



EGNSS-enabled Smart Road Infrastructure Usage and Maintenance for increased energy efficiency and safety on European road networks



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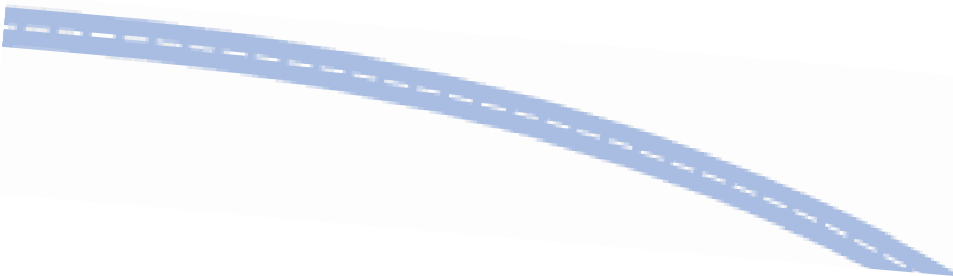
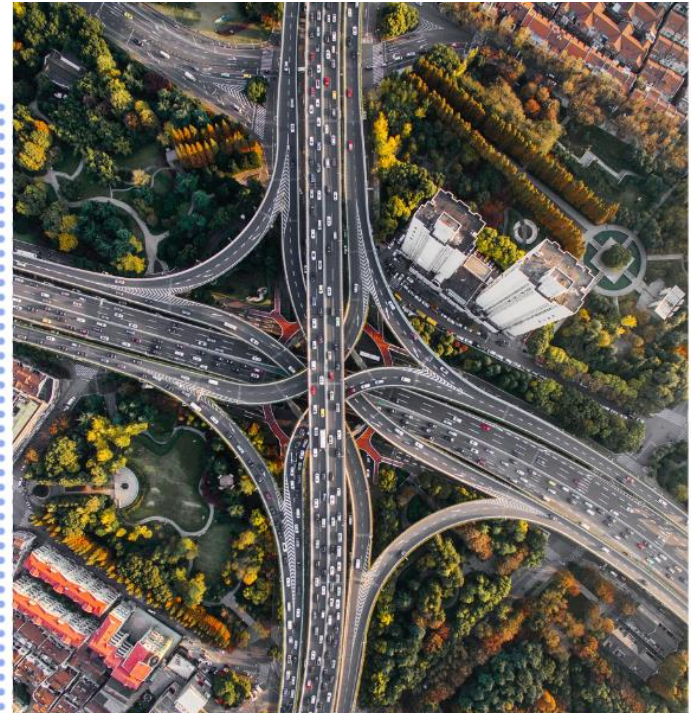
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OUR MISSION

Our key innovation is an EGNSS-based data platform. Our innovative digital road wear map will generate routing recommendations in-lane and cross-lane based on

- ✓ Road damage locations
- ✓ Road damage type
- ✓ Recent repair interventions
- ✓ Prediction on the temporal evolution of road damages depending on environmental and traffic conditions



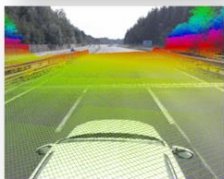
Technical Challenge

Cost Efficient Data Acquisition



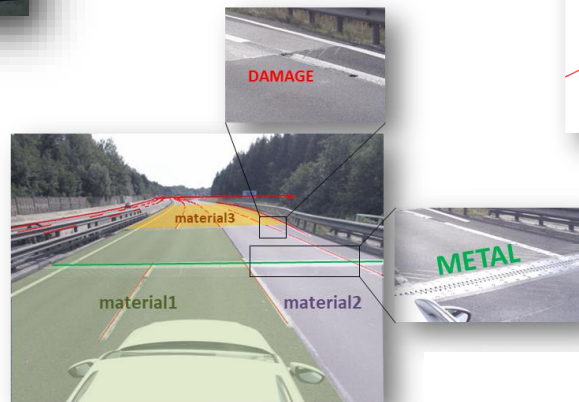
(a)

