ITN-5VC

Integrated Telematics for Next Generation 5G Vehicular Communications

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Vision

ITN-5VC aims to investigate the key problems of the integration of multi-band multi-antenna communications, including mmWave, with radar heads and other wireless sensors into the same telematics unit, so that transmission chains and radiation systems were efficiently reused in a cost-efficient manner while delivering the required performance. Multiple antenna deployment, joint operation and performance of the resulting automotive solution will be investigated by 11 Early Stage Researchers (ESRs) working with top industrial manufacturers and academia in Europe

This project has received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No. 955629.

The Consortium

8 partners

5 countries

3 universities

5 companies

Goals

- Design an optimum multi-antenna deployment for enhanced performance of the new hyper connected car concept.
- Integrate Cellular-assisted Vehicular to Anything (C-V2X) protocols with autonomous driving sensor systems.
- Adapt signalling (RRC) and MAC protocols on IoT specific 5G NR chipsets.
- Explore new hardware solutions for radar and SoC integration and configure the new design of the car electronics.

Impact

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