Improved Robotic Platform to perform Maintenance and Upgrading Roadworks: The HERON Approach

Grant Agreement Number: 955356

D2.2: Architecture Specification

Work package	WP2: End-Users Requirements, Metrics and System Design
Activity	Task 2.2 - Design of the overall system architecture
Deliverable	D2.2: Architecture Specification
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Executive Summary

This report is written in the framework of WP2 - End-Users Requirements, Metrics and System Design of HERON project under Grant Agreement No. 955356.

This deliverable provides a detailed description of the HERON platform architecture. It includes the definition of the different modules/tools to be developed in Work-Packages (WPs) 3-7, namely the components related to the User Interface, i.e. the Incident Management System (IMS), the Decision Support System (DSS) and the Augmented Reality (AR) app, the Sensing Interface & Artificial Intelligence (AI), the Middleware & Data Fusion, the Secure Data Communication module, and the Robotic System with the UGV / UAV Sensors and UGV Actuators. Moreover, the steps of a generic road maintenance use case supported by HERON are presented, aiming to clarify the various components involved in each step.

The Deliverable is the outcome of Task 2.2 and has been authored with contribution from all technical partners of the HERON project.