PRESS RELEASE

HIDDEN: A New EU Project Aims to Improve Urban Mobility by Helping Vehicles 'See' the Unseen

Athens. 25 August 2025. A new EU-funded project— **HIDDEN (Hybrid Intelligence for Advanced Collective Perception and Decision Making in Complex Urban Environments)** officially launched on July 8th, in Athens. Its mission? To make European cities safer by enabling automated vehicles better detect what they currently can't see— pedestrians, cyclists, and other road users hidden behind obstacles.

Coordinated by the Institute of Communication and Computer Systems (ICCS) and funded by a grant of approximately €5 million under Horizon Europe's Cluster 5, HIDDEN is supported by the Connected, Cooperative and Automated Mobility (CCAM) Partnership. Over the next 36 months, the project will bring together 14 partners and 2 affiliated entities across 7 EU countries to tackle a key challenge in urban mobility: occlusions. In bustling city environments, parked cars, buildings, and even vegetation can obstruct a vehicle's sensors, creating blind spots, that pose serious risks, especially for vulnerable road users (VRUs) like children, cyclists, or road workers. Current detection systems often struggle in such scenarios, with VRU recognition rates dropping below 65% when individuals are fully occluded.

HIDDEN addresses this challenge by leveraging and enhancing Collective Awareness using Vehicle-to-Everything (V2X) communication —where vehicles and infrastructure share sensor data – and artificial intelligence. This allows vehicles to build a more complete picture of their surroundings, collectively interpreting data from other vehicles, infrastructure, and even road users to see beyond what their own sensors can detect. What truly sets HIDDEN apart is the use of **Hybrid Intelligence (HI)**—a fusion of human and machine intelligence. This approach allows automated vehicles to not only detect hidden objects but also make decisions that are ethically and legally grounded and aligned with human behaviour.

"HIDDEN goes beyond conventional AI," said **Dr. Angelos Amditis**, **HIDDEN Coordinator and R&D Director at ICCS**. "We're bringing human judgement into the loop—so automated systems can act not just accurately, but wisely. By blending the precision of machines with human context, awareness, and ethics, we aim to make urban transport not only smarter but also safer and more socially attuned.

To test its approach, HIDDEN will focus on four high-risk urban scenarios: a child running from behind a parked car, a cyclist in mixed-traffic zones, a road worker obscured by vegetation, and a vehicle hidden at

an unsignalised intersection. Each case reflects complex, real-world challenges where improved perception and ethically grounded decision-making could prove life-saving.

Beyond technical performance, HIDDEN's CCAM systems are being designed to reflect human driving styles, uphold ethical standards, and meet emerging regulatory requirements. The project will also work closely with stakeholders, including EU type approval bodies and UNECE working groups, to align its results with future standards and policy development.

HIDDEN brings together a diverse group of partners with complementary strengths. The consortium includes leading research institutes and universities, SMEs specialising in AI and machine learning, major players in the automotive sector, type approval authorities, social science researchers, and industry associations involved in standardisation. This multidisciplinary team ensures that technical development is informed by real-world needs, regulatory insight, and a strong understanding of human and social factors—covering the full path from research to implementation.

At LIBRA AI Technologies, we are leading the technical management of the HIDDEN project, ensuring seamless coordination across work packages and alignment with project goals. Our main contribution focuses on developing an advanced AI-based system for driver gaze tracking and status monitoring, using dual cameras and visual transformer models. By integrating this human-centric data into the collective awareness system, we aim to enhance automated vehicles' perception and decision-making in complex urban environments, making them safer, smarter, and more responsive to real-world scenarios.

HIDDEN isn't just about developing smarter vehicles—it's about building trust, aligning technology with human values, and paving the way for safer streets in cities across Europe.

Editor's Notes

HIDDEN (Hybrid Intelligence for Advanced Collective Perception and Decision-Making in Complex Urban Environments) is a Horizon Europe research and innovation project focused on advancing urban mobility through safer, smarter, and more ethical automation. At its core, HIDDEN develops collective awareness systems that enable connected and automated vehicles to detect occluded objects and vulnerable road users in real time. Using hybrid intelligence, the project combines machine with human intelligence to support decision-making that aligns with human driving styles and ethical principles. HIDDEN also addresses the legal, regulatory, and ethical challenges of AI in mobility, ensuring transparency and trust in how decisions are made. Field tests across Europe and

virtual simulations will validate the technology in real-world scenarios. Through close collaboration with type approval authorities, standardisation bodies, and key stakeholders, HIDDEN aims to set new benchmarks for safe and socially responsible autonomous mobility in complex urban settings.

HIDDEN is part of the CCAM Association and falls under Cluster 5 within the Key Enabling Technologies family. The project addresses the topic "AI for advanced and collective perception and decision-making for CCAM applications.

Project Coordinator	**Dr. Angelos Amditis, R&D Director** **Institute of Communication & Computer Systems (ICCS)**
Project Duration	36 months 1 July 2025 – 30 June 2028
Project No	101202228
EU funding	€4,997,139.75 (HORIZON-CL5-2024-D6-01-04) **Granting Authority:** European Climate, Infrastructure and Environment Executive Agency (CINEA)
Website	https://www.hiddenproject.eu/
Social Media	LinkedIn: @HIDDEN EU PROJECT YouTube: @HIDDENEUProject
Partners	**Partners:** 14 partners and 2 affiliated partners from academia, industry, and research across 7 EU countries. 1. **EREVNITIKO PANEPISTIMIAKO INSTITOUTO SYSTIMATON EPIKOINONION KAI YPOLOGISTON (ICCS)** (Greece) 2. **LIBRA MLI LTD (LIBRA)** (United Kingdom) 3. **FUNDACION PARA LA PROMOCION DE LA INNOVACION INVESTIGACION Y DESARROLLO TECNOLOGICO EN LA INDUSTRIA DE AUTOMOCION DE GALICIA (CTAG)** (Spain) 4. **TECHNISCHE HOCHSCHULE INGOLSTADT (THI)** (Germany) 5. **ALBERT-LUDWIGS-UNIVERSITAET FREIBURG (UFR)** (Germany) 6. **TECHNOLOGIKO PANEPISTIMIO KYPROU (CUT)** (Cyprus) 7. **MOSAIC FACTOR SL (MOS)** (Spain) 8. **DENSO AUTOMOTIVE DEUTSCHLAND GMBH (DENSO)** (Germany) 9. **USTAV INFORMATIKY AV CR (UI)** (Czech Republic) 10. **TUV SUD CZECH S.R.O. (TUV)** (Czech Republic) 11. **RENAULT ESPANA SA (RENAULT)** (Spain) 12. **UNIVERSITAT POLITECNICA DE VALENCIA (UPV)** (Spain)

13. **SEABILITY INNOVATIONS IKE (SEAB)** (Greece)
14. **SAE GROUP EUROPE BV (SAE)** (Netherlands)
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