

# **Stakeholder Requirements and Developing Specifications for the United Nations Framework Classification (UNFC-2009)**

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# Acknowledgements

**This presentation is based on material prepared by Mr. Jim ROSS, Ross Petroleum Ltd, Vice Chair of the EGRC and Chair of the EGRC Specifications Task Force**

**The work of the EGRC Specifications Task Force is acknowledged**

# Specifications for UNFC-2009

- **Who are the stakeholders?**
- **What are Specifications?**
- **Stakeholder Requirements**
- **Addressing the Needs**
- **The Next Steps**

# UNFC Stakeholders

**The UNFC has been designed to serve, to the extent possible, the needs of four key stakeholders:**

- **Creators of international energy and mineral studies, to facilitate the formulation of consistent and far-sighted policies**
- **Governments to manage their resources accordingly**
- **Industry to provide data and information necessary to deploy technology, management and finance in order to serve their host countries, shareholders and stakeholders**
- **Financial community to provide information necessary to allocate capital appropriately so reducing costs**

# Specifications for UNFC-2009

- **Who are the stakeholders?**
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# What are Specifications?

- **Specifications set out the basic rules that are considered necessary to ensure an appropriate level of consistency in application**
- **They provide additional instructions on how the definitions must be applied in specific circumstances**

# What are Specifications?

Definitions

**Classification  
Framework**

Specifications

**Application  
Rules**

Guidelines

**Non-  
Mandatory  
Guidance**

# Petroleum Resources Management System

- **Example of Specifications**  
(which PRMS refers to as “guidelines”)
  - “If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate”
  - “There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of [a] firm intention to proceed with development within a reasonable time frame”



# CRIRSCO Template (2006)

- **Example of a Specification**

**Para 34:**

**In situations where figures for both Mineral Resources and Mineral Reserves are reported, a statement must be included in the report which clearly indicates whether the Mineral Resources are inclusive of, or additional to the Mineral Reserves**

***Mineral Reserve estimates must not be added to Mineral Resource estimates to report a single combined figure***

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# Specifications Task Force

- **Individuals from:**
  - Norwegian Petroleum Directorate
  - SPE Oil & Gas Reserves Committee
  - US Geological Survey
  - CRIRSCO
  - Geoscience Australia
  - Russian Working Group
  - Alberta Securities Commission
  - Ernst & Young

# Specifications Task Force Mandate

- **Expert Group on Resource Classification (EGRC) Specifications Task Force – January 2010 to date**
- **Approached a representative range of key stakeholders to ask what specifications, if any, they considered to be necessary in order that UNFC-2009 would adequately serve their needs**
- **Focus was on users of reserve/resource data**
- **Identified stakeholders in each of the four key areas of application:**
  - **International Energy and Minerals Studies**
  - **Government Resources Management**
  - **Industry Business Processes**
  - **Financial Reporting**

# Results

- **Written responses received from 46 organisations**
- **Summarized into 132 bullet points**
- **Consolidated into 51 specification issues**
- **Full report available on UNECE website:**

**[http://www.unece.org/energy/se/egrc.html#egrc\\_tf](http://www.unece.org/energy/se/egrc.html#egrc_tf)**

# Summary

- **CRIRSCO Template and PRMS address many of the specification issues raised, but not all of them**
- **CRIRSCO 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 to be used for financial reporting and government resource management**

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# Ultimate Objective

- **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**



# Mineral Reserves vs. Petroleum Reserves

## 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	
Average Mill Recovery			71%
Rio Tinto share	Company Interest		19.7%
	Recoverable Metal (millions of ounces)		1.497

