

AITEC SERVICE OFFER

FOR H2020 PROJECTS

AITEC can make impactful contributions to help your project meet the Digitalization of Transports call objectives.

DT-ART-03-2019

Human-centered design for the new driver role in highly automated vehicles

AITEC knowledge in impact assessments for safety aspects and Behavior Based Safety (BBS) can tackle the need for “effectiveness assessment methods, especially for safety aspects” that are required in the topic.

DT-ART-04-2019

Developing and testing shared, connected and cooperative automated vehicle fleets in urban areas for the mobility of all

AITEC has a deep knowledge in User-driven innovation techniques. AITEC has developed a specific methodology called the Implementation Acceleration Methodology for ICT (IAM-ICT). This methodology uses User-Driven Innovation (UDI) techniques to facilitate the identification of acceptance barriers that hinder acceptance by specific user groups (e.g. elderly, youth, users with disabilities), and their prioritization using mathematical methods. This methodology could be applied to identify “specific user needs in different regional and operating environments and for different user groups” as mentioned in the topic.

DT-ART-05-2020

Efficient and safe connected and automated heavy-duty vehicles in real logistics operations

AITEC can contribute towards the achievement of this topic with its knowledge in safety issues for the storage and transport of dangerous goods (by road, rail, water and air) and with the knowledge in current ICT solutions and acceptance barriers for a connected door-to-door freight transport.



AITEC



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AITEC-INTL

Digitalization of Transport

We innovate with you



AITEC IN A NUTSHELL

AITEC is an **R&D performing SME** established in 2002 with the aim to increase the innovation capacity, technology level, and competitiveness of companies in the industrial sector. In 2016, AITEC obtained the stamp of innovative SME, granted by the Spanish Ministry of Economy and Competitiveness.

AITEC is expert in the management of R&D projects in the field of **transport, mobility and logistics**, with relevant experience in **safety, security, environment and CSR**. Several **digitalization solutions** applied to the **transport system** have been developed by AITEC, as for example digital solutions to manage the transport of dangerous goods.

AITEC is **active** in the **dissemination** of scientific results on peer-reviewed scientific journals and international conferences.

AITEC has a **network of contacts** around Europe (Finland, Bulgaria, etc...) and other third countries (China).

AITEC EXPERTISE AND SERVICES

Over the years, AITEC has developed **management software solutions for the digitalization of the transport** of dangerous goods, and **the optimization of port logistics** for a more efficient transport supply chain (from an economic, social and environmental perspective).

In addition, AITEC offers a variety of transversal services that are often instrumental in H2020 projects:

- **Environmental risk analysis.**
- **Corporate Social Responsibility protocols.**
- **Training programs** for the transport of dangerous goods (ADR, RID, IMDG).
- Training programs to improve safety and security in the road transport based on worker/driver's performance/behavior (**Behavior-Based Safety assessments**).
- **Multicriteria decision making methodologies** (e.g. Analytic Hierarchy Process [AHP]) for the prioritization of alternatives in order to help in the decision-making process.
- **Methodologies for the analysis of barriers** (technical, social and economic) **of new ICT technologies** in order to **improve user acceptance/uptake/adoption by stakeholders.**
- Application of new methodologies (e.g. ASSIST, Volere, AHP, Bayesian networks) to solve real problems in transport companies.
- **Corporate Social Responsibility (including gender issues).**
- **Methodologies to analyze citizen/user interaction with the transport sector** (i.e. infrastructure, private and public transport, vehicles, technology, etc.) from a holistic perspective including for example age, gender, degree of disability, culture or income level.
- **Cost Benefit Analysis.**
- **User-driven innovation techniques** (e.g. Delphi, Dynamic Argumentative Delphi, co-creation, workshops, serious play methodologies).

RELATED PROJECTS

AITEC has been involved in several projects dealing with **the digitalization of the transport sector**. The common objective of these projects is to have an efficient and sustainable freight transport that looks for a door-to-door integration of the different transport modes, including first mile, long distance and last mile in order to ensure a smooth and secure transport.



SEGUARTEC: is a disruptive and innovative ICT global solution for dangerous goods transport that includes online communication of all the agents involved in the supply chain: Shipper, Carrier, Loading and Unloading sites. It addresses the management of all the technical requirements related to the transport of dangerous goods. SEGUARTEC was funded by the Spanish government.



gADGeTs - Avanced tool for Dangerous Goods Transport: is an EUREKA labeled project. The aim of this project is to develop an innovative solution for the management, security and traceability of dangerous goods transport. The new solution integrates different technical disciplines in the dangerous goods supply chain for a minimal human intervention, increasing the safety, efficiency, synchromodality and interoperability of the parties involved, in order to achieve a truly integrated transport.



DIAMOND - Revealing actionable knowledge from data to support fair women's inclusion in transport systems: is a H2020 project (project number: 824326) which aim is to progress towards an inclusive and efficient transport system through an interdisciplinary analysis combining methods from social sciences and computer science, and the inclusion of gathered knowledge in a toolbox that will give recommendations on how to achieve fair inclusiveness for women in each of the identified use cases (railways and public multimodal transport, automated and interconnected vehicles, vehicle sharing, and corporate social responsibility and employment).

AITEC contribution to the project includes the development of the DIAMOND methodology for the analysis of data, digital questionnaires to obtain data from women and online consultation based on Dynamic Argumentative Delphi (DAD) method.