



## Driver anticipation for normal and automated driving

### Problem description

Driving vehicles at high speeds in close proximity should really be considered as rather dangerous, however many millions of kilometres are driven daily with a very limited number of accidents. Research has shown that human drivers are very good at anticipating and compensating for potentially dangerous traffic situations and errors by other vehicles, such that traffic can actually continue to perform in a very safe fashion. At this moment, this is only understood to a limited extent. Furthermore, with the introduction of automated vehicles (AV), this may be a point that could lead to problems if AV's are not able to anticipate to the same extent or human drivers fail to correctly anticipate actions of AV's.

### Objectives & Assignment

The main objective of this project is therefore to investigate how human drivers anticipate situations in traffic and how this may change with the introduction of AV's. This can include the performance of field testing and/or driving simulator experiments with participants to gain empirical insights. A recently developed concept of 'Anticipation Reliance' (AR) can be applied as an indicator of anticipation and for which parameter values can be derived from experiments.

This Master thesis may also include an internship with an external organisation.

### External support

TBD

### Information

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Rijkswaterstaat

