

Thesis, internship and additional thesis project opportunities

These opportunities are available to start from July/August – October 2022 for a variable length of time. Note, the sooner I hear from you, the better (even if you wish to start later).

Truck-platooning impacts on traffic

This is a unique opportunity to perform analysis on data from a real-life truck-platooning pilot that is being executed now (June and July 2022) in The Netherlands!

We want to understand what the effects are of a platoon of trucks driving in close proximity with CACC-technology on a number of different traffic related aspects. This includes the performance of the platooning and the individual trucks, but also their reaction to various different traffic state and circumstances, such as cut-ins, weavings sections and congestion. The data analysis will be supplementary analysis on top of the basic data-analysis by TNO.

Truck-platooning impacts on emissions reduction

This is a unique opportunity to perform analysis on data from a real-life truck-platooning pilot that is being executed now (June and July 2022) in The Netherlands!

Truck platooning is designed to reduce energy consumption and in turn emissions. We are looking to perform additional analysis on how the energy and emissions reduction compares for various different traffic circumstances during the pilot. For example, how much does a cut-in affect emissions, or do specific weaving sections have a greater or lesser effect, etc?

Reducing road traffic emissions to Schiphol with traffic management

Traffic management is often applied to improve traffic flow and safety. However, the reduction of emissions is often only a secondary indicator or is not included at all. We are part of an exciting project (with Schiphol and assisted by Rijkswaterstaat and the Prov of Noord-Holland) to develop knowledge and a strategy to apply traffic management, in its broadest sense, to optimise the reduction of emissions. To do this, we need to analyse existing hotspots and bottlenecks where high emissions exist. Also, evaluation of potential traffic management measures and interventions that can be applied to tackle these hotspots is required. This will eventually result in a list of scenarios that can be applied and/or further analysed in later research.

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