



# THE SMART CONSTRUCTION SITE TRAILER

Up to now, various warning sign trailers (so-called "construction site trailers") which had to be controlled on site have been used on European motorways. AIT experts have now developed a smart trailer together with EBE Solutions GmbH – a remotely controllable pre-warning trailer equipped with appropriate sensors which helps to make the high-level road network safer.

# SAFE CONSTRUCTION SITES ON EUROPE'S MOTORWAYS

The trailers adapted by us serve to record the current traffic situation, in particular at construction sites on motorways.

The trailers are able to provide information on their exact location and the current display of the respective trailer as well as to generate sensor data and current travel times. This information is sent to the site management and traffic management centres of the motorway operators in real time.

By means of a camera built into the trailer, real-time images are transmitted from the route to the traffic control centre, information is transmitted to vehicles via the C2X module, and at the same time information is collected from the vehicles.

## YOUR BENEFITS

# THE FOLLOWING INFORMATION IS COLLECTED AND TRANSMITTED BY THE SMART TRAILER:

- Locations of the respective trailers
- Circuits of the remote-controlled display panels
- Section travel times
- Cross-section speeds
- Vehicle classes
- Webcam pictures and videos



- Information about the hardware used:
  - Battery status
  - Network connection
  - Activity

### MANAGEMENT BY THE AIT DATA PLATFORM

In order to manage the information, AIT operates a real-time data platform as well as self-developed systems for the automated interpretation of the data. This allows, for example, switching the display panels according to the traffic dynamics. The results are transmitted to the road operator by means of a customer-specific interface.

The obtained traffic information can subsequently be made accessible to all road users by means of various channels (apps, information websites, etc.).

# **REFERENCES**

- IMIS Trailer tender ASFINAG
- Adaption of construction site trailers by ASS GmbH
- Adaption of traffic warning signs by Buchhaus GmbH

AIT AUSTRIAN INSTITUTE
OF TECHNOLOGY GMBH

DI Michael Aleksa
Tel +43(0) 50550 6236
Giefinggasse 2, 1210 Wier
michael.aleksa@ait.ac.at