



UNEXMIN DELIVERABLE D8.5

BROCHURES

Summary:

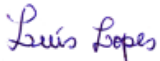
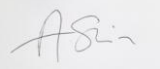
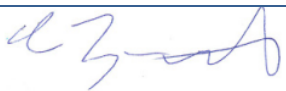
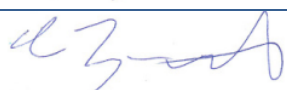
This document contains all the information present on the first UNEXMIN brochure, including related printing and distribution information. The first brochure focuses mainly on project objectives.

Authors:

LPRC - La Palma Research Centre



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1. Executive summary

This document provides a general overview of the first of the three scheduled UNEXMIN brochures, describing its elements, such as text and chosen images. Relevant data concerning the brochures, as printing and distribution data are also specified.

Brochures designing and distribution have been established in the Grant Agreement as an essential tool for dissemination purposes. It has been defined as “designed to provide a general overview of the project objectives” and that has been the direction taken.

This is D8.5, due in Month 6 and it will be updated through the project lifetime, when the two next brochures are made available.

2. Components of the first UNEXMIN brochure

The first UNEXMIN brochure was elaborated by LPRC and its main focus is on the project’s objectives and overall concept and approach that the project will follow.

2.1 – Brochure characteristics

The brochure was thought and designed to have the following characteristics:

- 14 x 14cm when folded (square structure)
- 28 x 14cm when unfolded (rectangle structure)
- 70g glossy paper (per brochure)
- Silver logo with special tint

2.2 – Brochure structure

The first brochure has the following element structure:

- Front page: Cover image + silver logo + project tag phrase (see Figure 1)
- Inside panels: Information on project’s main objectives and concepts + project related images (see Figure 2)
- Back page: UNEXMIN QR code and website, list of consortium members and European Union’s disclaimer information and respective flag (see Figure 1)



Figure 1: Front page (on the right) and back page (on the left) of the brochure.

2.3 – Brochure dissemination

For this first batch of brochures, a total of 3000 copies were printed. These brochures are going to be distributed between the consortium partners to be used on their own responsibility. They shall be used in the project's own dissemination activities, as well as in activities where the consortium partners may be present (conferences, workshops, etc). Additional copies as well as variations have also been printed and may still be printed as required (e.g. for conferences of a specific focus).

Concerning the printing and distribution to consortium partners:

- 3000 copies printed in total
- 200 copies (at least) to be given for each partners own dissemination purposes

2.4 – Text

The text used on the inside panels of the brochure – see figure below – was written taking into consideration the main objectives of the UNEXMIN project, and with this, trying to reach every stakeholders groups and interested parties. Specific text allusions were elaborated for the main groups – mining, robotics, archeology, etc. The brochure is written in small chunks of text and with bullet points with an easy language that can be understood by almost anyone.

Besides the basic scope of giving information on the project's objectives, the brochure also provides important data concerning the overall project concept and approach.

