PRESSEINFORMATION

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ASFINAG connects roads with vehicles on a large scale in Europe

Starting from November 2020 onwards, Austrian motorways will be fitted with dedicated short-range communication equipment to enable a direct exchange of safety-relevant information between the road infrastructure and vehicles. Through a procurement of V2X roadside units, the Austrian motorway operator ASFINAG has taken an important step to enable the dialogue between road infrastructure operators and road users. V2X stands for Vehicle-to-everything communication and includes co-operative, safety-related communication among vehicles and infrastructure. ASFINAG will start the deployment on selected sections and expand it to the overall Austrian motorway network within the next few years.

525 Roadside Units

The stepwise rollout of up to 525 roadside units and a central control unit will begin in November 2020 and include maintenance for at least 12 years. The communication technology behind V2X is a variant of Wireless LAN, also known as Dedicated Short Range Communication (DSRC). Other commonly used designations are ITS-G5, C-ITS, Car2X, IEEE 802.11p or WLANp. It is currently the only thoroughly tested, proven and interoperable form of short-range communication in the domain of co-operative intelligent transport systems. The roadside units do not use Internet connections, but rather establish ad-hoc short-range connections between vehicles and infrastructure. Full operation of the first generation of safety-relevant use cases will start within the next 16 months. Afterwards, new use cases supporting automated driving and connected traffic management will be introduced. The deployment on the Austrian motorway network is co-financed by the Connecting Europe Facility (CEF) of the European Union under the project name “C-ROADS”.

Impact on Road Safety

One of the advantages of short-range communication is that safety-relevant messages such as road works or hazardous location warnings are immediately and directly transmitted between all V2X-enabled participants. If infrastructure or vehicles detect incidents, the related data is sent instantaneously to all other connected vehicles. This shortens reaction times in potentially dangerous situations that may not yet be within the driver’s field of view. Vehicles equipped with V2X DSRC can display these messages directly on the dashboard. The latest generation of vehicles such as Volkswagen’s Golf 8 and the new electric models ID.3 and ID.4 have already implemented this technology.

Europe’s first large scale deployment

“ASFINAG is starting the dialogue between roads and vehicles on the Austrian motorway network. The direct connection with our customers provides an important contribution to safe, efficient and sustainable mobility“ says Josef Fiala, Managing Director of ASFINAG.
“This technology has greatly evolved and matured after successful field trials in Austria. It has been harmonized between road operators in 18 European Member States as well as the car industry. Direct Short Range Communication ensures that we reach vehicles immediately and independent from other networks, a fact also acknowledged by the European 5G deployment agenda. Also future applications from e-mobility to highly automated driving are supported by Direct Short Range Communication" adds Bernd Datler, Managing Director of ASFINAG Maut Service GmbH.

Co-financed by the Connecting Europe Facility of the European Union

C-ROADS

Cooperative ITS Corridor
Joint deployment

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