



# Innovative Technologies and Concepts for the Intelligent Deep Mine of the Future

## Sub-Task: Deep Mine Rescue

### Background of I<sup>2</sup>Mine

The mine of the future will exploit mineral raw materials at greater depths than today. Compared to today's deep mines, completely different approaches are required. European eco-efficient mines will contribute to improved access to domestic mineral resources, secure the sustainable supply of mineral raw materials and reduce EU's import dependency.

The project consortium comprises 26 partners from industry, research institutes, universities and associations from ten European countries. I<sup>2</sup>Mine will develop necessary innovative methods, technologies, machinery and equipment for the safe, eco-innovative, intelligent and economic exploitation of mineral raw materials in the EU.



German Mine Rescue Team underground

### Approach

- Capacity Building
- European Network
- Best Practice Guide
- Preventive Measures
- Refuge Chambers
- Disaster Management
- Challenges of Great Depths
- Drilling Technology
- Communication & Information
- Alarm Systems
- European Mine Rescue Constitution
- Evaluation of Mine Rescue Performances



### Motivation for Deep Mine Rescue

Even if the vision of I<sup>2</sup>Mine is an unmanned and fully automated mine, underground mining jobs will still exist in the near future. Experience shows that mining accidents can never be totally excluded. Therefore, appropriate methods and technologies must be developed, taking into account the specific situations of deep mines.

The objective of this task is to develop integrated mine rescue systems and concepts, with focus on usage of technology, to encounter a scenario of "miners trapped underground". Besides strengthening the European mining industry, the capacities built by "Deep Mine Rescue" contribute to an improved situation in global mine safety and rescue.

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Find more information at: <http://www.i2mine.eu>

### Project Partner



### Funded by

