Applying acceptability models to CCAM use cases in cross-border contexts: The 5G-MOBIX approach

Background

• The 5G-MOBIX is a project co-financed by the European Commission to “develop and test automated vehicle functionalities using 5G core technological innovations, along multiple cross-border corridors and urban trial sites”.

• The project will also evaluate the acceptability and acceptance of the developed solutions.

Goal

• To propose a self-assessment acceptability model to evaluate the CCAM use cases that will be trialed by the 5G-MOBIX project.

Proposed Acceptance Model

• Inspired on the Technology Acceptance Model (TAM; Davis, 1989) which explains acceptability of a technology based on the:
  - Perceived ease-of-use;
  - Perceived usefulness.

• Additional constructs derived from TAM extensions (e.g., Venkatesh & Bala, 2008).

• Additional constructs, relevant for automated driving (e.g., Zhang et al., 2019):
  - Perceived Safety;
  - Trust.

• The model (fig. 1) will be translated into a questionnaire for the participants taking part in the trials.

References


Fig. 1. 5G-MOBIX proposed acceptance model