

Developing Application Guidelines for the United Nations Framework Classification (UNFC)

A Discussion Paper Prepared for the AGHE – October 2006

Introduction/Background

The United Nations Economic Commission for Europe (UNECE) developed, and the UN Economic and Social Council (ECOSOC) endorsed in 1997, an international standard resource framework classification (UNFC) for solid fuels and minerals. Since then, this system has been recognised formally by the UNECE and ECOSOC and implementations have been initiated in more than 60 countries.

Recognising the potential benefits of a comprehensive and consistent basis for classifying all mineral and energy resources, the UNFC was expanded to integrate and harmonise the classification of coal, petroleum and uranium. ECOSOC endorsed this version in July 2004 and *“invites the member states of the United Nations, international organizations and regional commissions to consider taking appropriate measures for ensuring worldwide application of the Framework Classification”*.

The key aspect of the UNFC is a three-axis subdivision of resource projects based on economics, feasibility and geology, with resources being classified by a simple numerical system, thus avoiding potential problems with translation of terminology between different languages.

It is recognized that full implementation of such a system requires a comprehensive set of application guidelines. While, many of these guidelines would be similar for all resource types, there may be differences in the detailed assessment processes for each commodity. Moreover, while the main classification principles would rarely be amended, these application guidelines are subject to regular review and periodic revisions as interpretation methods and associated technologies evolve. It is envisaged that a specific process will be implemented to formalize this review, under the auspices of the UNECE as it currently stands.

Independently of the UNFC, the petroleum and mineral industries have continued to develop classifications, definitions and guidelines appropriate to achieve consistency within their respective industries. While similar guidelines continue to be developed at the national level, two international standards have evolved as dominant:

- the SPE/WPC/AAPG/SPEE Classification, Definitions and Guidelines for petroleum project evaluations, and
- the CRIRSCO International Reporting Template for public reporting of Exploration Results, Minerals Resources and Mineral Reserves.

In November 2005, SPE and CRIRSCO reached agreement to work jointly with the UNECE to pursue methods by which their systems could potentially be integrated.

In broad terms, CRIRSCO and SPE have each committed to drafting the text of guidelines that would meet the requirements of their respective clients while also providing support for the UNFC classification system. The following discussions relate to the potential approaches for implementing such a project.

Integration Models

In a practical view, UNFC, CRIRSCO and SPE (and other) systems will co-exist for the foreseeable future. This document considers possible models for integrating the three systems into a coherent and multi-purpose framework suitable for all its users.

Two main options for integration are available:

- 1) Merger: Retain the current UNFC text but modify CRIRSCO and SPE guidelines' style and content to create a merged single standard.

This model has severe practical limitations. CRIRSCO and SPE have fully documented systems utilized by the majority of commercial organizations in their respective industries. Further they have in place mechanisms and/or committees to maintain the systems through ongoing liaison with their primary stakeholders. In the case of CRIRSCO, its existing Template reflects national reporting standards that are embedded in, or referenced by, the majority of the regulatory agencies. UNFC lacks such an organizational structure and established industry liaison and it may not be efficient to attempt to replicate this function.

- 2) Focused Integration: Retain the current CRIRSCO and SPE guidelines as published and a) modify the UNFC text to eliminate redundancy and b) provide a mapping of UNFC codifications and terms to SPE and CRIRSCO classification and terminology.

While the UNFC has been partially implemented by several national agencies it has not been significantly adopted by private or national companies engaged in commercial ventures. Most of these companies have existing internal systems based on SPE or CRIRSCO standards and prepare external reports based on applicable regulatory requirements. These companies are rarely involved in both industries and may see no advantage to adopting a new system that accommodates both sets of commodities.

It is a CRIRSCO and SPE joint recommendation that we pursue initial integration as in Option 2. Several variations of this model are being evaluated. CRIRSCO and SPE would take responsibility for maintaining the guidelines on behalf of their international industry clients and also in maintaining the "mapping" to UNFC codifications.

Under this model, companies and agencies will have the opportunity to further examine the overall system and evaluate which components are best suited to their purposes in addressing their resource evaluation and business process needs.

While SPE and CRIRSCO systems dominate their industries, there remain many national and regional systems that will be maintained to provide continuity with historical evaluations and meet specific local requirements. To integrate these systems, the onus would be on each sponsoring organization to expand the "mapping module" approach from Option #2. Such modification would include mapping not only to the UNFC but also to the associated SPE and CRIRSCO guidelines. Each organization would be responsible for maintaining and publishing these "mappings" within their system documentation.