

Field of Intelligent Infrastructure

Status: June 2021

Safe Motorway Exit for Road-Side Checks

Initial Situation / Motivation

During checks of vehicles on motorways (e.g. by the Federal Office for Goods Transport (Ger.: Bundesamt für Güterverkehr - BAG)), vehicles are currently diverted "manually" by inspectors. In order to improve work safety for inspectors and traffic in general, the current procedure is to be replaced by a technical method to divert vehicles.

Measure Goal

The aim of this measure was designing and testing a safe and efficient motorway exit method for BAG road-side checks.

Measure Implementation

In order to make motorway exits safe for road users, a largely automated diverting method has been used. Camera technology, an LED motorway exit display and a control station were used for this purpose.

In a first step, five control stations have been set up and tested in Germany. The PWC Sophienberg (FR Nuremberg) south of Bayreuth has served as a "pilot facility", where the outdoor installations, the software and the practical application were realised and tested first.

At this pilot facility, among other things, the main focus was evaluating how truck drivers react to the displays and whether the illuminated signs are interpreted correctly.



Source: TUM

Picture: Exemplary motorway exit display with a test configuration in front of the PWC Sophienberg

Current Status

The five control stations are currently completed and in operation. The results of the evaluation have shown that the system is rated positively overall by BAG employees and truck drivers. Furthermore, optimization approaches and aspects could be worked out and pointed out, which should be taken into consideration for a future implementation.



Source: Bavarian Street Information System (BAY-SIS)



Locations

Operational kilometre 310.4: A9 PWC Sophienberg

Additional Locations:

- A1 PWC Ellerbrook
- A2 PWC Allenstein
- A3 PWC Theißtal
- A10 PWC Schieferberg

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