Market uptake dynamics of self-driving trucks

The introduction of self-driving trucks could fundamentally change road freight transport. Research has shown that the costs for owning and operating self-driving trucks will be significantly lower than for conventional trucks. The adoption of self-driving trucks by actors in the freight transport sector will also be influenced by many other factors than costs. Furthermore, the introduction of self-driving trucks will likely also result in new business models for trucks and in that other types of actors will buy and operate trucks than today. Therefore, the adoption behaviour of several different types of actors and different self-driving truck applications require investigation.

**This aim of the thesis** is to research and describe the potential dynamics and behaviour of different actors for adopting self-driving trucks. The research in the thesis will be based on a mixed methods design combining qualitative research and modelling.

Some of the task in the project are:

* Study the existing literature on how actors in freight transport make decisions on investing in new vehicle technologies
* Perform interviews with relevant actors and stakeholders
* Describe the results in a system dynamics model structure that can be used for future research

**We seek one student or a team of two students** with a background in industrial economics or other appropriate field. The thesis requires an interdisciplinary approach and a successful self-organization in order to scope, organize and drive the work.

The thesis work is hosted by Integrated Transport Research Lab (ITRL) at KTH. The thesis is part of an [ongoing research project](https://www.itrl.kth.se/research/ongoingprojects/system-level-impacts-of-self-driving-vehicles-1.917929) about impacts of driverless vehicles in Sweden performed by Trafikverket, ITRL and VTI. Depending on timing and results, you may also have the opportunity to write a scientific paper based on your work.

**Your application, including CV and a short personal letter, is welcome via email to** Albin Engholm (ITRL) [aengholm@kth.se](mailto:aengholm@kth.se). Selection of thesis workers will be performed continuously. The starting date for the thesis is in January 2020 and the thesis work will be carried out during the spring semester of 2020.

**About Integrated Transport Research Lab ITRL**

ITRL is a research centre at KTH performing research on future’s sustainable mobility and transport from an integrated perspective. In our projects, we work both on a holistic level and with demonstrations and Living Labs. Our focus areas are Connected & Automated transport systems, Efficient transports and Mobility services. Scania and Ericsson are partners in ITRL. More information at: [www.itrl.kth.se](http://www.itrl.kth.se).