

Highways Agency Project Outreach
4th December 2008

“I must be the luckiest Traffic Engineer in the World” So said Paul Burton at this very well attended Technical Presentation, held at the Surrey County Council Network Management and Information Centre in Leatherhead.

Little wonder, seeing the considerable toolbox at his disposal. As Head of Traffic Engineering at the National Traffic Control Centre, operated by SERCO on behalf of the Highways Agency, Paul is very well placed to advise on this unique venture.



With 50,000 employees worldwide, a £3bn turnover, a £14bn Order Book and over 650 contracts in Aviation, Commercial, Consulting, Defence, Education, Health, Home Affairs, Nuclear, SERCO as a company is huge.

The National Traffic Control Centre (NTCC) falls within the Science and Transportation field. First and foremost a Highways Agency facility with a 10 year £160m PFI, this very ambitious project (*never done on this scale before*) is managed by SERCO on their behalf.

Its field of operations is the Motorway & Trunk Road network in England. Although suffering the most congested routes, this has the least motorway miles per capita in Europe. The 4,530 miles of motorways & trunk roads carry 28m cars and 7m goods vehicle and, although being just 2% of national roads, carry 1/3 of all traffic and 2/3 of all freight.

Surprisingly however, despite these impressive figures, an immediate “snapshot” would identify just 250K vehicles on the network at any one time.

Paul explained the 24/7 operation. Over 40 trained operators, supervisors and managers working with Highways Agency NILOs and, in the winter months, the Meteorological Office, there are three shifts of seven staff per day.

Their “Toolbox” includes 2,200 TMUs and 1250 MIDAS installations, 1000 ANPR Cameras, 2449 Variable Message Signs, 8485 Matrix Signs and 883 CCTV locations, all requiring management by the largest Oracle Database in Europe, with 1000 items of raw data per minute and 200m records added per month. Five Infrastructure analysts and Schedulers based at Quinton and 12 engineers and supervisors in the field drive a total of 500,000 miles are driven each year to manage 2,200 locations.

This assists them to manage 6000 Planned Events per month, comprising 90% Capacity reducing events (aka Roadworks) and 10% Demand increasing events (aka sports, entertainments etc.) and an average 3800 Unplanned Events per month such as Accidents / Incidents, Obstructions and oil spills.

VMS signs are typically located 1 km and 500 m before strategic junctions. Controlled via an interface with the Regional Control Centres, these can display Strategic Information and Diversions.

This information is also available to the general public before leaving home.

www.trafficengland.com identifies travel information for the network, giving users access to CCTV images, details of expected delays and messages displayed on the matrix information signs. IVR Services (08700 660115), with Voice and keypad recognition also provide information via “The media” or e-mail and via “ATLAS-pro” website to subscribers. There is also live broadcasting from the Control Room at the start of the holiday season and incidents.

The IHIE Southern Branch would like to thank Paul and his colleagues in the Public Exchange Team (PETS), **Eileen Gibson** and **Derek Strand** for their input and help.