations

**Prepared for First Session, Expert
Group on Resource Classification**

**Presented by Jim Ross, Chair of
the STF**
Geneva, 28 April 2010

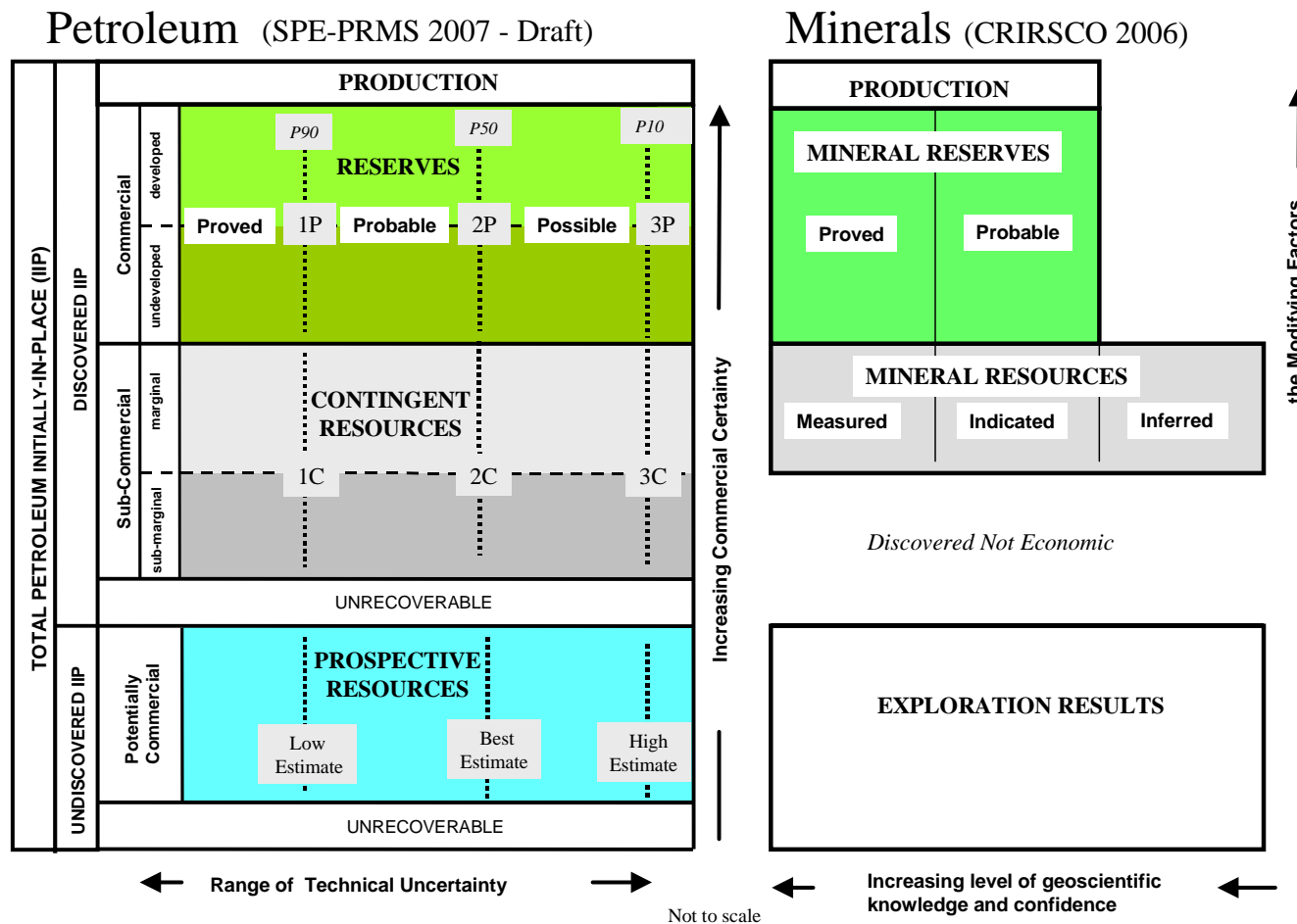
Discussion

- Evident that the Template and PRMS address many of the specification issues raised, but not all of them
- Template is focussed on public reporting for mining companies
 - Strong support for it as the basis for financial reporting
 - Some possible areas for further clarification
 - Potential for expansion to cover full resource base
 - May need different specifications for national reporting
- PRMS is designed to be flexible in order to cover a wide range of applications, leaving significant choice open to the preparer of resource estimates
 - Strong support for it as a basis for corporate reporting
 - Less support for it for financial reporting and government resource management

Discussion

- A key goal of UNFC-2009 is to provide a tool to facilitate global communications
- Comparability of estimates is a fundamental requirement
 - Quantities classified under the same UNFC-2009 code must be broadly comparable

Mapping of SPE-PRMS (Draft) and CRIRSCO Template



Proved and probable reserves may be similar in terms of level of confidence, but they are not equivalent

Gold Reserves at Oyu Tolgoi (Mongolia)

	Tonnage (millions of tonnes)	Grade (grammes per tonne)	
Proved Ore Reserves (at end 2009)	127	0.93	CRIRSCO Proved Reserves
Probable Ore Reserves (at end 2009)	803	0.27	
Total Ore Reserves (at end 2009)	930	0.36	CRIRSCO Proved + Prob. Reserves
Average Mill Recovery			71%
Rio Tinto share	Company Interest		19.7%
	Recoverable Metal (millions of ounces)		1.497

CRIRSCO
Proved Reserves

CRIRSCO
Proved + Prob. Reserves

SPE-PRMS
Proved + Prob. Reserves

Source: Rio Tinto, 2009 *Annual Report*, available at:
<<http://www.riotinto.com/annualreport2009/pdf/productionandreserves.pdf>>

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UNFC-2009

111?
112?
111+112?

Source: Rio Tinto, 2009 *Annual Report*, available at:
<<http://www.riotinto.com/annualreport2009/pdf/productionandreserves.pdf>>

