Applicability of self-explaining roads in Flanders on the basis of driving simulator studies

In this project the effect on driving behaviour and traffic safety in Flanders is investigated of:

1. gate constructions at the border of thoroughfares and curviness of the road in thoroughfares,
2. advisory bicycle lanes,
3. coloured road sections at intersections.

These recognisability characteristics should support the recognition of the road environment and thereby traffic safety; but studies state that a positive effect on the recognisability of the environment doesn’t always coincide with positive road safety effects. Driving simulator studies, fieldwork and accident analysis will examine to what extent these characteristics influence the driver’s information processing and behaviour, whether the driver’s behaviour is in accordance with the desired behaviour, and the positive and negative effects of these characteristics on road safety. The analysis of measures related to drivers’ performance, attention level and visual search behaviour will provide information about the different stages of information processing. On the basis of these results, recommendations will be made which could influence the application of these low-cost characteristics in Flanders and hopefully result in a better road safety and the reaching of the ambitious road safety targets.

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