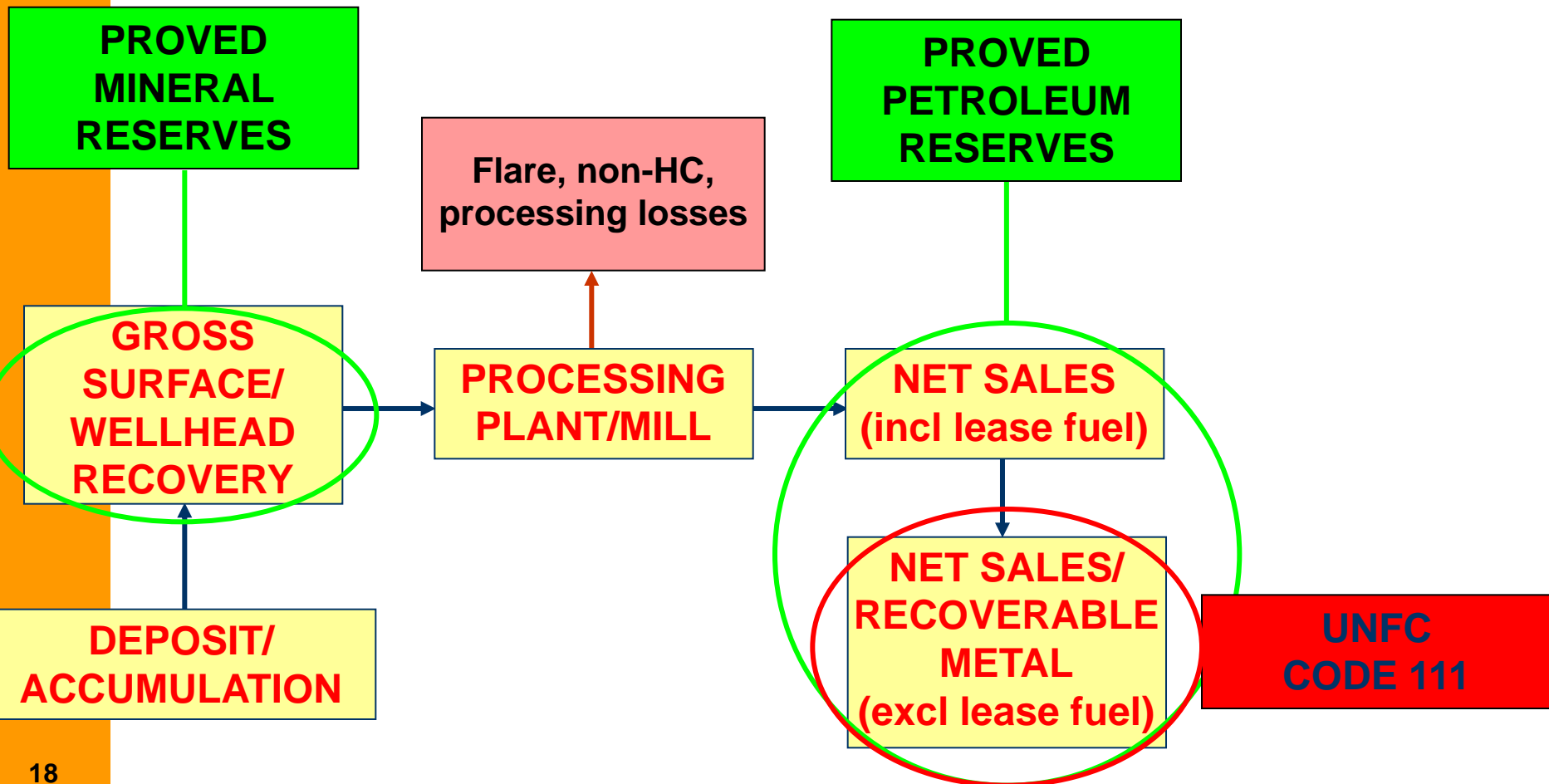
**CRIRSCO  
Proved Reserves**

**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>

# Mineral Reserves vs. Petroleum Reserves



# External Reporting for Financial Sector

- **Need to avoid use of the same terminology (e.g. “reserves”) to classify quantities that are not comparable**
- **Need to focus on net sales quantities (but more detailed disclosures can be useful)**
- **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?**

# Government Inventory Reporting

- **Government reporting is 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**

# Specifications for UNFC-2009

- **Who are the stakeholders?**
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# Current Status

- **Strong support for the CRIRSCO Template and PRMS to provide the preferred *commodity-specific* basis for UNFC-2009 application**
  - “Linkage” documents between CRIRSCO Template and UNFC-2009 and between PRMS and UNFC-2009 have been agreed and are being developed
  - UNFC-2009 can provide an umbrella over the other systems
- **A number of key stakeholder issues are not currently addressed in the Template and/or PRMS**
  - All specification issues are under review by Specifications Task Force
  - SPE and CRIRSCO are currently determining if any should be addressed by modification/addition to either PRMS or the Template
  - Task Force will recommend generic specifications for UNFC-2009 as appropriate