Discussion

- Full disclosure approach of the CRIRSCO-based codes means all relevant information is available to investors
- More of an potential issue for petroleum, where estimates are usually aggregated to at least a country level
 - Variability in the underlying basis (inclusive/exclusive of royalty, fuel gas, net economic interest, etc.)
 - Limited or no information on oil or gas quality
- Potential problems include:
 - Comparability between industry sectors (recoverable vs. sales)
 - Aggregation for national inventory purposes
 - Application to solids/fluids not usually handled by industry sector reporting system

Discussion

- Four key areas of application
 - International Energy and Minerals Studies
 - Government Resources Management
 - Industry Business Processes
 - Financial Reporting
- Essentially two forms of resource reporting:
 - National Reporting
 - Corporate Reporting
- Classification methodology based on industry sector
 - Primary differences in systems actually reflects distinction between extraction as a solid and production as a fluid

National Reporting

- Government inventory reporting
 - Also the primary basis for international energy and minerals studies
 - Lack of globally-accepted terminology for classes of aggregated quantities
 - Need to address aggregation issues
 - Solid minerals: differences between reserves and resources
 - Fluids: statistical techniques, impact of risk
 - Interested in gross (100%) estimates for entire country: full potential, including undiscovered resources
 - Longer term perspective than companies

Corporate Reporting

- External reporting for financial sector
 - Sub-set of internal reporting systems
 - Definition of legal right to extract (net entitlement) or net economic interest, constrained by licence duration
 - Focus on sales quantities (but more detailed disclosures beneficial)
 - Need to limit potential for aggregation of classes and sub-classes (different risk levels should require separate disclosure)
 - Need for consistency in treatment of royalty, lease fuel, etc.
 - Need for competent person in petroleum sector?

