



ChapmanBlack Insights

Technology in the Automotive Industry
The Driving Force for Change and Innovation



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Traffic Management Integration

“Cooperative systems, whether vehicle-to-vehicle (V2V) or vehicle-to-infrastructure (V2I,) will play an increased role in traffic management and control in the future” ¹⁶

Recently, the Reading Area Transport Information Network investigated the opportunities offered by emerging wireless communication technologies such as WiFi and 3G for better managing traffic flow on local networks. “The project... proved the concept of using advanced communication technologies to save costs and provide more reliable infrastructure”¹⁷

A development from the results of this test has been the ‘Coopers’ initiative: ¹⁸

“Vehicles connected via continuous wireless communication with road infrastructure on motorways, exchanging data and information relevant for the specific road segment to increase overall road safety and enable co-operative traffic management this is the vision of the Coopers project.” ¹⁹

“Based on existing technologies and infrastructure, the driver is provided with real-time data on the current traffic situation ahead of him. Each car is equipped with a receiver for the I2V (infrastructure to vehicle) communication encapsulated in an OBU (on-board unit) and a display gives information about accidents, traffic jams, road construction sites and other location and time related events.” ²⁰

With an I2V link, the real-time communication can be used both ways and the vehicle’s own sensors can augment and verify data given by the infrastructure sensor.

This technology has been fully developed and successfully tested. The remaining challenge is establishing the infrastructure required to support the system on a large scale.

16 Transport Research Knowledge Centre - Traffic Management for Land Transport

17 Transport Research Knowledge Centre - Traffic Management for Land Transport

18 COOPERS - Final Report

19 Automotive Visions beyond In-Car Driver Assistance: Integrated Traffic Management with Coopers

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