

IMA-Europe comments on UNFC-2009

The Industrial Minerals Association-Europe (IMA-Europe)¹ is grateful to the UNECE to open to comments the draft document "Specifications for Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009)" and the accompanying draft Explanatory Report. On behalf of its industrial minerals (IM) producing member companies, IMA-Europe wishes to introduce the following comments:

1. General comments

There is actually no conflict of principle between CRIRSCO codes (including PERC) and the UNFC.

Not only are the two classifications compatible, but the Expert Group on Resource Classification (EGRC) have specified that CRIRSCO provides the commodity-specific definitions for solid minerals within UNFC (and similarly the SPE PRMS classification provides the commodity specific definitions for oil and gas).

PERC is the code within the CRIRSCO family of codes with the most elaborate section on the reporting on Industrial Minerals, Dimension Stone and Aggregates. The PERC Code (part of the CRIRSCO family of codes which includes JORC, NI 43 101, SAMREC and others) is the reference code for quoted mineral based companies in the European sector reporting publically its Mineral Reserves and Resources.

In addition the NEAN Code, which is the official bridge between the old Russian system and the CRIRSCO codes, has been established further strengthening the use of the CRIRSCO codes for quoted and non-quoted companies. There is also a CRIRSCO working group, led by Australians, working on establishing a similar link between the Chinese Reporting Code and the JORC Code.

The UNFC may be suited for fundamental resource mapping by geological surveys and aligned governmental institutions. However the UNFC is ONLY a classification and not a reporting system.

Therefore, it does not comply with the requirements of the mining/minerals industry.

In its principle UNFC is not complicated, but there is no such concept as the 'Competent Person' signing off on the estimates published, nor underlying principles (materiality, transparency, competence) that are the basis of the CRIRSCO family of reporting standards. Therefore for corporate projects, UNFC is not an alternative to CRIRSCO. Companies use CRISCO Template such as PERC, and possibly correlate it with UNFC. In the current status, a coherent correlation with UNFC-2009 is difficult. Full alignment between CRISCO and UNFC remains a challenge and solutions for improvement should be looked at and implemented (see below recommendations, notably in 2.2).

¹ For a short description of IMA-Europe see paragraph 3.

2. Specific Comments

2.1 G-axis

On the G axis, bridging between CRIRSCO Template and UNFC-2009 is clear. One of member companies has tried to specify better the geological classes for applying the CRIRSCO Template (see attached document). UNFC is just saying that the level of confidence for G1, G2 and G3 is “high”, “middle” and “low” respectively. It is not detailed enough and gives possibilities for too much interpretation. Although the doc EGRC/2012/INF.1/PC on page 19, Figure III.2 provides some clarifications, it was better defined in the 2004 version.

2.2 E-axis

Bridging with CRISCO Template is unclear. The distinction between E1, E2 and E3 is left to “relevant commodity specific systems aligned with UNFC-2009”.

This (economic) axis includes the non-technical factors: economic, but also legal, social and environmental (see p.4 of the draft of October 19).

UNFC-2009 is putting much more weight to lower categories market conditions than CRIRSCO template. It makes sense for national resource reporting, but not for IM corporate projects which are always decided after analysis of market conditions. The IM companies interest is limited to E1 and (to only a limited extend) E2 categories. The pure categorisation of the economic/marketable aspect is so important to industry that a better approach would be NOT to mix economic topics with the legal/ environmental ones.

The legal content of the E axis is critical for IM corporate projects. This is particularly true for the issue of permitting. In the case UNFC-2009 be used in country reporting, by mixing economic related factors with permitting related issues in one E-axis, will not allow the government level to distinguish between the permitted part of economic reserves, the non-permitted/non-feasible part of economic resources and the non-permitted non-economic resources. Therefore everything outside Reserves categories 1.1.1 and 1.1.2 will blur the essential economic assessment.

Regarding the environmental factor which was added in the draft of October 19, it is more a technical factor and it should be included on the F axis. As an example, improvement in blasting methods and control of the vibration (respect of the norms) can make possible to recover resources closer to neighbouring houses. It is a technical feasibility. The same is true with the mitigation of the impact of dewatering on water resources. Technical solutions exist also to reduce the impact of mining activities on the landscape.

It must be noted that for some of our member companies already all legal, environmental and permitting related factors are included within “Feasibility” (F-axis).

We strongly recommend that **all factors related to environment/legal be included in the F-axis**, this will facilitate the bridge with CRIRSCO.

In addition, E 1.2 category needs to be moved to E 2: "Extraction/sale is not economic based on market conditions unless subsidised".

In summary the classification will look like:

Reserves Proved : 1;1.1;1 + 1;1.2;1 excluding 1;1.3;1*

Reserves Probable : 1;1.1;2 + 1;1.2;2 excluding 1;1.3;2

Resources Measured : 1;2.1;1 + 1;2.2;1 + 1;1.3;1 + 2;1.3;1**

Reserves Probable : 1;2.1;2 + 1;2.2;2 + 1;1.3;2 + 2;1.3;2

Reserves Inferred : 1;2.1;3 + 1;2.2;3

* 1;1.3;1 permits expected but not granted

** 2;1.3;1 industry assessment necessary to assess short-term potential economic status.

We realise that some companies may consider 1;1.3;1 within Reserves.

2.3 F-axis

The F 2.3 definitions are unclear. Resources with "limited potential" should be moved to F3.

2.4 Competent person

- With the JORC classification (followed by the CRIRSCO Template), a single competent person can evaluate the resources/reserves according to the template.
- Within UNFC the concept of an evaluator is missing, therefore to fulfil market conditions an additional evaluator should be added.
- It is recommended to ask for validation of the reserves/resources reports by company CEO or area production managers.

2.5 Reference point

Page 7 (19 October draft):

The meaning of this reference point, which is a geographical location for the resource estimate, is unclear. There is a need to improve the text clarity.

2.6 Reserves/resources estimate

Probably in relation with the general problem that UNFC is not a "reporting system" with obliged competent person accountability, there is nothing regarding the technical constraints used for the estimate (slope of the benches, final quarry floor...), the "calculation" method and software used, etc. This information should be given with the estimated figures.

2.7 Correlation reserves/resources of the CRIRSCO Template and UNFC-2009 classes

Reserves and Resources are corresponding to classes 1.1.1, 1.1.2, 1.2.1, 1.2.2.

In the CRIRSCO Template one may sometimes consider as Reserves/Resources 2.1.1, 2.2.1, 2.1.2 and 2.2.2. We suggest including in these categories a not yet permitted deposit (meeting G and F criteria) which already received the proper land allocation.



3. IMA-Europe in brief

Industrial Minerals Association - Europe (IMA-Europe) is the umbrella association which represents the European producers/importers of industrial minerals, notably: andalusite, bentonite, borates, calcium carbonate, dolomite, diatomite, feldspar, kaolin, lime, mica, plastic clays, sepiolite, silica, talc and vermiculite. IMA-Europe companies are located in 28 European countries (i.e. 23 EU Member States + Croatia, Norway, Switzerland, Turkey and Ukraine), representing 500 companies (685 mines & quarries, 750 plants) and more than 42.500 employees in processing sites and headquarters.

IMA-Europe is one of the industry stakeholders of DG Enterprise Raw Materials Supply Group, candidate to the European Innovation Partnership on Raw Materials and a founding member of SPIRE the Sustainable Process Industries through Resource & Energy Efficiency.