

July 2019

UNEXMIN completed the project's Pilot Tests at the Molnár János cave and will focus now on producing outputs

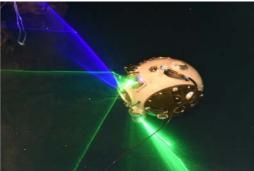
The UNEXMIN project is developing a technology capable of autonomous exploration and mapping of flooded underground mines. The robotic platform uses non-contact methods to gather geological, mineralogical and spatial data without major costs or risks associated. The field trials, set up at four different flooded underground mines in Europe, and at one cave system, help the team to assess the platform's development and to make improvements to the unique technology.

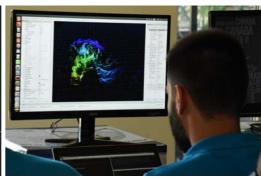
From the 26th of June to the 5th of July the UNEXMIN team brough its robotic system to explore and map the cave system at Molnár János in Budapest, Hungary. The robots' capabilities, with a focus on autonomy and navigation, were extensively tested. In total, more than 220m of the cave area were explored.

After the past four field trials at the flooded mines of Kaatiala, Idrija, Urgeiriça and Ecton, the team decided to test its robotic solution in a different environment — a cave system. Compared to the previous sites, the trials at the Molnár János cave stand out as an environment with no expected structure, an irregular layout, that negatively influence the navigation and other capabilities of the robotic system. This was, therefore, a step that the project needed to take in order to improve the system's capabilities and to be able to prove its operability in different environments and conditions. Thanks to this the system is now more prepared than before to face the unknown.

UNEXMIN's consortium will now work with the data collected from the five test sites and produce a set of outputs that will include videos, 3D models and geological and spatial analysis from the sites. These will be partly presented during the project's final conference in Brussels, on the 26th of September.







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