

DARLENE

Deep AR Law Enforcement Ecosystem



About DARLENE

DARLENE is a three-year EU funded project investigating how cutting-edge augmented reality (AR) technology can be deployed to help law enforcement agencies (LEAs) and first responders make more informed and rapid decisions especially in situations where time is of the essence.

The project aims to develop innovative augmented reality (AR) tools in order to improve LEAs' situational awareness when responding to criminal and terrorist activities. DARLENE will combine innovative AR smart glass technology and powerful computer vision algorithms with 5G network architectures to allow agile processing of real-time data by LEAs even in high-pressure situations.

The project will also carry out an integrated ethical, data protection and social impact assessment of augmented reality tools in order to ensure compliance with ethics requirements and build public trust for the lawful use of technology.

STRATEGIC OBJECTIVES

1

Achieve (near-) real-time semantic segmentation to overlay useful information on top of the real-world through the AR glasses and enable detection of objects and events without facial recognition technology

2

Enable officers to see the locations of people inside buildings and highlight additional information to reduce friendly fire casualties and threats

3

Demonstrate 5G systems in security-based field trials

4

Develop a personalized Heads-Up Display (HUD) framework, maximising DARLENE impact on situational awareness enhancement

5

Develop a robust legal and ethical framework for the DARLENE eco-system to ensure compliance and sustainability of the innovation with all relevant regulations and ethics principles

6

Disseminate the results of the project widely, on national, European and international levels