Solid minerals vs. fluids

- Currently, focus is on distinction by industry sector, despite significant overlap between them
 - Using oil & gas rules (based on PRMS) for solids, including coal, mined for the purpose of generating synthetic oil or gas
 - Using a Template-based code for uranium produced through wells (leading to zero reserves at a commercially-producing project, therefore not comparable to PRMS)
 - Failure to adopt best practice from experts in other sector

Recommendations

- Strong support for the Template and PRMS to provide the preferred commodity-specific basis for UNFC-2009 application: some form of “linkage” should be considered
- A number of key stakeholder issues are not currently addressed in the Template and/or PRMS
- These should be evaluated and addressed by a new Specifications Task Force, with formal CRISRCO and SPE involvement

Recommendations

- Establish a new Specifications Task Force to:
 - Consider all issues raised in the STF report
 - Identify those issues that are fully addressed in both the Template and PRMS
 - Recommend that all other issues are either:
 - Inappropriate for specification (e.g. the issue is considered to be a disclosure issue rather than a classification matter)
 - Accommodated by modification/addition to the Template and/or PRMS
 - Addressed by developing generic specifications for UNFC-2009, which should then be published for public comment and revision (if necessary) before submitting for EGRC approval

Recommendations

- New Specifications Task Force
 - Must have CRIRSCO/SPE representatives
 - Must have government representatives (solid minerals and petroleum)
 - Must have at least one representative from the financial sector
 - Could be the Technical Advisory Group, if formed promptly
 - Otherwise, recommend that the current STF, plus formal representation from the SPE-OGRC, continues with the specifications process

Recommendations

- Consider the need for simple generic specifications for UNFC-2009 using plain language to cover basic classification issues
- For example, requiring documentation of an Effective Date for any estimate reported under UNFC-2009
- Where comparable specifications exist in the Template and/or PRMS, conflicts must be avoided

Examples of generic specifications that may be appropriate

General Specifications	
Issue	Comment
Effective Date	Remaining quantities must be linked to a specific date
Commodity Type	Should be reported separately by sales product or, where aggregated, clarity provided on what commodities are included
Basis for estimate	Estimates should be clearly identified as either gross (100%) or net (quantity attributable to company)
Reference Point	Estimates must be linked to a reference point for comparability
Documentation	General specification for full documentation to be kept (<u>not</u> a requirement for disclosure)
Fluids vs. solids?	Further clarity on distinction made for G1/G2/G3 in Annex I of UNFC-2009
G axis/probabilities	Specifications for probability levels when using scenario approach (to align with PRMS)
G4 granularity	Need to be able to capture (i) range of uncertainty and (ii) different maturity levels (PRMS, RF P1/P2/P3)
Commodity-specific specifications	Linkage to Template/PRMS
Glossary of terms	Only define “new” terms (if any), all others to be provided by cross-reference to Template, PRMS, InterEnerStat, etc.

Examples of generic specifications that may be appropriate

Specifications for National Reporting	
Aggregation by commodity	Rules for aggregation of reserves and resources, including consideration of risking
Definition of additional classes	Classes that are aggregations of other defined classes, e.g. EDR (as used by GA) or equivalent
Large scale resource deposits	Rules/guidelines for classifying deposits where some areas are licensed, but others are not
Aggregation using energy equivalence	Rules for defining energy equivalence?
Specifications for Corporate Reporting	
Net legal entitlement	Specification that reported sales quantities must be net to company (legally attributable)
Royalty	Clarity on inclusion/exclusion for reported quantities?
Economic assumptions	Management view, or view of Competent Person, or published view that is considered reasonable forecast
Aggregation	Rules for aggregation of quantities? Probability levels, risking?
Competent Person?	Generic reference? (Not explicitly addressed in PRMS)
Oil/gas quality?	Rules for defining oil/gas quality, or energy equivalent, or definition of “different” commodities?