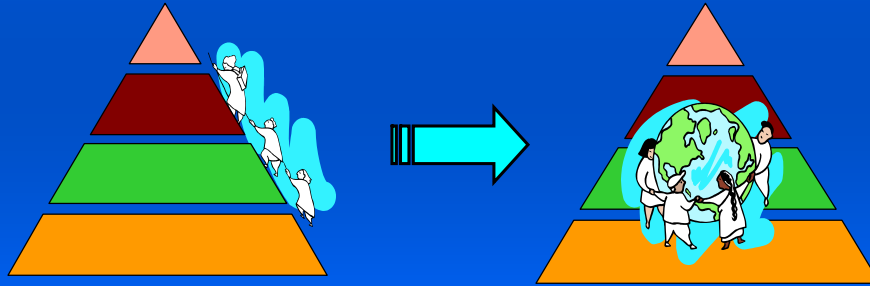


SPE_CRIRSCO_UNFC “Integration”

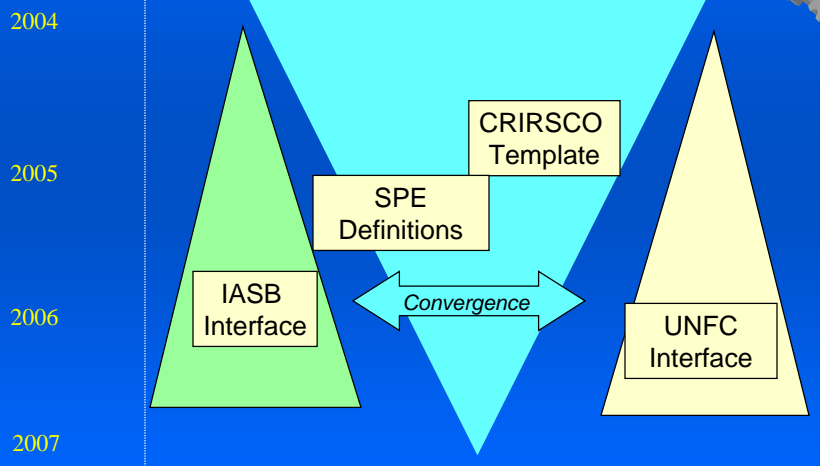
Project Status Report October 2006



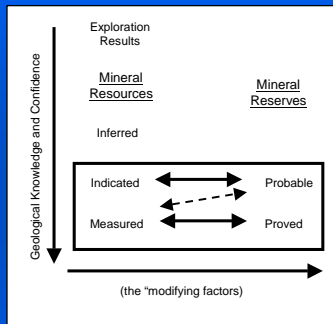
(See SPE_CRIRSCO Position Paper)

In Pursuit of the “Grand Vision”

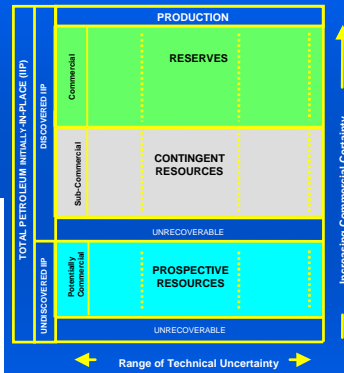
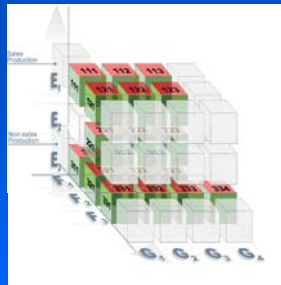
A Parallel but Coordinated Approach



SPE/CRIRSCO Linked with UNFC



Separate but
Cross-referenced



3

“Integration” of UNFC, CRIRSCO and SPE

SPE/CRIRSCO Position

UNFC, CRIRSCO and SPE classification systems
must co-exist!

“Integration” ≠ Merged
Integration = linked, cross-referenced, connected

- UNFC can be applied by referencing definitions and guidelines in the linked SPE and CRIRSCO systems.
- Evaluation results using SPE and CRIRSCO systems can reported using UNFC codification.

4

“Integration” of UNFC, CRIRSCO and SPE

SPE/CRIRSCO Position

□ Why UNFC, CRIRSCO and SPE systems must co-exist.

- Each has its own primary client group based on specific needs and historical linkages.
- Each has a Vision that is mutually-achievable only through co-existence.
- Each has been recently published a standard reference document.
- Any major change of language would require industry/clients' approval.
(in some cases the language is embedded in existing legislative guidance).
- Client groups do not perceive advantages to change to a new system.
- Clients can choose their preferred system from co-existing classifications.

