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Consortium:

Three SMEs from Greece



TERRAPIN

A RIMA Network experiment to perform predictive maintenance and manage damages in wastewater and water supply networks

Interested to know more?



<https://terrapi.pro/>





Underground water pipe inspection is expensive, time consuming & manpower intensive.



Robotic underground water pipe inspector

Motivation



Water Loss

The annual global water loss, due to leakages, is 25 billion cubic meters



Pollution

Untreated sewage escapes aged pipes leading to severe environmental implications



Cost

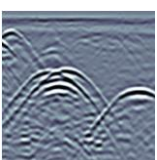
Damages on water main breaks can range from \$100 to \$500.000

TERRAPIN will

- Provide a novel robotic solution for trenchless water pipe inspection to automate the inspection at lower costs.



- Provide accurate & cost-effective methods to monitor & assess the condition of underground pipes.



Way to success

More precisely TERRAPIN will develop:

- An AI algorithm for leak detection in underground pipes, without shutting down the water supply
- An AI model for material ageing analysis of the pipes

TERRAPIN will optimize the water leak management by combining:

- Surface Operating Rover
- Structured Navigation
- Pipe & Leakage Detection
- Material Degradation Modelling

