The capability to exchange information between vehicles and between vehicles and roadside infrastructure in co-operative vehicle systems creates many opportunities for innovation in the way in which the road network is used and managed. This will not only involve the introduction of new technologies, but also in the way in which road operators, vehicle manufacturers, service suppliers and other stakeholders work together to provide services for travellers using the road network, with mutual benefits for all.

This report was written in 2010 and draws on current projects and recent experiences at that time. An overview of the status of developments in co-operative vehicle systems at that time is provided to assist the Highways Agency in assessing the implications of future deployment of such systems on the road network. The findings are informed by the experience gained while participating in the European CVIS (Co-operative Vehicle Infrastructure Systems) project.

The ‘state of the art’ of co-operative vehicle systems is reviewed, recent projects and developments in Europe, the USA and Japan are summarised and applications are analysed and priorities identified for the Highways Agency. Implementation issues are discussed, and issues for the Highways Agency are summarised. Recommendations are made for further Highways Agency activities to take forward the development of co-operative vehicle systems.

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