European Commission

TRIMIS

TRANSPORT RESEARCH AND INNOVATION MONITORING AND INFORMATION SYSTEM

D I G E S T

Issue 14
May 2020

e-ticketing

Subscribe to Free Bi-monthly Research Alerts

The contents and views included in the TRIMIS research digest do not necessarily reflect the position of the European Commission.

Read more about TRIMIS at:
https://trimis.ec.europa.eu

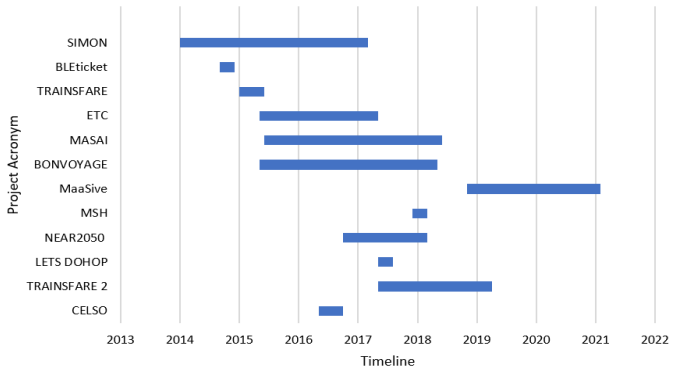
TRIMIS INSIGHTS

The TRIMIS database includes several EU-funded projects that focus on developing new or enhancing existing e-ticketing systems. Figure 1 presents the timelines of EU projects that directly or indirectly affect e-ticketing in transport.

Many projects focus on developing the communication system of mobile ticketing (such as BLEticket and CELSO). However, increasingly, projects aim to optimise e-ticketing application design and user interfaces for consumers (such as ETC, LETS DOHOP and BONVOYAGE). Rather than e-ticketing being the sole focus of many research programmes, it is incorporated as part of a wider transport project. In recent years, research projects (such as MSH, MaaSive and MASAI) have often focused on developing Mobility-as-a-Service (MaaS) systems, within which e-ticketing is an integral part.

More information on these projects, as well as more projects on aviation emissions, can be found on the TRIMIS website. One of these projects, TRAINSFARE, is highlighted below.

Figure 1: Projects related to e-ticketing (Source: TRIMIS)



Highlight: TRAINSFARE (Phase I and II)

Project period: January 2015 to June 2015 (Phase I) and May 2017 to April 2019 (Phase II).

TRAINSFARE targets the problem of fare evasion, which is one of the biggest challenges faced by public transport operators. Current approaches to address this issue are in the form of spot checks by ticket inspectors or fare verification at ticket barriers. TRAINSFARE has developed a tool that detects fraud at barriers and alerts ticket inspectors in real time via a mobile application, including identifying users who are 'tailgating'. Furthermore, the system can use its video stream to detect other situations such as vandalisms or theft.

Phase I conducted a feasibility study of the systems, while Phase II looked to develop the artificial vision technology to solve other safety and maintenance challenges. The effectiveness and potential applications of the system was recognised by the International Association of Public Transport (UITP) and nominated as a global finalist for the Operational and Technical Excellence Award (2015).
Website: https://silverstream.automotive.oth-aw.de/