



UNEXMIN DELIVERABLE D8.6A

PRESS-RELEASES AND MEDIA KITS
UNEXMIN: AN AUTONOMOUS UNDERWATER EXPLORER
FOR FLOODED MINES

Summary:





This deliverable provides a record of the press releases published in the framework of the UNEXMIN project. The first press release has been issued in July 2016.

Author:

Anita Stein



	Lead beneficiary:	LPRC	
	Other beneficiaries:		
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Revision history	Author	Delivery date	Summary of changes
Version 1.0	Anita Stein	22.07.2016	
Version 2.0	Norbert Zajzon	24.07.2016	
Version 3.0	Luís Lopes	30.09.2016	Added PDF of first press release
Version 4.0			
Version 4.1			

Approval status			
Function	Name	Date	Signature
Deliverable responsible	Anita Stein	27.07.2016	
Reviewer 1	Balazs Bodo	27.07.2016	
WP leader	Balazs Bodo	27.07.2016	
Project leader	Norbert Zajzon	27.07.2016	

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Table of Contents

1. PRESS RELEASE JULY 2016 - UNEXMIN: AN AUTONOMOUS UNDERWATER EXPLORER FOR FLOODED MINES

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The first UNEXMIN press release has been published in July 2016. All project partners were asked to disseminate it broadly through their network. The document is available for download on the UNEXMIN website at <http://www.unexmin.eu/more-information/downloads/>.



July 2016

PRESS RELEASE

UNEXMIN: An Autonomous Underwater Explorer for Flooded Mines

13 organisations from 7 countries across Europe are collaborating in an ambitious project to develop a submersible robotic system for surveying and exploration of flooded mines. The C5M project, funded by the European Union's Horizon 2020 research programme, includes the development of a Robotic Explorer (UX-1) for autonomous 3D mine mapping to gather valuable geological information that cannot be obtained in any other way: in general the mines will be too deep and dangerous for access by human divers.

A multi-robot system based on UX-1 will represent new technology, made possible by recent developments in autonomy research allowing development of a completely new class of robots, capable of operating underground without remote control: UX-1 will be the first of its kind. Research challenges are related to miniaturisation and adaptation of deep sea robotic technology to this new application environment and to the interpretation of high volumes of multivariate geoscientific data.

Pilot deployments will be carried out at mines with progressively more challenging conditions: Kaatjala feldspar/quartz mine (Finland), Urgeiriça uranium mine (Portugal) and Idrija mercury mine (Slovenia). The final, most ambitious demonstration will take place in the UK with the first modern survey of the Deep Ecton copper mine (UK) most of which has been flooded and inaccessible for over 150 years. This will demonstrate the system's scalability from small missions to the largest ones by increasing the number of deployed autonomous drones, and supporting multi-robot cooperation in confined 3D spaces with real-time sensor and data fusion for reliable navigation and communications.

The development of UX-1 will open new exploration scenarios so that strategic decisions on re-opening Europe's abandoned mines, many of which may still contain critical raw materials, can be supported by real data which cannot be gathered in any other way.

MORE INFORMATION

<http://www.unexmin.eu/>



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 690008.



Figure 1: UNEXMIN pressrelease n°1.

The press release provides basic information about the project objectives and activities with the aim of drawing attention to the project's existence. It invites the reader to follow the project activities through the website and the social media.

This press release is the first in a series of press releases that will be issued during the project's lifetime. It will be made available on the project website (www.unexmin.eu) as a part of the media kit (other publishable materials, photos, logos, quotes, audio-visual materials, etc) under the Press Corner menu of the website:

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