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Trials at the Idrija mine further prove UX-1's capabilities; First autonomy tests underwater were a success

The second trials with the new UNEXMIN technology took place in the Idrija mercury mine, in Slovenia, from the 10^{th} to the 21^{st} of September. In the Idrija mine, an UNESCO's world heritage site, the UX-1 robot managed to explore and map the accessible parts of the underground flooded mine.

Early in the first week, the communication equipment and control station set-up and equipment dry-testing were the main tasks. The UX-1A robot was also transported to the launching point which was -192 m below surface. The first dives were performed in the harsh water environment, where a mix of obstacles, confined space and lack of visibility — only a few tens of centimetres — contributed to the challenging work for both the robot and the technical teams.

On the second week the UX-1A robot dived through the entire available part of the flooded shaft in Idrija, to 26m water depth, down to the so-called IX level. The navigation until this point was only possible due to the UX-1A's own discovery, as the bottom of the shaft was thought to be blocked by a wooden platfom. Testing of instrumentation was also done, including tests with the multispectral camera, sonars and SLS imaging units, that greatly helped with UX-1A's navigation. The first fully autonomous mission was also done, a big achievement for the project.

The trials at the Idrija mine went by without a single accident with no human harm or damage of the equipment or the mine itself, resulting from careful planning and execution by the UNEXMIN team, making this trial a success. The robot now traveled to Porto, Portugal, where further development of the technology will take part with special focus on the UX-1's autonomy.





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