



Good practice cases on innovation for minerals exploration and extraction: content of the 3 Policy Laboratories

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Good practice cases – exploration and extraction

Innovation cases
New geo-models, i.e. 3D modelling using multiple geological, geophysical and geochemical datasets
Airborne geophysical methods
Use of commercially available drones and other small aircraft in surveying tenure or high precision mapping
In-situ analysis using portable XRF analysers
In-situ analysis using multispectral core logging
Autonomous equipment/operations including use of robotics, smart sensors and 3D printing
Process control & (big) data management („real time information and mass flows“)
Continuous processes and automation
Resource characterisation
New models for financing of mining



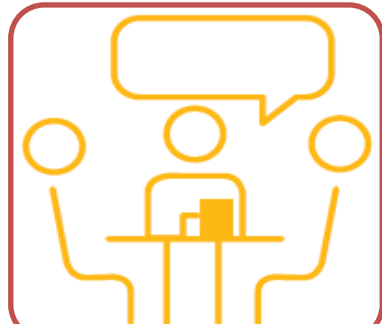
Cases – deep sea mining

Case 1: Blue Mining Project: Innovation in deep sea mining

Case 2: Impacts of deep sea mining - MIDAS Project

Case 3: Underwater exploration and mining, UNEXMIN project

The Policy Laboratory



Policy Lab 1:

Exploration

Case 1: New geomodels - Panagiotis Zachariadis, Hellas Gold, GR

Case 2: Airborne geophysical methods - Benedikt Steiner, xpLORE.global, DE

Case 3: Drones - Ari Saartenoja, Radai, FI



Policy Lab 2:

Extraction

Case 1: Process control & (big) data management - Markus Häupl, Strabag, AT

Case 2: Continuous processes and automation - Uwe Restner, Sandvik, SE



Policy Lab 3:

Deep sea mining

Case 1: Blue Mining Project: Innovation in deep sea mining, Robert Ketterij, IHC MTI B.V., NL

Case 2: Impacts of deep sea mining - MIDAS Project, Ana Colaço, Uni Azores, PT

Case 3: Underwater exploration and mining, UNEXMIN project, Norbert Zajzon, Uni Miskolc, HU

THANK YOU!