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## PRESS RELEASE

## New workshop confirms that UNEXMIN is on the right track

UNEXMIN is an ambitious EU-funded project (Horizon 2020 project no. 690008) which is developing a novel submersible multi-robotic system for the surveying and exploration of flooded mines. The project will lead to the development of the 'UX-1' robotic explorer which will autonomously map flooded mines and, in doing so, gather valuable geological data that cannot be otherwise obtained. Using the data gathered by UX-1, geologists will be able to identify potential prospectivity in areas that are now inaccessible, which in turn could lead to the reopening of abandoned European mines.

From the 31<sup>st</sup> of January to the 2<sup>nd</sup> of February, a UNEXMIN technology appraisal workshop was held at Tampere University of Technology in Tampere, Finland, with the intention of approving the prototype design prior to the shortly commencing manufacturing phase. Specialists in robotics and earth sciences from the Consortium and Advisory Board came together to agree upon the final design specifications of UX-1. The meeting marked 12 months since the beginning of the project, and upon its conclusion the second milestone was successfully achieved, with the final technical specifications being confirmed.

The first day consisted of a revision of all work packages within the project, which was then followed on the second day by technology appraisal discussions and technology development workshops. Specific topics addressed during the first two days included control systems, data conversion, dissemination strategy, and the beginning of Work Package 3 'Autonomy for mine exploration and mapping' and Work Package 4 'Multi-robot platform development'. The third and final day was dedicated to further technical discussions and final decision-making on the mechanical and sensory design and systems testing procedures.

Work will now continue on the development and testing of other technical instruments, giving priority to sensors and scientific measuring equipment. In the coming year the UNEXMIN Consortium expects to complete both laboratory and real environmental tests on the scientific instrumentation units, and define the robot's software architecture. The next crucial step is to build the first UX-1 prototype robot in time for the beginning of 2018.

**MORE INFORMATION** 

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