

## VISIT TO UK TRAFFIC CONTROL CENTRES

### SUGGESTED PROGRAMME

#### **Day 1      Transport Scotland, Glasgow**

am            Arrive Glasgow

pm            Meet and Greet with Transport Scotland  
Presentation on Traffic Scotland  
Control Centre Tour

Evening      Dinner

Overnight stay in Glasgow

#### **Day 2      England's National Traffic Control Centre (NTCC), Birmingham**

am            Travel to Birmingham  
Lunch on arrival at the National Traffic Control Centre  
Meet and Greet with the Highways Agency

pm            Presentation on the Control Room Operation  
Control Room Tour  
Presentation on the technology deployed for the NTCC

Travel back to Denmark

Close

## Transport Scotland

Scotland's trunk road network of 3,500 kms is vital because it connects our cities, rural communities and the ports that serve the islands.

The trunk road network in Scotland is hugely diverse - from the ten-lane M8 in the centre of Glasgow, to single carriageways in the West Highlands. Although it represents just over 6% of the total Scottish road network it carries 37% of all traffic and 62% of heavy goods vehicles.

It is valued at around £12.5 billion and because it is considered to be of strategic importance to Scotland's well being, it is under the authority of the Scottish Ministers.

The Transport Scotland team includes dedicated professionals from all sides of the industry who ensure that:

- Strategic projects are moved forward
- Roads and structures are safe
- Traffic flows are maintained
- The network is available throughout the year

Their aim is to deliver a safe, efficient, reliable and environmentally acceptable Scottish trunk road network that meets current and future needs.

The Traffic Scotland Interim Control Centre in central Glasgow has been established to provide the focal point for the monitoring of the trunk road network, to control traffic to improve the operational condition of the network and to share and disseminate information. The service from this control centre operates around the clock, every day of the year, providing up-to-date information on the conditions on the trunk road network across Scotland.

Serco was awarded the major traffic monitoring and control system contract known as CITRAC/FEDICS in 1992. This contract led to the development by Serco of the Scottish National Driver Information and Control System (NADICS) now known as Traffic Scotland.

This unique project combines the centrally integrated traffic control of the urban motorways throughout Glasgow, with the strategic traffic management and driver information for the majority of the Scottish trunk road network—with equipment located from Inverness to Gretna and from Edinburgh to Glasgow covering an

approximate area of road network 200 miles north–south by 60 miles east–west.

This highly sophisticated and complex integrated traffic management facility is one of the largest traffic control system contracts in the world. It is designed to both increase the throughput of traffic and improve safety on the road network, optimising the use of an already busy road infrastructure at lower environmental and financial cost than the construction of new roads. The system is operated from both central and regional Control Offices over local and wide area networks, either automatically or with intervention. It provides a number of co-ordinated incident detection and response mechanisms. These include automatic incident detection and sign setting, closed circuit television, emergency telephones, variable message signing, lane signalling and motorway on-ramp metering.

The scope of the system has grown steadily over the years, both in the geographic area covered and in the number of devices and the functionality of operation.

Serco have also deployed the Traffic Scotland system into New South Wales, Australia and Hong Kong. These three clients gain the benefits of having a common core system and collaborate together to identify common aims and goals in order to share best practice and get best value out of system enhancements.

### **England's National Traffic Control Centre (NTCC), Birmingham**

In March 2001 the Highways Agency (HA) selected Serco to deliver and operate its National Traffic Control Centre (NTCC). This £160M project gives motorists the information to plan their journeys, avoid traffic and make the best use of network capacity for the next 10 years. The HA manages England's motorways and trunk roads - a network representing just 2% of all roads but carrying a third of all traffic and two-thirds of all freight.

As the UK has the most congested roads in Europe (being three times busier than Germany and five times as busy as France, Portugal or Austria), the success of the NTCC is key to influencing traffic movements and selecting the most appropriate response to weather conditions.

This means that if a section of road is closed or restricted, the system checks the traffic flow and journey times on every

alternative route. It suggests only those diversions that offer travellers the minimum delay to their journey. The system is intelligent enough to check if any diversionary routes are restricted by road works or abnormal loads, or if any events nearby are likely to increase congestion.

The NTCC's highly-trained operators work in close co-operation with the police and any other partners that can influence traffic movements in the area.

Built under a public/private partnership, the NTCC is an exercise in teamwork, taking information from hundreds of operational partners and fusing it with real-time data from thousands of traffic sensors.

All this raw information comes together in a unique Serco-developed decision-support system which can analyse countless options to offer our operators a range of prioritised response plans based on network conditions at the time.

NTCC can reach its target audiences through a variety of channels:

- 350 variable message signs at key decision point junctions on the network
- Over 250 operating partners including broadcast media, local highways authorities, the police, ports and airports, exhibition centres, sporting venues and other major traffic generators.
- [The Traffic England](#) (Please note: this link will open the page in a new browser window) website and interactive telephone service
- System-to-system links with other network operators using the Travel Information Highway which is a common framework for exchanging travel data over the internet

As well as real-time traffic management, the NTCC also collects and maintains huge amounts of data on the nature and performance of the road network. This data includes a database of network characteristics, information about traffic events, traffic flow, journey times, and weather and its impact on congestion. This information is constantly used to refine traffic management practices and to inform the HA's network enhancement decisions.