Increasing the robustness of V2X communication within platoons using ad hoc and cellular networks

Nowadays, mostly two types of networks are used for V2X communication: ad hoc networks, based on IEEE 802.11p, and cellular networks, currently widely available through LTE. Especially, within the application of platooning new challenges arise, such as low latency. Both type of networks can not guarantee an upper bound in any scenario. Promising is their combination.

- Performance investigation of combined networks regarding latency, data traffic, and availability.
- New platoon management to benefit from advantages of both ad hoc and cellular networks.
- Comparing achieved inter vehicle distance to existing solutions.
- Solution for communication critical zones: hand over and out of coverage.