



Case study

EUROPE'S BUSIEST MOTORWAY KEEPS MOVING THANKS TO APLICOM'S VEHICLE COMPUTERS, AND SIEMENS DATATRAK

The M25, Europe's busiest motorway, and surrounding areas carry more traffic than any other part of Britain each day. Accidents and breakdowns have a serious knock-on effect with traffic often building up for miles until incidents are cleared.

Traditionally, rescue and recovery services have relied on telephone calls from those needing assistance or the police in the case of accidents. A central server carried all the relevant data and this was taken up by independent recovery operations working in the area of the incident.

The three major problems were: 1. Efficiency, because of the high number of independent recovery operators; 2. The length of time taken to manually log and relay information to and from drivers; and 3. Safety of the drivers, where most communications was carried out by mobile phone.

Ontime Rescue and Recovery has solved all three problems, with the help of a two-way data transmission communications software and project management from Siemens Datatrak, and Aplicom's advanced in-vehicle computer workstations.

Ontime is a single organisation based on the purchase of five of the eight rescue and recovery operations covering the M25 and south-east of England. The single, computer-based central control office in Hayes, Middlesex, controls vehicles in major parts of Greater London, Sussex, Kent, Essex, Hertfordshire, Buckinghamshire, Berkshire and Surrey.

Each of the 200+ Overtime recovery vehicles, the area's largest fleet has an Aplicom ICA 2004 vehicle computer including clear screen monitor and keypad. Being fully programmable they were selected by Siemens Datatrak, one of the world leaders in two-way interactive data communications. Siemens Datatrak to carry out all the software programming using the highly reliable, simple to operate OS95 system from Nokia. Each of the computers has integral AVL with responder set to work every 108 seconds.

Using the Aplicom hardware and the Siemens Datatrak communications software the driver receives text messages – faster, clearer and more accurately than the previous mobile phone system – and can then report back to the Overtime control centre.

Rescue and Recovery services not only have to be profitable to survive and invest, but their performance is a vital factor in maintaining the licence to operate. This demands ever improving efficiency, reduced time in communications, and fast responses to incidents. Colin Jefferys, Overtime's Operations Director, says the Aplicom computers, working with the Siemens Datatrak telematics and communications software, are helping to generate significantly improved efficiency.

"All data needed by the driver is sent direct to the vehicle and stored so he can access it when it is needed. Text-based data is a lot more reliable and accurate than using verbal, mobile telephone links," he says.

"In the past, while the control centre has had all the information, communication to the drivers has been by mobile phone and that is open to mistakes and misinterpretations. Time is also significantly reduced because the data received by the control centre can be immediately copied to the driver, cutting out telephone calls, the need for checking of locations and addresses, and manual logging."

Ontime's control centre picks up information from the Laserbyte server – central host for the calls from police and motoring organisations. The control centre then allocates this data to the best located and most suitably equipped recovery vehicle. The driver is audibly informed he has a message and he can then respond as soon as it is safe to do so – using the Aplicom keypad without having the spend time using a mobile phone.

Call-out information, including the driver's name, vehicle, location and a brief description of the problem, is logged in a very high capacity central server, which is accessed by all rescue and recovery operations. The Siemens Datatrak service extracts the information relevant to incidents in the Ontime areas and enters it into a complete management system. Data is transferred via a secure modem-based system to the Ontime head office in Hayes, and then to and from the on-board Aplicom computers.

Data displayed on the Aplicom screen means that the driver is often aware of the extent of the problem before he arrives, improving customer service and making maximum use of time at the roadside. At the incident the driver generates a status report on the Aplicom keypad, often by pressing a single button for messages such as 'On Scene' or 'Recovery Completed'.

The Aplicom ICA-series vehicle computers include a compact on-board computer unit, high definition monochrome monitor and easy to operate, dashboard-mounted keypad. Aplicom vehicle computers are fully programmable and support a variety of data communications technologies including GSM, GPRS, GPS, TETRA, trunking and traditional PMR networks.

Mike Baker of Siemens Datatrak said that the Aplicom 2004 vehicle computer is ideal for this application. "It has proved to be highly reliable, ideally suited to the type of interactive communications we need, and very easy to see and operate within the vehicle cab," he says.