



Ramp Metering

telent offer Ramp metering expertise to reduce congestion on busy motorways in the UK

The Highways Agency (The Agency) is continually looking at ways of keeping motorways and trunk roads running smoothly. Having identified that some areas of the UK were suffering with severe congestion during peak traffic hours, they sought a solution. Ramp metering was selected as the best solution by managing traffic on slip roads.

Concept

Ramp metering is a method by which traffic joining a motorway or busy trunk road is controlled at the point of access via traffic signals. This prevents merging and mainline traffic from bunching together and creating a bottleneck which causes delays and congestion. Sensors in the road monitor the congestion and adjust the signal timings. The system also monitors the slip road to minimise the possibility of queues forming on authorities roads.

Trials

The Agency introduced ramp metering trial sites on major traffic hotspots in England in 1986. Since then, trial sites have been set up on the M6, M27 and M3. **telent** was involved in the M6 trial site, installing communications to the transmission stations and installing ramp metering controllers at the site location. Since the successful implementation of the trials, 30 further sites have been chosen and implemented with others planned on the M1, M6 and M42. Each one has been specifically designed to suit local conditions.

Benefits

Ramp metering has proven to reduce travel time at busy junctions by 9%. Downstream traffic speed has increased by 7.5% (information taken from The Agency).

Experience

Utilising the West Midlands TechMAC contract, **telent** has replenished old ramp metering sites on the M6, M56 and M62. These schemes, completed in May 2007, involved replacing old equipment on the roadside with new signal controllers and communications networks. Also, new loops were cut in the road surface.

Contracts

telent is also responsible for the maintenance contract for ramp metering in the West Midlands. This covers The Agency's MAC areas 9 & 11. **telent** is also responsible for communications upgrades, signal maintenance and loop commissioning in these areas too.

Currently **telent** has a contract in the West Midlands for new ramp metering sites between Junctions 7 to 10 on the M6 motorway. **telent** engineers are completing installation works including ducting, cabling and socket creation for signal posts.

Knowledge

Our knowledge of motorway systems gained through completing our current ramp metering contracts, places **telent** as one of the most experienced providers of ramp metering installation and maintenance in the UK.

Future Vision

The Agency is planning more ramp metering projects on other major motorways. **telent** is a partner of choice for The Agency in the delivery of ramp metering and signal works. We aim to continue this partnership and further develop our skills and knowledge in this area.

telent Facts

- **telent**'s West Midlands TechMAC is home to the largest number of ramp metering sites in the UK
- There are currently 30 ramp metering sites deployed throughout the UK of which **telent** has installed 13. During FY 09, we will deploy a further 12 sites
- **telent** installs complete ramp metering solutions
- **telent** is currently maintaining ramp metering sites through TechMAC's

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