



Case study

MARKING A SUCCESSFUL PARTNERSHIP: DELIVERY OF THE 1,000TH APLICOM VEHICLE TERMINAL TO THE ADAC

With a membership of around 14 million, the ADAC is not only the largest automobile association in Europe, but also a pioneer in the field of traffic telematics. The German automobile association was one of the first service providers to exploit the potential of modern information and data communication technology in the area of breakdown recovery, inviting tenders for a radio and data transmission system (BOTE) as early as 1983. The Finnish company Aplicom is a long-standing partner and equipment provider of the ADAC. As a leading manufacturer of vehicle computers and vehicle terminals, in 1990 Aplicom was one of the first companies in Europe to begin developing and producing hardware for mobile data communications in vehicles.

In 1995, when telematics was still in its infancy in Germany, Aplicom installed its first vehicle computer in an ADAC road patrol vehicle in cooperation with system partner Kratzer. The basis for this development process was provided by the launch of the "MODACOM" mobile radio data transmission system by Deutsche Telekom (DeTe-Mobil) in 1991, which enabled fast and reliable data communications with



blanket coverage. The increasing workload for the ADAC's patrol vehicles, which carry out around 3.5 million breakdown recovery operations annually, led to an attendant rise in technical requirements for the purposes of controlling the fleet of vehicles. By the end of 2000, all the road patrol vehicles were equipped with GPS technology (Global Positioning System) for satellite location. The German automobile association now has one of the largest satellite-controlled vehicle fleets in Europe.

Swift assistance in a Europe without borders

The delivery of the 1,000th Aplicom vehicle terminal to the ADAC in October of this year marks more than just the joint success of a long-standing collaboration. Both partners are convinced that their involvement in traffic telematics also represents an important contribution to faster and more reliable breakdown recovery services on Germany's roads. "We are proud to be one of the trailblazers in the field of mobile data communications in Germany. Together with the ADAC, we have made a great leap forward. The new challenge now lies in pursuing a cooperative approach to solve traffic problems on the roads of a united Europe. Developing appropriate solutions in collaboration with our German and European partners is our overriding aim", explains Lasse Paakkola from Aplicom with regard to the future challenges and objectives for his company. Aplicom is currently equipping the vehicle fleets of the automobile clubs in Austria (ÖAMTC), Switzerland (TCS) and the Netherlands (ANWB) along the same lines as its cooperation with the ADAC, for example.

“Yellow angels” deploy professional IT solution from Aplicom

Emergency calls are handled and the ADAC vehicles are controlled via the six control centres in Landsberg/Lech (near Munich), Gross-Gerau, Hamburg, Genshagen (near Berlin), Magdeburg and Dormagen (near Cologne). The “yellow angels”, as the patrol vehicles are known, can be called around the clock on a standard nationwide telephone number - 0180 2-22 22 22 (no dialling code required on cellular phones) and via emergency telephones on the motorways. With specially installed telematics equipment, motorists are also able to call for help at the push of a button. In this case, in addition to the emergency breakdown call the vehicle’s position as calculated by the GPS system is also relayed to the regional control centre. Here the call is received by a member of the call centre staff, the data are entered in the computer system and forwarded to the operations manager and deployment of the road patrol vehicles is coordinated.

The GPS satellite location system with which all 1,690 of the association’s vehicles are equipped provides the operations manager with an on-screen digitised map indicating precisely which of the patrol vehicles will be able to reach the scene of the breakdown most quickly. At the push of a button, a job is selected and sent automatically via the wireless Modacom data network to the driver concerned. The roughly 1,000 ADAC road patrol vehicles which are equipped with a vehicle terminal from Aplicom possess a vehicle computer (ICA 2004), a display (DT 3000) and a keypad (KP3). The transmitted data are stored in the vehicle computer and presented on the terminal display. Similarly, messages indicating the driver’s work status (e.g. start of work, break, end of break and end of work) are transmitted via radio data transmission to the control centre. The driver also confirms receipt of the message and completion of his operation at the touch of a button.

Mobile data communications make ADAC even more efficient

The advantages of mobile data transmission over voice communications via radio are self-evident. The fact that only a single data entry operation is required results in a marked reduction not only in routine work but also in the incidence of errors in assigning jobs. In conjunction with the GPS location system it has been possible to organise deployment of the vehicles more efficiently and to optimise the drivers’ work schedule. Overall, this has led to an improvement in productivity of around 13 per cent in dealing with emergencies. Above all, the waiting time for those seeking assistance has been reduced considerably, resulting in a waiting time of under an hour for 60% of all deployments and an average waiting time per emergency of 39 minutes.

The recovery service personnel’s initial fear of the new technology was dispelled by intensive introductory courses and regular training. Initial concerns among the drivers that they would be under total surveillance were only to be observed in the launch phase. Ultimately, the system has also led to greater satisfaction among the drivers on account of the elimination of unnecessary journeys, combined with the feeling that they are able to offer an even faster and more comprehensive service.