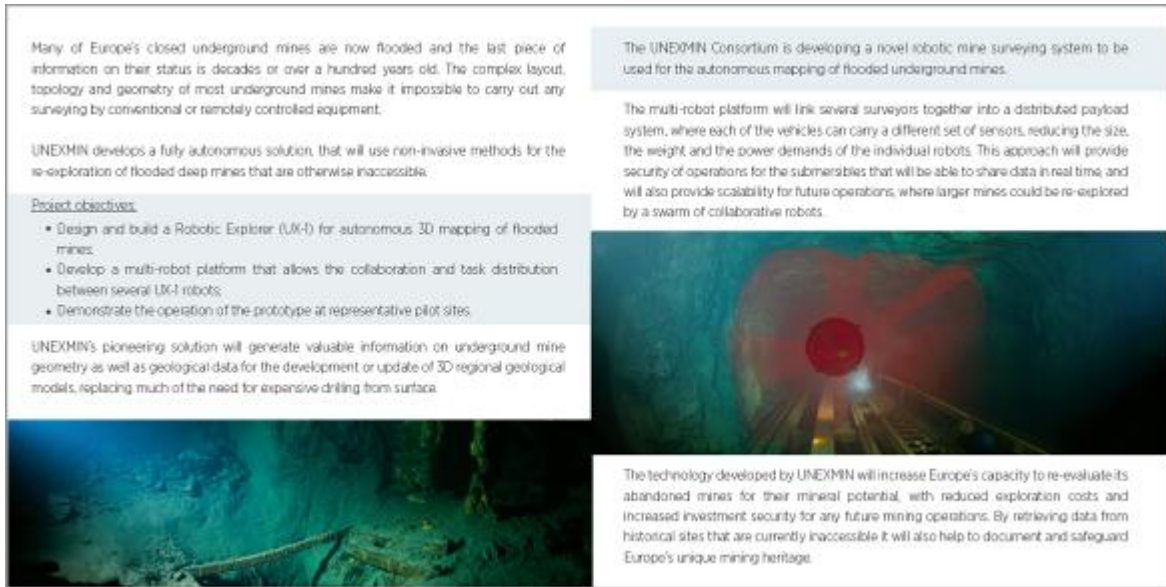


Figure 2: Inside panels of the brochure

2.5 – Images

The three images used in the brochure are property of LPRC and overall they make part of the standard project image defined in D8.3 – Project image and stylebook.



Figure 3: Image used on the front cover of the brochure



Figure 4: Image used on the first inside panel of the brochure

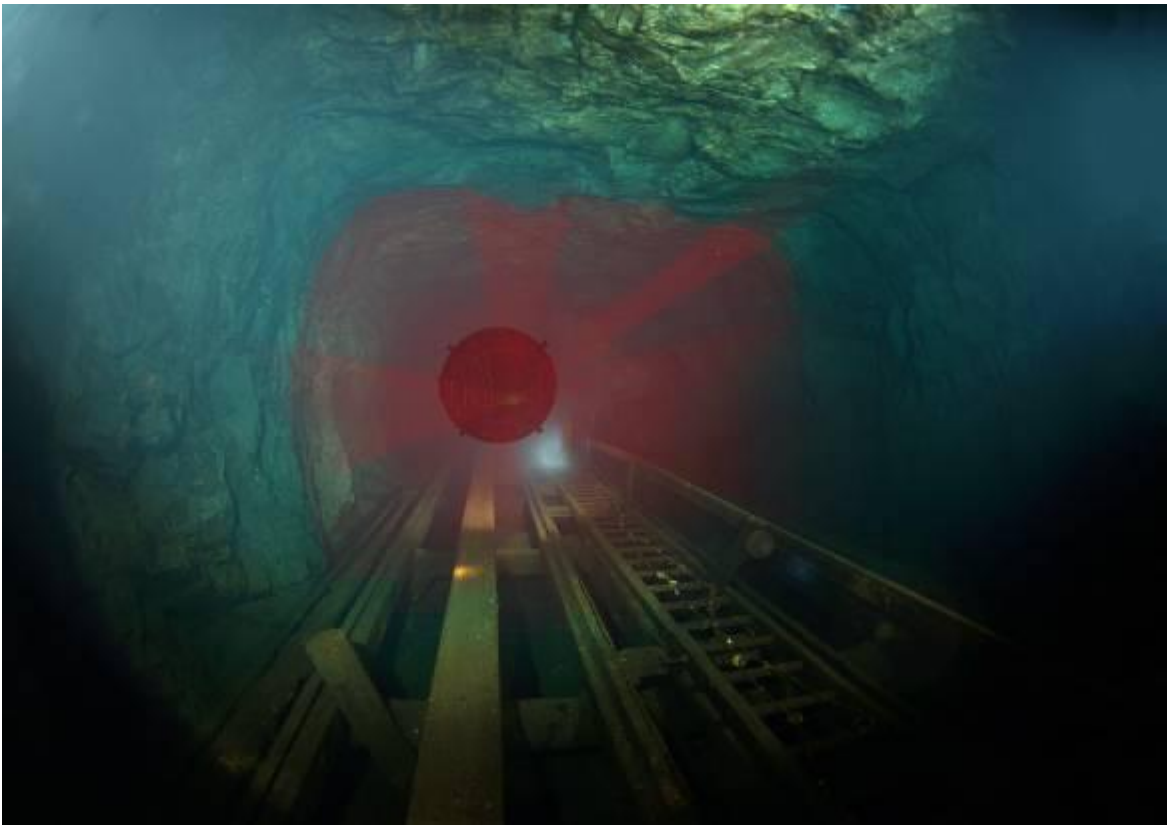


Figure 5: Image used on the second inside panel of the brochure

3. Conclusions

The first brochure of UNEXMIN intends to make the project noticeable amongst the interested parties by primarily addressing the objectives the project wants to achieve during its lifetime. The overall concept and approach that UNEXMIN is using is also stated in this first issue of the brochures. All in all, it has all the necessary information to understand the basics of the project and shall redirect traffic to the UNEXMIN website.

