

The European Coordination Hub for Open Robotics Development

Final Review Meeting – WP 5

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Background

Motivation for the Work Conducted

• Remote inspection is a strategic sector for IDMind. The scientific challenges were well aligned with the research interest of UPO and USE.

Technical Problem Addressed / Challenge Overcome

- Utility infrastructures and condition monitoring for sewer network. Robots for the inspection and the clearance of the sewer network in cities.
- Problems caused by the terrain (gutters, obstacles, slippery sections); environmental conditions (dust, water, temperature, gases); communications; absence of references for localization methods.

Expertise Relied on

• Complementary expertize adequate for all the required developments; previous sucessful collaborations; **trust and devoted teams**

Start-date / End-date

January 1, 2016 / December 15, 2018



Solution Developed



28/03/19 - Paulo Alvito

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Being an Experiment in ECHORD++

Benefit from participation in ECHORD++

- Directly addressing end user needs
- Application driven R&D
- Collaborative work at an operational level

Impact on Development Process

• multi-stage, iterative development process, with permanent dialog with evaluators and **end-users (BCASA)**, had a very positive impact on the outcomes

Actionable Insights

- Close collaboration with the end-users is critical (we had it here)
- Reduction of reporting (short progress reports)
- Making the demos more open to potential stakeholders (investors)
- Simplify the management process
- Supporting mechanisms to bring the innovations to the market (?)



Impact of Work Conducted

Exploitable Foreground (TRL7)

- SIAR Robot System
- Communication System
- Inspection Software
- Localization in Sewers/Tunnels Software

SIAR as a Product/Service

 SIAR is not only a robot for the inspection of sewers, it is also a robot with potential for use in a large number of underground galleries and other scenarios where its specifications will be a differentiating factor.





Business Opportunities

• IDMind is currently defining the strategy for the exploitation of SIAR (spin-off of the technology, talking to potential investors)



SIAR

Improving Efficiency

Reducing Risks



Thank you. Paulo Alvito