

Case Study: Mouchel

Mouchel

Mouchel is a professional support services company. It manages road networks, public buildings, rail infrastructure, homes, schools and utilities, on behalf of central and local government, public-sector agencies and businesses.

In the roads sector it is one of the UK's leading highways companies. It manages, maintains and improves thousands of kilometres of motorways and trunk roads throughout the UK, and develops better local transport services.

It works closely with the Highways Agency and the Scottish Executive to provide people with safe, reliable and informed ways to travel. It is the Managing Agent for the M25 and all radial trunk roads leading into London — one of Europe's busiest road networks.

The company employs just under 7,000 people in more than 80 offices across the UK, Ireland and internationally.



M42 active traffic management (ATM)

The challenge

ATM is a pro-active approach to the management of traffic and will allow the Highways Agency to better fulfil its role as Network Operator by:

- Providing targeted solutions to specific traffic problems
- Providing additional capacity, possibly reducing the need for road widening
- Combining a variety of tried and tested technology, infrastructure and procedures
- Piloting of new and innovative concepts
- Helping to alleviate congestion
- Improving the detection of and response to incidents
- Reducing delays and driver stress

The chosen location for this pilot project is the M42 between junctions 3A and 7; a 17km section which is used by more than 120,000 vehicles per day. It was chosen because of its strategic importance to the Midlands area in distributing local and national traffic and providing a link between the M40 and M6 motorways. The M42 also serves the National Exhibition Centre (NEC), Birmingham International Airport, the business parks and the busy residential areas along this corridor.

The solution

The Highways Agency selected a consortium led by Mouchel to act as Managing Consultants for the ATM Pilot Project. IPL is a key member of the Managing Consultants team, responsible for the telematics stream. IPL's contributions to the project have included:

- Investigating the use of telematics systems specific to the safe use of the hard-shoulder as the fourth running lane;
- Investigating and specifying the control systems, including changes to NMCS2, MIDAS and providing support for phase 1 of ATM;
- Specifying the detailed system requirements for hard-shoulder running and the management of the necessary system upgrades
- Managing of the procurement of a semi-automatic control system for hard-shoulder running
- Development of the signs and signal setting rules together with the development of the HA rules test bed
- Technical advice on the hazard analysis of all motorway activities with respect to ATM.

The highlights

ATM will contribute towards tackling congestion, increased reliability of journey times, safer travel, improved information provided to drivers and smarter roads. ATM will enable incidents to be detected faster due to comprehensive roadside detection technology, CCTV monitoring from a control room and the installation of full motorway lighting.

ATM will bring together a number of technologies to demonstrate how they can be used in parallel to maximise their benefits. Depending on the volume of traffic and the extent of any congestion, ATM's systems will calculate the optimum speed to maximize traffic flows. Automatic signalling will provide early warnings to road users, protecting those held in queuing traffic.

About IPL

Founded in 1979, IPL has a long history of successfully delivering excellent value consultancy and end-to-end solutions to both the public and private sectors.

IPL's consultancy is renowned for its quality and value. Our consultants are talented and independent-minded individuals with extensive industry experience. We consistently exceed our clients' expectations through a combination of imaginative thinking, managerial and technical expertise and many years of systems engineering experience.

IPL's track record in end-to-end solutions development is exceptional. Our proven development methodology allows us to cut through technical complexity, manage risk and completely focus on delivery. We consistently deliver reliable, efficient and accurate systems to a precise schedule.

IPL is an ISO9001:2000/TickIT registered company having a permanent workforce of 245, revenues of ca. £22M p.a. and 40,000 sq ft of secure office space in central Bath.



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