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“Integration” of UNFC, CRIRSCO and SPE

SPE/CRIRSCO Position

□ What is the best way to “integrate”, yet separately maintain, UNFC, CRIRSCO and SPE systems?

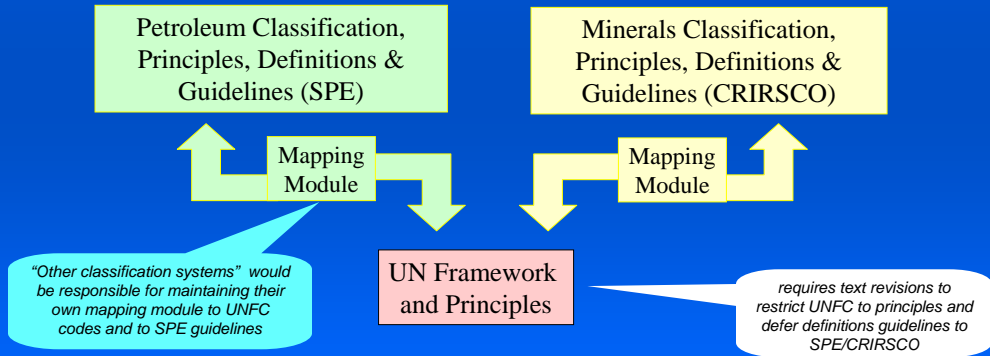
- Linked websites simplifies maintenance.
- A mapping module translates between systems/terms.
- Ensure basic principles are common.
- Ensure application guidelines are transportable.
- Each system should reference the other, where applicable.
- Hold joint conferences/meetings to help progress alignment.
(and align stakeholder needs and expectations)

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“Integration” of UNFC, CRIRSCO and SPE Reserves and Resources Classification Systems

SPE Proposed Model

Maintained separately in linked websites



Example: Draft Mapping of UNFC and SPE Classes

SPE/WPC/AAPG/SPEE Reserves & Resources Classification System				United Nations Framework Classification				
Group	Class	Operational/Economic-based Sub-classes	Decision-based Sub-classes	Code E	Code F	Category Criteria		
	Production							
Discovered	Commercial	Reserves	Developed	On Production	1	1	Economic, Justified Development	
			Developed Producing		1	1.2	Economic, Committed	
			Developed Non-Producing		1	1.1	Economic, Producing	
			Undeveloped		1	1.2.1	Economic, Committed, (Non-Producing)*	
					1	1.2.2	Economic, Committed ¹ (under development)	
				Under Development	1	1.2.3	Economic, Committed ¹ (planned for development)	
		Sub-commercial	Contingent Resources	Economic	Development Pending	2	2	Potentially Economic, Contingent Development Project.
				Development On Hold	1	1.3	Economic, Uncommitted ² (project in inventory)	
				Development Not Viable	2.1	2.1	Marginal Economic, Under Investigation	
					2.1	2.2.1	Marginal Economic, On Hold ³	
				2.2	2.2.2	Marginal Economic, Unclassified ³		
				2.2	2.3	Sub-marginal Economic, Not Viable		
		Unrecoverable		3.3	3	Unrecoverable, Project Undefined		
Undiscovered	Potentially Commercial	Prospective Resources		Prospect	3	3	Intrinsically Economic, Project Undefined ⁴	
				Lead	3.2	3	Undetermined, Project Undefined ⁴	
				Play	3.2	3	Undetermined, Project Undefined	
					3.2	3	Undetermined, Project Undefined	
			Unrecoverable		3.3	3	Unrecoverable, Project Undefined	

Mapping is feasible .. but can be complex .. lots of sub-codes

Example: Draft Mapping of UNFC and SPE Categories

SPE Technical Uncertainty Categories by Class			UNFC Uncertainty Categories	
Reserves	Contingent Resources	Prospective Resources	Geologic Codes	Geologic Uncertainty
Proved	Measured	Low Est	G1	Reasonably Assured Geologic Conditions
Probable	Indicated	Best - Low Est	G2	Estimated Geological Conditions
Possible	Inferred	High - Best Est	G3	Inferred Geological Conditions
1P	1C	Low Estimate	UNFC has no equivalent cumulative terms	
2P	2C	Best Estimate		
3P	3C	High Estimate		
All prospects use draft development plans to derive recoverable estimates. Leads and Plays may be characterized by in-place potential only.			G4	Potential Geologic Conditions

May not equate to solid minerals' view of geological certainty

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SPE_UNFC "Integration" Project

SPE Proposed - Geneva Oct 06 Model

Introduction (*Modified UNFC*)