# Generic Specifications for UNFC-2009

- Certain fundamental requirements are essential for any resource classification system to provide meaningful estimates to users of reported information e.g. providing a reference date, stating whether reported quantities are gross (for project) or net (to company). These are required as generic specifications for UNFC-2009 regardless of their existence (or otherwise) in PRMS / Template as they must be provided whenever UNFC-compliant estimates are reported
- Where a specification is provided in one commodity-specific system but not in other and it is necessary to ensure comparability at level of UNFC (i.e. not purely a commodity-specific issue), a generic specification may be necessary
- Should be, to the extent possible, **principles-based**
- Wording needs to be appropriate for **all commodities** (so could not, in most cases, match exactly any text in PRMS or Template)

# Generic Specifications for UNFC-2009

- **Generic specifications will be:**
  - Kept as simple as possible, using plain language
  - As necessary to achieve comparability of estimates at a generic level
  - Principles-based where possible
  - To respond to issues not addressed by PRMS or the Template
  - Not in conflict with PRMS or the Template
- **Key language**
  - «**Shall**» is used where a provision is mandatory
  - «**Should**» is used where a provision is preferred
  - «**May**» is used where alternatives are equally acceptable
- **Any proposals for UNFC-2009 specifications will be subject to a public comment period**





# Generic Specifications for UNFC-2009

- **14 generic specifications currently under consideration by Task Force:**
  1. **Effective date of estimation** – remaining quantities must be linked to the specific date of the evaluation
  2. **Use of numerical codes** – relevant UNFC codes (111, 111 + 112 etc) always to be reported with each resource quantity
  3. **Basis for estimate (gross or net)** – clearly state how royalty obligation is dealt with
  4. **Distinction between recoverable and in-situ** – difference between petroleum and mining sector, in petroleum contingent and prospective resources are estimated recoverable quantities
  5. **Aggregation of quantities** – CRIRSCO does not allow aggregation of mineral reserves and resources

# Generic Specifications for UNFC-2009

- **14 generic specifications currently under consideration by Task Force:**
  6. **Distinction between E1, E2 and E3**
  7. **Competent person** – when required by regulation
  8. **Commodity or product type** – reporting of estimated quantities separately for each commodity/product type
  9. **Reference point** – quantities can be different at different stages in the extraction/processing/transportation system but economic evaluation requires a specific point of reference where estimated (reported) quantities are aligned and sales values of those quantities are aligned
  10. **Classification of projects based on level of maturity** – use of sub-classes is optional but encouraging use of those in UNFC if used

# Generic Specifications for UNFC-2009

- **14 generic specifications continued:**
  11. **Economic assumptions** – based on current market conditions
  12. **Confidence levels for G1/G2/G3** – high, medium and low, not specified more precisely at generic level due to differences in approaches for commodities extracted as solids and as fluids
  13. **Units and conversion factors** – use of consistent set of units (ISO)
  14. **Documentation** – methodology and assumptions used
  
- **Further consideration being given to 6 other potential generic specifications:**
  - Expand G4 to account for uncertainty
  - Add labels (“unit name”) for 111, etc
  - Classification of undiscovered resources
  - “Unconventional” petroleum resources
  - Need to clarify timing issues
  - Further granularity for “Additional Quantities in Place”

# Summary of Development Process

- UNFC-2009 simplification with generic definitions only
- Survey of stakeholder requirements for specifications
- Development of specifications
- Public comment period



***In progress***

***When draft completed***

# Conclusions

- **CRIRSCO 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
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- **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**
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# Conclusions

- **Agreement for the Template and PRMS to provide the preferred commodity-specific basis for UNFC-2009 application: bridging documents to be prepared by CRIRSCO and SPE**
- **A number of key stakeholder issues are not currently addressed in the Template and/or PRMS: these should be:**
  - **Accommodated by modification/addition to the Template and/or PRMS, or**
  - **Addressed by developing generic specifications for UNFC-2009, which should then be published for public comment and revision (if necessary) before submitting to the EGRC for approval**

# Conclusions

- **Draft documents to be presented to EGRC Session, 2-4 May 2012**
    - **Draft generic specifications for UNFC, including glossary of terms and relationship between UNFC and PRMS & UNFC and CRIRSCO Template**
    - **Explanatory report**
  - **Feedback from EGRC incorporated into revised texts\***
  - **Public comment period\***
  - **Final generic specifications**
- \* Your opportunity to ensure YOUR needs are met**