

MINERAL RESOURCES MAPPING OF ORTHOMAGMATIC DEPOSITS IN EUROPE:

TERMINOLOGY (PASSPORT INFORMATION)

1. Section “Occurrence”:

Provides basic information about the localization, geology and exploration/exploitation history

Record number – unique number of the object within the database

Coordinate X and Y – Coordinate X represents the Longitude and Y the Latitude. The points represent an approximate position of the mineral occurrence in the map of Europe.

WGS84/ETRS89 coordinates system in decimal form has been applied.

Occurrence name – name or names under which the occurrence or deposit is known/registered in other databases or literature

Occurrence ID – unique identifier of each mineral occurrence in the database

National object ID – unique identified in national database (may or not exist/be available)

Occurrence type – based on INSPIRE Mineral Occurrence Type¹ with corresponding definitions of occurrence, prospect and mineral deposit

Mineralization style – association of valuable elements (metals) in mineralization

Age – geochronological age/era of the mineralization (relative)

Host rocks – type of rock material that is mineralized

Host minerals – minerals that contains valuable material in (potentially) economic concentrations

Mineralized zone – more information about the mineralization

Project name – name of the exploration or mining project (sometimes may not be identical with the name of the occurrence) to which the further information on resource estimate and project status is related

Ore/mining district – name or specification of the mining district (if known) or further more detailed localization of the occurrence in the metallogenic context (ore district, province)

Target commodities – commodities of economic interest in respective project

Other materials of economic interest – other materials that are present and might be of (potential) economic interest but are either out of SEMACRET project scope, or they have

¹ <https://inspire.ec.europa.eu/codelist/MineralOccurrenceTypeValue/>

not yet been an object of exploration, resource estimate, mining, due to some economic, technological, geological knowledge or other constraints.

Current Activity – it reflects the known stage of project exploration/mining activities at the time of time being of the record update. Its definitions are different to INSPIRE Mine Status which is applied as a filter in the map viewer.

It is either:

- Not active – there is not known any legal entity with valid mineral rights to the area
- Under active mineral right - there is a license holder with legal rights to explore, do the prospection, or equivalent, depending on the relevant legal framework (exploration permit/ license or some kind of concession representing exclusive rights to the deposit)
- Under development – the project is in the stage of evaluation its technical feasibility and overall viability – there exist some preliminary assessment of exploitation potential based on which the license holder continues in project development.
- Operating or under construction – the mine is either in operation or shortly before the execution of operation with technical preparation and construction works running and permits for exploitation approved/valid.

License owner – holder of the legal rights being bound to the deposit

Origin of the resource – whether the mineral resources are identified in the area with mining history (brownfield) or has been unexploited (greenfield) or it is of anthropogenic origin (mining waste, tailing)

Ever exploited – Yes/No

Exploitation specification – further information on mining (time range of operation, tonnage, or other specification)

Type of mining method – assumed, planned or previously applied mining method (if ever exploited) – that might be either Onshore: Surface mining/Underground or Combined; or Offshore (not in SEMCRET scope)

Previous activity/status comment – previous holders, discovery, exploration/mining activities performed, etc.

Classification method – classification method applied in the most recent resource estimate

- CRIRSCO-compliant – resource estimate applies classification in line with CRIRSCO - family reporting standard. The current holder is the one who has issued or confirmed the estimate, thus it is considered CRIRSCO-compliant.
- Historic CRIRSCO – resources have been classified according to the CRIRSCO-family standard, however, the company has left the tenement or there has been an ownership change

without amending the resource estimate. Such estimates are usually referred as historic or foreign and are not considered CRIRSCO-compliant *sensu stricto*.

- Non-compliant/historic – the resource estimate is not in line with any CRIRSCO-family reporting standard and related classification. The classification might be in line with some national standard, or it is a historic/not standardized classification
- No resource estimate – the resource estimate does not exist (is not known).

Classification specification – further details about the classification method (e.g. type of standards/code) or any other specification.

Estimation date – date of the issue of the estimate. In the case of CRIRSCO-compliant estimates, the Effective date is provided. In the case that only year is known, the 31.12. + year is used.

Estimation specification – further details about the estimate

Total ore (t) – total tonnage of all resource and reserves categories, based on the most recent available estimate (the last estimate for which the tonnages and grades has been available, based on the literature).

Grades – average grades of main and other commodities, if known, also cut-off grade is provided

Original estimate Ref + link – if available, reference to the relevant report with resource estimate

Best UNFC class – the UNFC class that best represents the Project development status and overall confidence in the resource estimate. For CRIRSCO-compliant resource estimates, the UNFC class is not displayed.

Best UNFC amount – Proportion of commodity quantities, that corresponds to the Best UNFC class.

Additional UNFC class + Additional quantities – The project itself may contain additional commodity quantities with different UNFC classes.

Best UNFC subclass – in some cases, also a specific UNFC Subclass (subclass name) has been designated.

Importance – Importance of the deposit based on INSPIRE Importance Value. Express the classification of deposit size of the deposit according to the commodity quantity. Class boundaries are based on a statistical study of a large set of deposits throughout the world and defines what is a very large, a large, a medium-sized etc deposit for this commodity.

2. Section “Resources”:

It provides records for estimated quantities per each commodity and resource class/category.

Commodity – type of commodity for each the estimate is calculated – in some cases an oxide form of metal might be applied, i.e. – chrome (Cr_2O_3) vs. chromium – (Cr); titanium dioxide (TiO_2) vs. titanium (Ti); vanadium pentoxide (V_2O_5) vs. vanadium (V).

Ore measurement type – Mineral Resources and Reserves categories according to the CRIRSCO Template definitions. Others are considered as Non-compliant resources (including those from historic CRIRSCO estimates)

Ore amount – ore quantity (in t) corresponding to the stated ore measurement type

Commodity grade – grade (in % or ppm) corresponding to the stated ore measurement type and ore quantity

Commodity amount – reported (if available) or calculated (ore amount*grade) commodity quantity per provided ore measurement type

Recommended literature and links:

European Commission (2024) D2.8.III.21 Data Specification on Mineral Resources – Technical Guidelines https://knowledge-base.inspire.ec.europa.eu/publications/inspire-data-specification-mineral-resources-technical-guidelines_en

UNECE (2019) United Nations Framework Classification for Resources: Update 2019. ECE ENERGY SERIES No. 61. United Nations, Geneva. Available at:

https://unece.org/fileadmin/DAM/energy/se/pdfs/UNFC/publ/UNFC_ES61_Update_2019.pdf