



Supplement of

Mapping Critical Raw Materials (CRM) hard rock deposits in Europe

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Supplementary Materials

Table S1: Lexicon for Resource category.

Code	Description
indicatedAndInferredMineralResource	A combination of indicated mineral resource and inferred mineral resource.
indicatedMineralResource	The part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence.
inferredMineralResource	The part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity.
measuredAndIndicatedMineralResource	A combination of measured mineral resource and indicated mineral resource.
measuredIndicatedAndInferredMineralResource	A combination of measured mineral resource, indicated mineral resource and inferred mineral resource.
measuredMineralResource	The part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence.
(RUS)A	Russian NAEN Code
(RUS)A+B	Russian NAEN Code
(RUS)B	Russian NAEN Code
(RUS)C1	Russian NAEN Code
(RUS)C2	Russian NAEN Code
(RUS)P1	Russian NAEN Code
(RUS)P2	Russian NAEN Code
(RUS)P3	Russian NAEN Code
anticipatedEconomicResourcesA+B	Polish classification
anticipatedEconomicResourcesC1	Polish classification
anticipatedEconomicResourcesC2	Polish classification
CategoryA	Slovenia code
CategoryB	Slovenia code
CategoryC	Slovenia code
historicResourceEstimate	
verified(Z1)	Slovakia code
anticipated(Z3)	Slovakia code
economicExploredResources	
economicProspectedResources	
potentiallyEconomicResources	
poorlyDocumented	

Table S2: Lexicon for Resources/reserves classification method.

Code	Description
CIMstandards	Standards defined by the Canadian Institute of Mining Metallurgy and Petroleum (CIM) which establishes definitions and guidelines for the reporting of exploration information mineral resources and mineral reserves in Canada.
CRIRSCOCODE	Template established by the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) which integrates the minimum standards being adopted in national reporting codes worldwide with recommendations and interpretive guidelines for the public reporting of exploration results mineral resources and mineral reserves.
FRBstandard	Former recommended Rules for Public Reporting of Exploration Results Surveys Feasibility Studies and Estimates of Mineral Resources and Mineral Reserves in Sweden Finland and Norway established by the Fennoscandian Review Board (FRB)
historicEstimate	An estimate that was made sufficiently long ago to be defined as historic and consequently should be used with caution.
IIMChCode	Reporting code developed by the Institute of Mining Engineers of Chile (IIMCh) and adopted by the Mining Commission of Chile as the official document for the reporting of the estimation classification and assessment of mineral resources and mineral reserves
IMMReportingCode	Reporting code developed by the former Institution of Mining and Metallurgy (IMM) which sets out minimum standards recommendations and guidelines for Public Reporting of Mineral Exploration Results Mineral Resources and Mineral Reserves in the United Kingdom, Ireland and Europe.
JORCCODE	Reporting code established by the Joint Ore Resources Committee (JORC) which sets out minimum standards recommendations and guidelines for Public Reporting of Mineral Exploration Results Mineral Resources and Mineral Reserves in Australia and New Zealand.
NationalReportingCode	A reporting code developed by an authorised National body which is applied within the specified country but is not separately listed.
NI43-101	National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects is a mineral resource classification scheme used for the public disclosure of information relating to mineral properties in Canada.
nonCompliantExplorationEstimate	An exploration estimate that does not comply with any internationally recognised system of reporting.
nonCompliantReserveEstimate	A reserve estimate that does not comply with any internationally recognised system of reporting.
nonCompliantResourceEstimate	A resource estimate that does not comply with any internationally recognised system of reporting.
PERCCODE	Reporting code developed by the Pan-European Reserves and Resources Reporting Committee (PERC) which sets standards for public reporting of exploration results mineral resources and mineral reserves by companies listed on markets in Europe.
PolishClassification	Polish Classification
RussianNAENCODE	The Russian Code for the Public Reporting of Exploration Results Mineral Resources and Mineral Reserves established by the National Association for Subsoil Examination (NAEN) which sets minimal requirements for Public Reporting by Russian mining and exploration companies
SAMRECCODE	The South African Code for Reporting of Exploration Results Mineral Resources and Mineral Reserves (the SAMREC code) sets out minimum standards, recommendations and guidelines for Public Reporting of Exploration Results Mineral Resources and Mineral Reserves in South Africa

SAMVALCode	The South African Code for the Reporting of Mineral Asset Valuation (the SAMVAL code) sets out minimum standards and guidelines for Reporting of Mineral Asset Valuation in South Africa.
SECGuide	Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations are a set of guidelines developed by the Securities and Exchange Commission (SEC) in the United States of America.
SMEGuide	Guide for Reporting Exploration Results Mineral Resources and Mineral Reserves adopted by the Society for Mining Metallurgy and Exploration (SME) in the United States of America
UNFCCode	The United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources (UNFC) is a universally applicable scheme for classifying and evaluating energy and mineral reserves and resources as well as other types of resources
USGS_Circular_831_of_1980	Principles of resource and reserve classification for minerals United States Geological Survey Circular 831 issued in 1980.

Table S3: Lexicon for Reserve category.

Code	Description
provedOreReserves	A ‘Proved Ore Reserve’ is the economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined.
provedAndProbableOreReserves	Covers both the Proved Ore Reserves and Probable Ore Reserves.
probableOreReserves	A ‘Probable Ore Reserve’ is the economically mineable part of an Indicated, and in some circumstances, a measured mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined.
(RUS)A	Russian NAEN Code
(RUS)A+B	Russian NAEN Code
(RUS)B	Russian NAEN Code
(RUS)C1	Russian NAEN Code
(RUS)C2	Russian NAEN Code
(RUS)OffBalance	Russian NAEN Code
demonstatredMeasuredReserves	USGS_Circular_831_of_1980
demonstratedIndicatedReserves	USGS_Circular_831_of_1980
demonstratedMeasuredIndicatedReserves	USGS_Circular_831_of_1980
demonstratedMeasuredMarginalReserves	USGS_Circular_831_of_1980
inferredMarginalReserves	USGS_Circular_831_of_1980
inferredReserves	USGS_Circular_831_of_1980
documentedReserves	Czech Republic code
economicExplored	Czech Republic code
economicProspected	Czech Republic code
historicReserveEstimate	
inaccessibleDocumentation	
mineableReservesA+B	Polish classification
mineableReservesC1	Polish classification
mineableReservesC2	Polish classification
verified(Z1)	Slovakia code
probable(Z2)	Slovakia code
anticipated(Z3)	Slovakia code