

Subject: Public Comment on DRAFT GUIDANCE FOR APPLICATION OF UNFC FOR MINERAL AND ANTHROPOGENIC RESOURCES IN EUROPE from Pim Demecheleer, Mineral reserves and resources expert for industrial minerals, Applied Mineralogy Director at Sibelco, Past Chairperson of the PERC committee

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Dear Madam, Sir,

I have followed the development of UNFC since many years.

This document is useful as it demonstrates the complexity in the classification of mineral resources, with various aspects that need to be evaluated by the expert doing the job, in order to make a right classification.

Today, the few small companies that have used UNFC in Europe, are those that have supported the UNECE with "case studies".

No serious exploration, mining or mineral firms are using the UNFC classification.

The global mineral industry is completely oriented to CRIRSCO codes, and most globally active European headquartered industrial mineral companies are using the PERC code, part of CRIRSCO.

In 2021 a new PERC code version has been launched integrating more clearly all aspects of ESG (environmental, social, governmental) within the modifying factors.

This is also mitigating the past (and I believe false) criticism of UNECE representatives that "only UNFC evaluates ESG type of considerations".

The UNFC classification has low-confidence categories, which are potentially of interest to geological surveys, but are of no interest as classification categories for companies.

While this should be an apparent advantage (UNFC as a "broader system"), in its current shape, I believe no-one in the global mineral and financial industry will support to use UNFC as the basis for a UNRMS.

I believe UNRMS will remain an unpractical and theoretical dream, that will be of little significance for mineral resources management in the foreseeable future, in the EU and globally.

I see however two major aspects of improvement.

- UNFC should focus on developing a very comprehensive classification system. In order to play to its strengths, UNFC should endorse (only) CRIRSCO codes for economic evaluation of mineral reserves and resources. UNFC guidance should stop any reference to pretending that it is a potential alternative for the economic evaluation and development of mineral resources. From a European perspective, UNFC may help to improve classification of resources information. However, the EU and the EU citizen should know, that by no means the adoption of the UNFC by countries geo surveys, will currently be of any economic significance for mineral resources development in Europe. Such developments will be done by company initiatives, making official assessments of resources and reserves by making use of CRIRSCO codes, and declared by Competent Persons (as defined in CRIRSCO), and as required by the stockmarket.
- The current UNFC classification is incomplete and not comprehensive enough. The "3-axis system" was a good idea 20 years ago, and it makes a nice visual cube, but this guidance document demonstrates the many aspects that need to be considered to classify mineral resources correctly. I refer particularly to the Tables 1 to 14, of Annex 2, Pages 19 to 28. Within a truly comprehensive system the choice or evaluation made for each of the 14 Tables, should be recorded, and can potentially be used as a separate "axis" or "sorting category". In my opinion, in a digital environment (as with a digital resource assessment signature) this would make the system more practical, because it would record the detail as needed for specialists. The current aggregation of various and very different aspects (as differentiated in the tables) behind one category, like eg. "E2.1." is then stopped. All this complexity is covered behind one sentence on page 19 : **"Lowest Ranking Issue: for the tables below (Tables 1 to 14) the rule of lowest ranking issue should be**

respected, which means that the lowest rank prevails.” : This sentence is actually only mentioned for the E-axis (10 Tables to be considered), but should be repeated for the F-axis as well (3 Tables to be considered). Within the E-axis THE problem remains that ECONOMICS and PERMITS are within the same axis or classification group. Personally I struggled many years with that idea, but on UNECE lead training sessions, I understood the idea designed for governments being the socialist idea that governments can impact both economics (by providing subsidies) as well as permits. This is not the reality from a global mineral resources perspective, and in the EU countries. The evaluation of the economical feasibility is very different to the permitting situation, and the reality of difficult or impossible permitting (for good reasons) is exactly what many exploration and mining companies are facing in Europe. Hence the importance of an accurate permitting environment assessment and to differentiate that from the economics of a project. In the current UNFC, uneconomic projects will get the same category as economic un-permittable projects : “Lowest Ranking Issue: for the tables below (Tables 1 to 14) the rule of lowest ranking issue should be respected, which means that the lowest rank prevails.” Unfortunately, this remains a fundamental failure of the current 3-axis UNFC system, and to use it as a useful tool in databases and public assessments.

I believe that thanks to the comprehensive tables in the guidance document, the weakness of the current UNFC proposition becomes very clear. My recommendation is a complete review of the classification method, and to consider to expand it, in order to adapt it to the current societal needs.

Thank you for providing the opportunity for comments, and thank you for considering them.

Kind regards,
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