

**Commodity Specific Specifications to the UNFC
(with emphasis on the needs of the mineral sector)**

Prepared by the Russian Working Group

delivered by Grigoriy Malukhin
**State Commission of Mineral Reserves
Federal Agency of Use of the Subsoil, Russian Federation**

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Here we would like to draw attention of our distinguished colleagues to the fact that the aims and contents of “specifications” and “guideline” documents are differently understood in different countries. In the JORC Code and many other documents following consistently the CRIRSCO Template, specifications are reflected in complementary notes on separate mineral commodities added to the main text of the Code (coal, diamonds, some non-metallics, etc.; the Guidelines are included immediately in the main text body and italicized. All meaningful methodological issues of assessing reserves/resources are dealt with in professional publications, “best practice” standards and reference manuals of the COGEH type.

In Russia, the issues of estimation of petroleum and mineral reserves/resources as well as many others related to organization and management of geological exploration by commodities and stages, techniques of geological studies, classification and computation of reserves/resources are dealt with in separately published methodological recommendations and manuals on these works and operations.

For example, the main objectives of instructions on application of the new Russian Classification of petroleum reserves/resources are characterized as follows:

- clarification of the principles and main provisions of the Classification;
- establishment of uniform rules and regulation of quantitative and qualitative criteria of identifying groups and categories of oil and gas reserves and resources;
- development of conditions for standardizing the process of classification and compiling state inventories of petroleum reserves and resources.

In our opinion, “the Guidelines” should be regarded as a document elucidating basic concepts and principles of the Classification, contributing to better understanding of given wordings, disclosing specific features, conditions and requirements to be observed in practical application of the Classification.

“The Specifications” are meant as prescriptive instructions and technical requirements complementary to the ”guidelines” (and generally mandatory) specifying in more detail rules, conditions and reservations contained therein.

The main objective of the second (commodity specific) part of the Specifications is the development of appropriate sets of technical requirements and conditions for individual portions of the subsoil to be assigned to separate categories, subcategories and smaller divisions of the UNFC as applied to the commodities specified. For each principal need of its practical application identified by the AHGE, only those requirements and characteristics should be established which adequately reflect specific features of respective objects of accounting and reporting (needs and commodities). Parameters not relevant to the latter are subject to elimination from the list.

The sets of technical requirements for a given group (kind) of mineral commodities are seen like this:

A. By criteria of geological knowledge and confidence (G):

- specific features of the mineral commodity under consideration from the viewpoint of objectives and contents of classifying its reserves and resources;
- commercial geological deposit types;
- methods to evaluate a degree of uncertainty (confidence) of geological exploration data with an account taken of complexity of the object’s geological structure, density of observation points, drilling and sampling grids;
- By criteria of evaluation (check lists) of quality of field works and reserves/resources calculation (QA& QC).
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B. By criteria of economic-technological knowledge and maturity for production (F):

- main aspects of evaluating technical feasibility of a project;
- stage character of geological exploration and types of geological-economic assessment documentation submitted on separate stages;
- types of cut-off limits applied, principles of their justification and calculation.
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C. By criteria of economic/commercial viability (E):

- factors influencing economic efficiency of recovery of mineral “resources” and the possibility of their requalification to “reserves”;
- evaluation of degree of exploration and development knowledge of mineral deposits needed for determination of mineral “reserves”;
- justification of likely economic character of “resources” in “foreseeable future”.

Specifications relating to specific mineral commodities are supposed to reflect the most meaningful technical aspects of geological exploration, sampling, development, assessment and calculation of reserves/resources notable for certain kinds and groups of commodities. Recommended to be compiled first of all are the specifications for the commodities being of special economic importance for a country. For example, in Russia these may well be the specifications complimenting the UNFC as applied to petroleum, gold, diamonds, nickel, PGM, apatite, potash, a wide range of industrial minerals, etc.