Brochures are an essential tool that will be used by all consortium partners, whenever possible, in order to achieve a greater dissemination of the UNEXMIN project towards the stakeholders' groups.

This document will be updated during the project lifetime, when the next two scheduled brochures are created and ready for dissemination.



WWW.UNEXMIN.EU

The UNEXMIN Consortium:

- University of Miskolc, Hungary
- Geological Survey of Slovenia, Slovenia
- Tampere University of Technology, Department of Mechanical, Engineering and Industrial Systems, Finland
- Universidad Politécnica de Madrid, Centre for Automation and Robotics, Spain
- La Palma Research S.L., Spain
- INESC TEC – Institute for Systems and Computer Engineering, Technology and Science, Portugal
- Resources Computing International Ltd, UK
- Geoplano, Portugal
- Ecton Mine Educational Trust, UK
- European Federation of Geologists, France
- Geo-montan, Hungary
- Empresa de Desenvolvimento Mineiro, Portugal
- Idrinja Mercury Heritage Management Centre, Slovenia

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UNEXMIN

**UNDERWATER EXPLORER
FOR FLOODED MINES**

Many of Europe's closed underground mines are now flooded and the last piece of information on their status is decades or over a hundred years old. The complex layout, topology and geometry of most underground mines make it impossible to carry out any surveying by conventional or remotely controlled equipment.

UNEXMIN develops a fully autonomous solution, that will use non-invasive methods for the re-exploration of flooded deep mines that are otherwise inaccessible.

Project objectives:

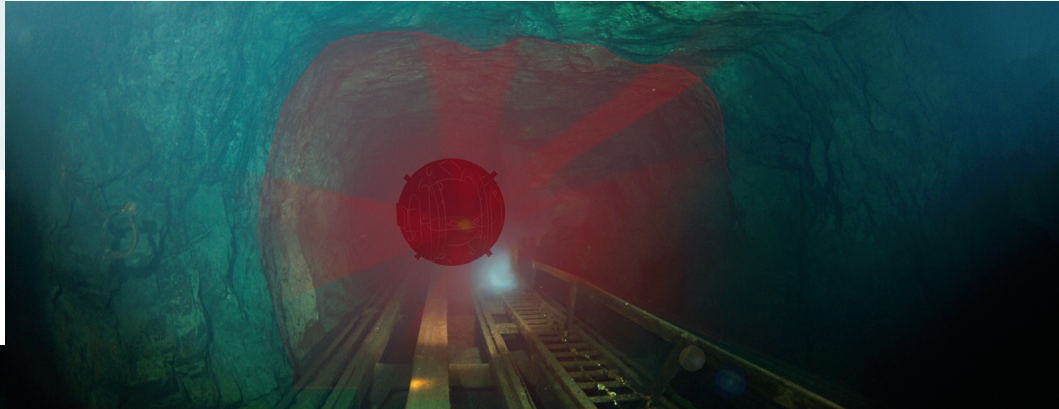
- Design and build a Robotic Explorer (UX-1) for autonomous 3D mapping of flooded mines;
- Develop a multi-robot platform that allows the collaboration and task distribution between several UX-1 robots;
- Demonstrate the operation of the prototype at representative pilot sites.

UNEXMIN's pioneering solution will generate valuable information on underground mine geometry as well as geological data for the development or update of 3D regional geological models, replacing much of the need for expensive drilling from surface.



The UNEXMIN Consortium is developing a novel robotic mine surveying system to be used for the autonomous mapping of flooded underground mines.

The multi-robot platform will link several surveyors together into a distributed payload system, where each of the vehicles can carry a different set of sensors, reducing the size, the weight and the power demands of the individual robots. This approach will provide security of operations for the submersibles that will be able to share data in real time, and will also provide scalability for future operations, where larger mines could be re-explored by a swarm of collaborative robots.



The technology developed by UNEXMIN will increase Europe's capacity to re-evaluate its abandoned mines for their mineral potential, with reduced exploration costs and increased investment security for any future mining operations. By retrieving data from historical sites that are currently inaccessible it will also help to document and safeguard Europe's unique mining heritage.