



Road Pricing: Air Interface Requirements for Road Pricing where DSRC (Tag & Beacon) systems are used

The interoperability of different local schemes is a key factor in the Department's thinking on road pricing.

Where Dedicated Short Range Communications (DSRC - usually referred to as "tag and beacon") technologies are used, there can be no such interoperability if, say, Scheme A's tag cannot "talk" to Scheme B's beacon. In order to achieve this, different local schemes need to comply with the same air-interface standards.

The Department for Transport explored options for DSRC interoperability through its DIRECTS road charging research project which led, amongst other things, to the publication of an air interface specification referred to as the Open Minimum Interoperability Specification Suite (OMISS). OMISS was, in turn, replaced in October 2006 by an updated specification called the DSRC Charging Application Specification (DCAS). However, both OMISS and DCAS have now been superseded.

The European Committee for Standardisation - CEN - has developed a European Standard for DSRC interoperability and this has been published as a British Standard - BS EN 15509:2007.

Against this background, and in order to achieve DSRC interoperability for road pricing schemes in England and Wales, the Department for Transport proposes that the following air interface requirements should be met:-

- BS EN 15509:2007 (obtainable from the BSI - see [<http://www.bsi-global.com/en/Shop/Publication-Detail/?pid=000000000030149383>]), plus,
- Draft EN 15509 top-up specification v1.0 (PDF, 65KB)- a draft "top up" specification illustrating how the various discretionary elements of BS EN 15509:2007 should be exercised for road pricing schemes in England and Wales,
- Draft EN 15509 top-up specification explanatory notes v1.0 (PDF, 48KB) - explanatory notes to give guidance on how EN 15509 and the top up specification are to be implemented, and
- Draft EN 15509 top up test specification (PDF, 85KB) a test specification for determining whether or not the requirements of BS EN 15509:2007 and the top up specification have been met.

Both the top up and test specifications are published as drafts. They will be refined in consultation with stakeholders through the road pricing Interoperability Forum that the Department intends to launch early in 2008.