Abstract

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Pan-European mineral resource assessment: the ProMine Project G. Gaál¹, D. Cassard², G. Bertrand², H. Schaeben³, J.-J. Royer⁴, P. Weihed⁵, P. Skyttä⁵ and T. Bauer⁵

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Abstract

The project "Innovative concepts and processes for strategic mineral supply and for new high added value mineral-based products - ProMine" started in 2009 for a four years period, and involves 27 partners from 11 countries. A first major result from the project is the release of the collaboratively developed ProMine Mineral Deposit (MD) database. It is a new dataset that compiles homogeneous and thorough information on primary mineral resources in Europe (12,979 records, covering 34 countries). This database serves the development and feeding of a homogeneous multi-layer information system that covers the whole European territory and is publicly accessible through a dedicated web portal (http://ptrarc.gtk.fi/ProMine/default.aspx).

A major outcome from the ProMine MD database is the implementation of "addedvalue" layers that include (1) maps of mineral potential over the European Union and (2) predictivity (or favourability) maps for selected commodities, using previously defined "commodities associations" (*i.e.* metallogenic types). Considering the size of the area, the large number of metallogenic types and the complexity of the geological framework, such a huge task has never been completed before. It will be done at BRGM (French Geological Survey) according to a data processing procedure established collaboratively by ProMine partners and using robust and well-tried methods, based on knowledgedriven approaches. In addition to this continental scale approach, regional 3D models of selected ore bearing areas of special interest are produced, to better assess their geometry, dynamics and mineral potential.

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