UN Classification

- Basic Principles
- Classification System
- Codification

UNFC applied to petroleum

Link to SPE Website

Maintained by UN

Maintained by SPE

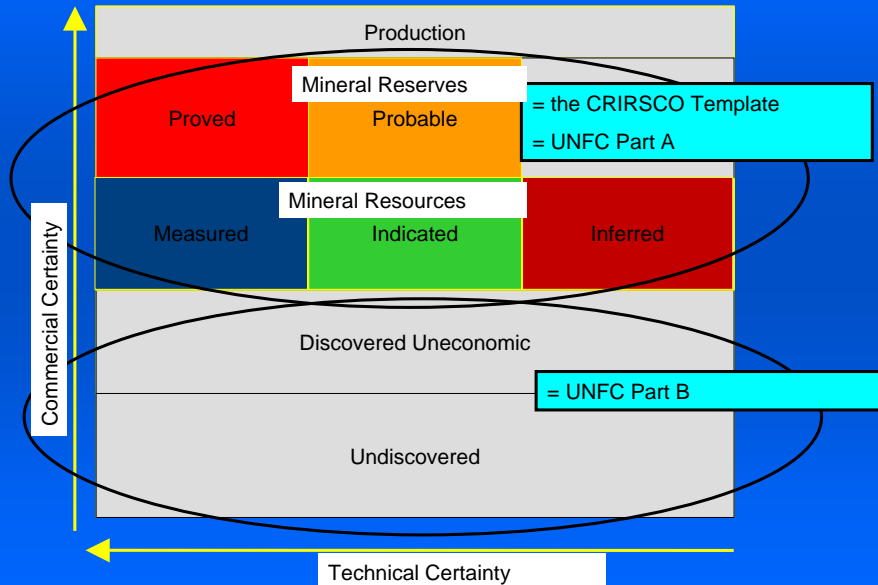
*Petroleum/Minerals
Classification Principles
UN Petroleum/Minerals
Classification System*

*Petroleum Introduction
UNFC/SPE Petroleum
"Mapping Module"*

*Petroleum Classification,
Definitions and Guidelines*

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CRIRSCO_UNFC Linking Project



11

CRIRSCO_UNFC Linking Project

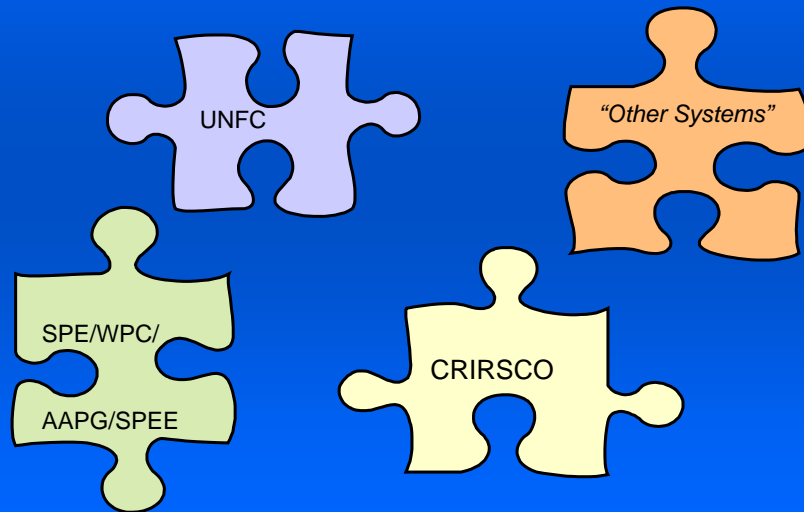
CRIRSCO/UNECE - Johannesburg May 06 Model

- Background/Introduction (modified UNFC)
- Part A: Reporting of Economic & Potentially Economic Mineralization
 - = The CRIRSCO Template (*linked websites*)
 - + CRIRSCO Checklist of Assessment & Reporting Criteria
-
- Part B: Reporting of Additional Non-Economic Mineralization

Maintained by
CRIRSCO

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UNFC/SPE/CRIRSCO "Integration" Project



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UNFC/SPE/CRIRSCO "Integration" Project

	SPE/CRIRSCO commit to drafting "Guidelines" for UNFC	Nov 2005
↓	Phase 1: SPE & CRIRSCO Background Work	Jan 2006 - Oct 2006
⋮	Phase 2: Joint Studies	Oct 2006 - Jun 2007
	Phase 3: Discuss Joint Draft Document	Jun 2007
	Phase 4: Publish Joint Final Document	Oct 2007

align two models

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