

D-TRAS
Digital Platform for Traffic
Safety-Risk Prediction in Rural
Areas

Program: FFG

Program line: FFG „IKT der Zukunft“

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<https://projekte.ffg.at/projekt/3825506>

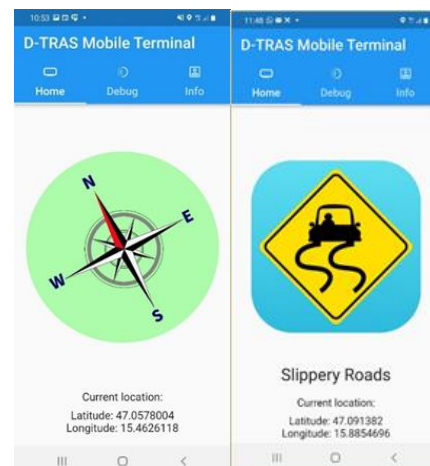


SAFE ON THE ROAD TOGETHER! SHARING ROAD RISK INFORMATION TO IMPROVE SAFETY ON THE RURAL ROAD NETWORK.

THE RURAL ROAD NETWORK PRESENTS AN INCREASED RISK FOR CAR DRIVERS AND ESPECIALLY MOTORCYCLISTS. THE D-TRAS INFORMATION PLATFORM HAS BEEN DEVELOPED TO SUPPORT RISK ASSESSMENT WHILE DRIVING.

Rural areas present a higher risk because of their winding roads and unpredictable changes in road conditions. Drivers of cars and motorcycles must rely on their knowledge and experience to navigate these areas. But what happens when road and weather conditions change and affect driving conditions?

To increase awareness and reaction time, an information platform has been developed to alert motorcyclists and car drivers to risks while driving, including road works, sharp bends or particularly dangerous sections of the road where accidents have already been recorded.



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SUCCESS STORY



Collect traffic information and warn of traffic risks

The D-TRAS project developed a modular, expandable, cloud-based digital platform that can collect and process information from various data sources, such as mobility data marketplaces or weather databases, via various services. This platform also processes information from vehicle and cell phone sensors that users provide when they are on the road.

This information about road safety is used to calculate traffic risks. These risks are based on time and location. The risks include factors such as road course, weather, temperature, and time of day. This information helps warn road users in rural areas of potential dangers. These warnings are sent to the road user's mobile app through a web interface. The warnings are displayed according to speed and direction of travel.

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Project coordination (Story)

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Validation study in Germany and Austria

A five-month study was performed in Styria (Austria) and Harz (Germany) to test and evaluate the approach developed in the project. This approach was implemented in the platform and in the respective mobile apps for motorcyclists and car drivers. The study involved over 100 participants. In addition, the requirements for a broad commercial use of this approach were examined. Strategies and possibilities for a successful business model were analyzed and developed.

As part of this study, 1.6 million safety-related events were calculated in the platform. Of these, 10,500 location- and situation-based alerts were displayed to motorcyclists and car drivers in the mobile applications during this period.

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Project partner:

- University of Göttingen, Germany
- Caruso GmbH, Germany
- NEXT Data Service AG, Germany
- motobit GmbH, Austria

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