Lane Data Capture



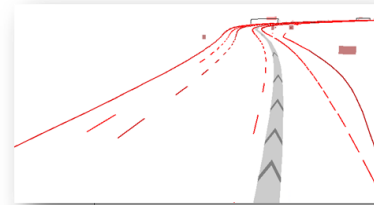
(b)

Detection of Damages and Changes



(c)

Communication of Driving Recommendations for Automated Vehicles



(d)

Reduced Road Wear



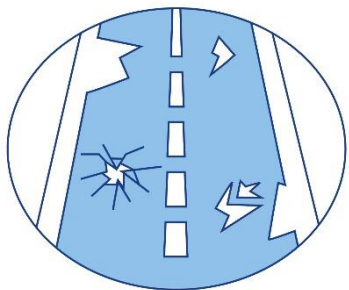
Optimized Maintenance



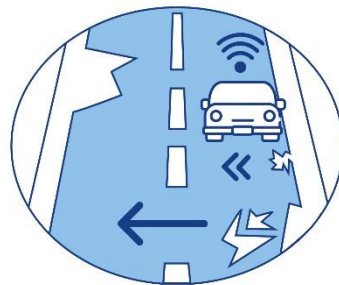
(e)

ESRIUM BUSINESS
USE CASES

Business Use Case 1:
AI-based Road damage
Prediction System



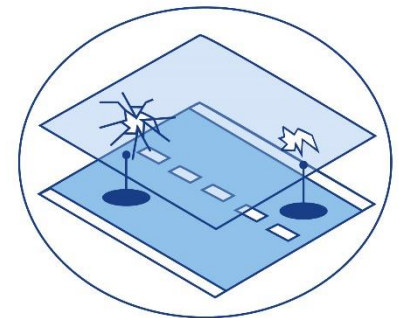
Business Use Case 2:
Routing
Recommendations
based on the road wear
map, provided via C-ITS
messages



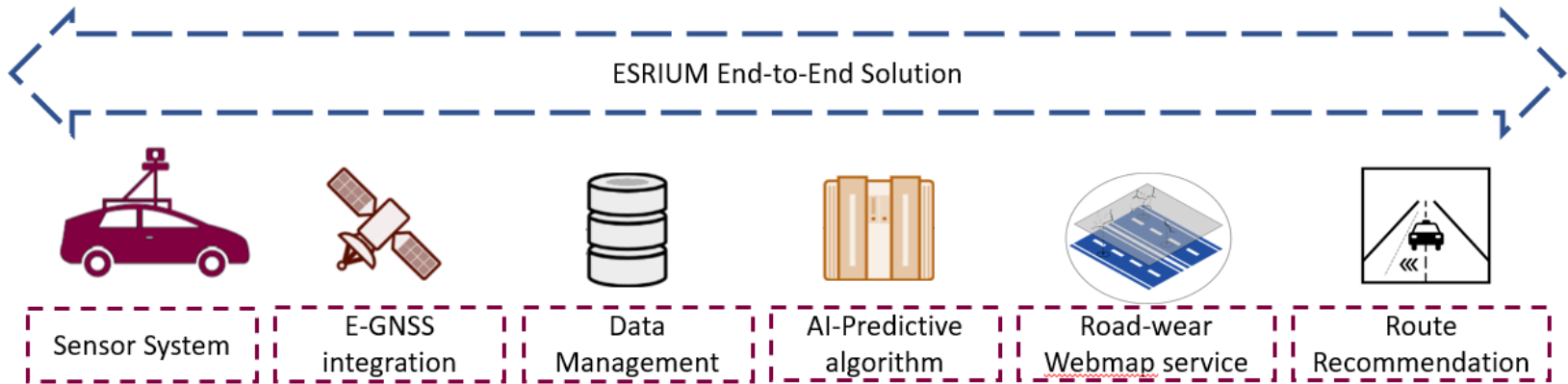
Business Use Case 3:
C-ITS Message 'GNSS-
correction data'
provision



Business Use Case 4:
Wear-map content
provision



Products and Services





Contact

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