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Remarks to the revised, simplified version of the United Nations Framework Classification for Fossil Energy and Mineral Resources (UNFC) 4 February 2009

The proposed new, simplified version of UNFC and definitions of resources categories seems more friendly as the "umbrella" system. However it may be not transparent enough for practical application to resources evaluation and need more detailed explanation and support by application guidelines.

1. According to the proposed version of UNFC total resources within the deposit (including recovered, recoverable and remaining unrecoverable) are referred to the "in place" quantities. It is clear for hydrocarbons. For solid mineral commodities it is not clear enough. The definition of 11x category suggests that it presents expected "extractable" portion of resources only. The remaining in the deposit, within its part designed for mining, but left untouched (because of technical or safety reasons), that will be lost, should be classified as 31x or 3.31x.. However the real geometric designation of extractable portion of resources is not always possible before detailed planning of mining operations. Therefore the question is, and should be explained in UNFC, if the resources designed for detailed extraction planning (eg. at feasibility study stage) should be presented: as "total in place" 21x = 11x + 31x.

In the UNFC for solid mineral commodities should be clearly expressed which categories define the extractable resources only, how unextractable resources, at the deposit portion designed for mining should be classified and which category should be assigned to resources delineated for exploitation planning, when exact presentation of extractable portion is premature.

2. For the mined out part of deposit of solid mineral commodities it is preferable to present not the "produced quantities" only but "exhausted (utilized) resources", there is produced quantities and remaining within the deposit unrecoverable quantities, completely lost in developed part of deposit, excluded from further resources inventory.

3. The definitions of G categories are not precise and the meaning of "high", "moderate" and "low level of confidence" is not transparent. More detailed definition is necessary or detailed meaning of thees terms explained in guidelines.

I propose to consider:

- 1. to replace on fig 1-3 term "Past production" by "exhausted resources" with subdivision to: "sales production", "non sales production", "lost resources"
- 2. Clearly specify E resources categories of solid mineral commodities: if and when they represent quantities in place designed as technically and economically extractable only, and if or when designed for extraction planning without delineation of extractable portion. I propose to use E1 for quantities designed as really extractable, and E2 for quantities designed for extraction planning when really extractable portion was not yet determined (E2 = E1 + E3.3)
- 3. Extend the definition of E3 category and E3.3 subcategory by adding; "...or extraction is considered impossible due to technical, safety or environmental conditions".
- **4.** Extend E3.2 category definition by addition that it include also resources remaining in abandoned mines: "....(eg. During the exploration phase *or in abandoned mines*)"

Detailed guidelines of UNFC supported by real examples of its application seems necessary for good understanding and to secure its materiality, transparency and univocal utilization.