




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

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D1.3: Societal Impact Report (version 1)

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Table of Contents

TABLE OF CONTENTS	3
LIST OF TABLES	3
ABBREVIATION LISTS	3
EXECUTIVE SUMMARY	4
1 INTRODUCTION	5
1.1 PURPOSE OF THE DOCUMENT	5
1.2 INTENDED AUDIENCE	5
1.3 INTERRELATIONS	5
2 SOCIETAL IMPACT	6
3 GENDER IMPACT	6
4 ETHICS	6
5 CONCLUSIONS	7

List of Tables

Table 1: Abbreviations of the Partners' names	3
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Abbreviation Lists

Table 1: Abbreviations of the Partners' names

Short name	Participant organization name
ICCS	Institute of Communications and Computer Systems
ACCI	Acciona Construcción S.A.
OLO	Olympia Odos Operation S.A.
UGE	Université Gustave Eiffel
ETHZ	Eidgenössische Technische Hochschule Zürich
ROB	Robotnik Automation
CORTE	Confederation of Organisations in Road Transport Enforcement
STWS	SATWAYS - Προϊοντα Kai Υπηρεσιες Τηλεματικής Δικτύων Kai Τηλεπικοινωνιακών Εφαρμογών Εταιρία Περιόρισμενής Εφθίνης ΕΠΕ
RISA	RisaSicherheitsanalysen GmbH
INAC	InnovActs
IKH	Ainoouchaou Pliroforiki SA -IKnowHow-
RG	Resilience Guard GmbH

Executive Summary

This deliverable report contains the status of the project and the issues as concern the societal, gender, and ethical impact of the HERON project's activities and impacts. The document will be updated at the end of the project based on the feedback received from the system deployment and trialing activities.

1 Introduction

1.1 Purpose of the Document

The main purpose of this deliverable is to report on issues as concern the societal, gender and ethical impact on the HERON. The document will be at the end of the project based on the feedback received from the system deployment and trialing activities.

1.2 Intended Audience

The document's target is the HERON consortium partners, as it will act as a roadmap for addressing any potential issues that arise from monitoring the project's societal aspects.

1.3 Interrelations

This deliverable interacts with all other project activities, and is used by all the partners of the HERON project.

2 Societal Impact

The field of HERON, which focuses on the better management of road infrastructure, is a domain that avoids controversies within civil society. With roads deteriorating and the combination of climate change and limited budgets for maintenance, any initiative aimed at improving the situation is usually welcomed.

The vulnerability of civil engineering structures is becoming a significant concern, even more so than the roads themselves. Instances like the incidents in Genova and Northern Greece have highlighted the accelerated aging of infrastructures. This acceleration can be attributed to climate change, which brings about increasingly disastrous situations like storms and floods, both in frequency and intensity. Additionally, the dramatic increase in heavy traffic (particularly trucks) has placed an unforeseen strain on the infrastructure. HERON offers solutions that provide more frequent updates on the status of roads, as well as an automated system for fixing such issues. Data used for this monitoring and intervention operations do not track any personal information. Data used for system training and information regarding the operation of the system are stored in adherence with all best policies.

Unmanned aerial vehicles (UAVs) equipped with cameras and Lidar instruments are employed to detect anomalies or changes in various elements of the road infrastructure. It is important to note that the UAVs do not capture images of cars or individuals that could lead to identification or tracking. With strict adherence to safeguarding citizens' privacy, UAVs are generally well-received and often considered intriguing to observe in flight.

HERON's systems, introduce real-time capabilities for monitoring road infrastructure and making necessary decisions. The system exclusively processes data that describes the condition of the road infrastructure, without involving any personal information. Overall, the project brings added societal value to transportation and travel.

3 Gender Impact

HERON's efforts are in the field of road infrastructure monitoring and as such the project is totally gender-neutral. The project team however continuously monitors gender issues and pushes for an equal share between genders.

4 Ethics

As described in the deliverables D10.1-D10.3, all the measures have been taken to avoid any ethical issues. The images that have been collected and stored until now are:

- Without any person on it (pictures of the RI components),
- Or pictures of the consortium members that agreed on the use of them for dissemination purposes.

So, in a nutshell, until now, no ethical issue has been raised in HERON.

5 Conclusions

The present document discusses the impact of HERON from a societal, gender, and ethical perspective. As a project, HERON is gender-neutral and monitors all ethical aspects through a dedicated WP. Moreover, innovations towards the project's general objectives are usually welcomed societally.