

What are the potential road safety benefits of ADAS deployment in LMICs and what are the main barriers?



Problem description

The development and deployment of Adaptive Driver Assistant Systems, such as Adaptive Cruise Control (ACC), intelligent speed adaptation systems (ISA), and Lane-keeping systems (LKS), in motorized vehicles promises to improve traffic safety by gradually increasing the guidance role of vehicles. In-vehicle support may help drivers to behave safely in today's complex traffic situations. These technologies could therefore have a great potential of improving traffic safety in low and middle income countries (LMIC), where actually the majority of road fatalities and serious injuries occur worldwide. This is of major importance since the level of motorization in these countries is increasing rapidly and without proper actions traffic fatalities could increase. Despite the criticality of the situation, there is a clear knowledge gap in the literature regarding the potential road safety benefits of ADAS deployment in LMICs and the main barriers for large scale deployment and utilization of the vast developments of technologies that can improve traffic safety.

Assignment

- Review of the state-of-the-art on the safety benefits of different Adaptive Driver Assistant Systems and safety problems in LMIC;
- Conducting a survey on the developments in LMICs regarding ADAS, connectivity and the deployment of technological innovation for traffic safety improvements;
- Analysis of the potential traffic safety benefits of the deployment of selected ADAS and connectivity in LMIC;
- Analysis of the main barriers and the main opportunities for large scale safety targeted technological deployments in selected LMICs;
- Writing a thesis report (and optionally a scientific paper for an international journal);

Research group

Transport & Planning

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Information

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