

## STAPLE - SiTe Automation Practical Learning

**CEDR Programme:** Call 2017 Automation

**Project Duration:** 01.09.2018 – 31.08.2020

**Partners:** FEHRL (Coordinator; Belgium); AIT (Austria); ERICA (Portugal); IFSTTAR (France); Maple Consulting (UK); VTI (Sweden)

The overall aim of STAPLE is to provide a comprehensive review of technological and non-technological aspects of the most relevant connected and automated driving test sites in order to understand the impact of these sites on the NRA's core business and functions. This project will provide NRAs with the necessary know-how on connected and automated driving test sites, with the aim of supporting their core business activities, such as road safety, traffic efficiency, customer service, maintenance and construction.

The project will build on previous work by CEDR and others (EU and national level projects) as well as on FEHRLs test sites experience gained through various Scanning Tours organized in the recent years. Pre-existing knowledge will be combined with desk research and consultations with selected automated driving test sites to produce a comprehensive catalogue of the latest information and guidance on connected and automated driving test sites in Europe and beyond, with specific emphasis on NRAs' core business influence. STAPLE will bring together the results of other projects, initiatives and actions such as C-Roads, Vehicle Platooning or UK CITE and use them to identify how current test sites for connected and automated driving can be used to determine the key areas/priorities for NRAs and the impacts of these test sites on their business and operating processes. STAPLE will also embrace the results of these previous and current works via investigation of the key performance areas, where automated and connected driving test sites can influence NRAs operations in terms of new technologies to improve road safety, traffic efficiency, the environment, customer satisfaction, maintenance and construction processes.

A searchable catalogue of test sites, together with their current activities for future reference by NRAs will be produced as a result of this project. This online tool will provide reference information and guidance on what type of technologies are available and will help in identifying existing gaps of current and future operations of these sites as well as the implications for the NRAs core business areas. Additionally, a comprehensive assessment will be performed on additional considerations such as the NRA-related implications of SAE Level 3 and 4 automated systems on the network, roads with/without physical infrastructure, maintainability and construction as well as the need of roadside equipment. Governance issues and harmonisation of national ITS systems to achieve connected driving and infrastructure readiness for V2X/X2V applications will also be of concern for STAPLE. Lastly, roles and responsibilities of the different stakeholders at test sites and socio-economic assessment of the sites will be carried out to gain a full spectrum of test sites' performances and their influence on NRAs' business processes. Learning from the test sites will be handed over by the STAPLE consortium to the NRAs in the form of guidance, recommendations and interactive online catalogue supporting current and future decisions regarding achievement of such targets as zero fatalities, zero emissions, 24/7 availability, efficiency savings, reliability and environmental protection via automation of road transport.