

February 2023

AWARD has launched a new autonomous logistics use case in Gunskirchen, Austria, which will test an automated swap-body truck manufactured by KAMAG and equipped with EasyMile driverless technology. The aim of the testing is to demonstrate the vehicle's capabilities in a hub-to-hub logistics scenario, and it is one of four planned demonstrations within the AWARD H2020 project. The aim of these use cases is to demonstrate the autonomous vehicles working in all weather conditions and addressing challenges related to the deployment of vehicles in real logistics operations through several strategic demonstrators that meet market needs, from the factory to logistics hubs.

Led by consortium partner Digitrans, with support from other consortium partners BRP-Rotax, DB Schenker, Kamag, Easymile, AustriaTech, Conti and LCM, the Hub-to-hub autonomous logistics use case seeks to showcase the use of autonomous heavy-duty vehicles in extended on-road driving scenarios. These scenarios include crossing public roads and areas, factory areas, and logistics hubs.

To improve the KAMAG vehicle's capabilities, it will be upgraded with EasyMile's Autonomous Vehicle Technology, which will enhance its traffic simulation, communication, and obstacle detection abilities. The demonstration will take place in eight phases, starting with a use case specification and technical modifications to the test vehicle, and culminating in the deployment of a fully autonomous vehicle without a safety driver.

The AWARD team is committed to working closely with regulators, industry stakeholders, and other partners to ensure the safe and responsible deployment of this technology. The project represents a significant step towards the deployment of autonomous vehicles on public roads. To demonstrate such capabilities, KAMAG vehicle will drive autonomously on public roads from ROTAX to DB SCHENKER plants in Austria. The AWARD team has conducted functionality tests on the vehicle and will be performing obstacle perception and vehicle localization tests to ensure that it operates safely and reliably. By demonstrating the capabilities of the AWARD autonomous driving system, the project hopes to contribute to the wider adoption of this technology in logistics operations.

Project background:

AWARD project, is an H2020-funded project by the European Commission, aiming to enable a safe and efficient connected and autonomous logistic chain through heavy-duty vehicles in real logistics operations. The project is developing and operating safe autonomous transportation systems (ATS) in a wide range of real-life logistic use cases, in a variety of different scenarios. The AWARD consortium members, from 12 different countries, are leading companies and innovative, growing ones recognized for their real-world applications and expertise, as well as research organisations. This maturity and mix pave the way for the replicability and sustainability of project results.





They include:

Heavy-duty vehicle manufacturers

- KAMAG, Worldwide leader for Swap body trucks
- Kion, Worldwide Material handling vehicles provider
- Terberg, manufacturer of special vehicles and worldwide leader of yard and terminal trucks for ports, industry, and distribution centers
- TLD Group, worldwide leader for airport ground support equipment and Smart Airport Systems (SAS)

Automated driving technology suppliers

- Continental, one of the biggest automotive suppliers and expert on automated driving technologies
- ADASKY, the leading developer and manufacturer of advanced high-resolution, thermal perception systems
- Navtech Radar, world-leading manufacturer of High-Definition-Imaging Radar Solutions
- Foresight, world expert in multispectral automotive vision systems and sensor fusion

Fleet supervision and teleoperation

- Applied Autonomy, leading provider of Smart Fleet Management systems for connected autonomous vehicles
- Ottopia, delivering safe teleoperation

Research organizations

- CEREMA, expert in characterizing weather-related parameters in fog and rain
- Linz Center of Mechatronics
- AIT Austrian Institute of Technology
- VTT, validation of automated driving functions and sensors in arctic conditions
- University of Applied Sciences Upper Austria Department of Logistics

Companies involved in demonstrations of Autonomous Road Transport (ART) Autonomous Transport Systems

- DFDS
- Rotax (factory)
- Avinor (airport)
- DB Schenker
- AustriaTech





Consulting companies

- ENIDE, delivering digital solutions for sustainable mobility and logistics
- Testregion and Proving Ground: DigiTrans
- Certification and regulatory bodies: CERTX, FRACS-STACS
- National and international organizations with close links to the automotive and logistics industries: CARA European cluster for mobility solutions and Business Upper Austria, Automobil Cluster Upper Austria

Certification and regulatory bodies:

- CertX: Accredited functional safety and cyber security certification body for safe and secure automated and autonomous systems worldwide.
- FRAC-STACS

Membership Organization

- ITS Norway
- IRU Projects works closely with IRU, the world road transport organisation, by upholding the interests of commercial road freight and passenger transport operators

You can follow AWARD on Linkedin and Twitter to keep updated with its next developments.

Project Factsheet

Duration: 1 January 2021 - 31 December 2023

Coordinator: EASYMILE

Partners: CONTINENTAL TEVES AG & CO. OHG, KAMAG TRANSPORTTECHNIK GMBH & CO.KG, TERBERG

BENSCHOP BV, SMART AIRPORT SYSTEMS, DEMATIC, DFDS AS, CENTRE D ETUDES ET D EXPERTISE SUR LES RISQUES L ENVIRONNEMENT LA MOBILITE ET L AMENAGEMENT, TEKNOLOGIAN TUTKIMUSKESKUS VTT OY, AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH, APPLIED AUTONOMY AS, DIGITRANS GMBH, ENIDE SOLUTIONS .S.L, IRU PROJECTS ASBL, ASSOCIATION CARA, NAVTECH RADAR LIMITED, BUSINESS UPPER AUSTRIA - OO WIRTSCHAFTSAGENTUR GMBH, ITS NORGE-NORSK FORENING FOR MULTIMODALE





INTELLIGENTE TRANSPORT SYSTEMER OG TJENESTER - ITS NORWAY, LINZ CENTER OF MECHATRONICS GMBH, FH OO FORSCHUNGS & ENTWICKLUNGS GMBH, AVINOR AS, ADASKY LTD, FORESIGHT AUTOMOTIVE LTD, BRP-ROTAX GMBH & CO KG, CERTX AG, OTTOPIA TECHNOLOGIES LTD, AUSTRIATECH - GESELLSCHAFT DES BUNDES FUR TECHNOLOGIEPOLITISCHE MASSNAHMEN GMBH, SCHENKER & CO AG, FRANCE AVIATION CIVILE SERVICES.

Contact

Project Coordinator: Inès Guth, EasyMile

ines.guth@easymile.com

Dissemination Coordinator: Francesc Rosinés, ENIDE

francesc.rosines@enide.com

Website: https://award-h2020.eu/

LinkedIn: AWARD-H2020

Twitter: @award_h2020