



URBAN NETWORK COVERAGE FOR C2X COMMUNICATION

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Motivation

As manufacturers develop technologies and test their first prototypes for connected driving, the overall conditions have been looked at far too little. The successful realization of connected and autonomous driving requires low-latency communication systems with sufficient availability and integrity levels. A loss of signal in this challenging environment can lead to safety-critical situations.

Big Data Platform

Cartox² will develop a service platform for generic services of connected and automated driving. The platform will collect and process information on the car-2-car connectivity, the network coverage for the car-2-infrastructure communication as well as data routing to and in between the edge clouds, i.e. the access points of the cloud environment.

Data basis and provision

Cartox² merges various sources of communication-, location- and geodata as well as data from the open data platform mCloud (e.g. Breitbandatlas, DB Netzradar, weather data) on a single big data platform. Exemplary developments will include:

- Provision of data about car-2-car connectivity on various protocol levels,
- Information about access possibilities for edge clouds and their network coverage for digital mobility services
- Evaluation of potential risks for autonomous driving by analyzing connectivity bottlenecks between vehicles and infrastructure.

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