



## A new era in Healthcare system

AI-DRIVEN EVOLUTIONARY COMPUTATION GIS INTEGRATION

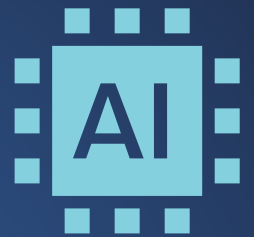
NEWSLETTER #1, MAY 2024 – 2025

### PARTNERS



# OVERVIEW

Ambulance response times and emergency call center triage procedures are two of the primary variables influencing the situations that ambulance services address. The optimization of ambulance fleet handling and the enhancement of a relevant department's response times are the primary goals of this proposal. The exact placement of ambulances has a critical role in establishing how quickly an event is handled. The time that elapses between receiving an emergency call and the ambulance arriving at the scene is included in this response time. The evaluation of ambulance service providers is conducted by regulatory bodies and centers on their capacity to achieve and exceed these critical response times, which can vary based on local conditions and available resources (Van Barneveld et al., 2016). Cyprus is used as an example case study.



## OUR GOAL

Among the project's goals is the creation of novel approaches to health services administration and digital health. Our goal is to improve healthcare management and decision-making processes by utilizing cutting-edge technology such as artificial intelligence, big data, and the Internet of things.



With the help of the State Health Services Organization's Ambulance Department and its expertise in Emergency Health Care Support, as well as the successful collaboration and integration of the strengths of the ERATOSTHENES Centre of Excellence for Geographical Information Systems, the eHealth Lab at Cyprus University of Technology for electronic health systems, and STREMBLE Venture LTD as a successful SME in the eHealth market.



Our goal is to usher in a new era of effectiveness, responsiveness, and communication in the healthcare system, which will ultimately lead to better public health outcomes and overall life quality.



# SmartPLAIGO through 2024

## SmartPLAIGO Project Launched to Revolutionize Ambulance Services in Cyprus

The newly funded SmartPLAIGO project, led by Dr. Maria Anastasiadou of Eratosthenes CoE, officially launched with €600,000 in funding from the Research and Innovation Foundation. This groundbreaking initiative aims to improve emergency healthcare in Cyprus by using AI algorithms and GIS technology to optimize ambulance routing and resource allocation. In collaboration with Cyprus University of Technology, Stremble Ventures Ltd, and the State Health Services Organization, SmartPLAIGO is set to enhance response times and the overall efficiency of public health services.



## SmartPLAIGO Gains Public Attention on RIK Radio



The SmartPLAIGO project, coordinated by the Eratosthenes Centre of Excellence, continues to draw significant interest as it aims to optimize ambulance routing in Cyprus using AI and GIS technologies. Dr. Maria Anastasiadou discussed the project's goals and impact during an interview with journalist Despina Roussou on RIK's "Morning Routes" program.

[Listen to the interview excerpt](#)

## SmartPLAIGO Technical Meeting Sets Roadmap for Innovation



The SmartPLAIGO team recently held a successful technical meeting to align objectives and plan next steps. The session focused on AI-driven modeling, Evolutionary Computation, and GIS integration to optimize ambulance dispatch operations and dynamic systems. This milestone meeting reinforced the project's commitment to enhancing emergency healthcare efficiency in Cyprus and beyond through cutting-edge technologies.



# Cyprus Showcases SmartPLAIGO and AVARIS for Next-Gen Emergency Care

On December 2nd, the State Health Services Organization (OKYPY) signed three collaboration protocols with the Cyprus University of Technology, marking a major step forward in emergency healthcare. During the event, the AVARIS system which is developed by CUT's eHealth Lab, was unveiled to support pre-hospital care. Also, presented was the SmartPLAIGO project, an AI- and GIS-enhanced evolution of AVARIS focused on improving ambulance response and routing. The event concluded with the reveal of a tech-equipped ambulance, symbolizing the future of emergency care in Cyprus.



## SmartPLAIGO Showcased at National Science Conference

At the 12th Student-Teacher Conference on Science (March 14–16, 2025), Dr. Maria Anastasiadou from the Eratosthenes Centre of Excellence presented SmartPLAIGO, promoting the use of AI and GIS to improve emergency response in Cyprus. Her talk showcased how real-time data and predictive modeling can optimize ambulance dispatching and enhance patient care, sparking interest in AI's role in healthcare.



## SmartPLAIGO Presented at RSCy2025 Conference

At the RSCy2025 Conference, Stelios Mappouras from the eHealth Lab at the Cyprus University of Technology (CUT) presented SmartPLAIGO, a next-generation system for optimizing ambulance dispatch using AI, real-time data, and GIS. Built on the AVARIS platform developed by the eHealth Lab, the project enhances emergency response through intelligent routing and predictive modeling. Funded by the Research and Innovation Foundation, SmartPLAIGO is a collaboration between CUT's eHealth Lab, Stremble Ventures Ltd, the ERATOSTHENES Centre of Excellence, and the State Health Services Organisation (OKYPY).





# SmartPLAIGO



[info@smartplaigo.eu](mailto:info@smartplaigo.eu)



[www.smartplaigo.com](http://www.smartplaigo.com)