

## Intelligent Telematics

# Is Big Brother watching you ?

The intelligent use of telematics in vehicles is becoming a vital tool for fleet managers. We look at what is happening in the market, and we talk to a supplier of ancillary equipment which may come to play a substantial role.

Tim HARRUP

There are two aspects to intelligent telematics. One is the use of intelligent devices themselves, which gather and transmit certain types of data, and the other is the intelligent use of this data by the fleet manager.

### Safety is key

A concrete example of how an in-car camera and a telematics system work together, and how this can genuinely be used to improve safety, is demonstrated by a collaboration between an industry leader in telematics, MiX Telematics, and in-car surveillance equipment supplier Mobileye. The two companies have collaborated to boost driver safety through integrating their complementary solutions. Inside the vehicle, a small display unit coupled with audible alerts are used to warn drivers if motorbikes or pedestrians are detected in their paths and if they are deviating from their lane or driving too closely to the vehicle in front of them. The fleet manager or other person using this information can also see this same event data, combined with other driver and vehicle performance data to provide a comprehensive range of information and enabling them to manage exceptions and identify poor driving trends. This in turn enables fleet or HSE managers to make more informed decisions and tailor driver improvement programmes and remedial action for unsafe drivers.

### Client service

For telematics to be really intelligent and of use to a fleet manager and his company's business and profits, two other elements are clearly vital. One is fuel consumption, and the other is journey

efficiency. TomTom, known for its navigation systems, offers companies and drivers the opportunity, via intelligent telematics, to provide their clients with enhanced performance in these areas. It has solutions which enable personnel to be aware of and avoid traffic jams, and thus remain productive for longer periods... not to mention arriving at a client's office on time. Staying in this domain, such telematics also allow for messages between 'head office' and the travelling personnel to be sent, perhaps modifying schedules as up to date information is received. As a complement to this, fleet managers or others (such as sales managers perhaps) can be kept informed of the activities of

personnel and vehicles. The journey history can be shown, and trip schedules adjusted accordingly.

### Wasted fuel

Another facet of TomTom solutions enables not just real time fuel consumption for each vehicle in the fleet to be calculated, but also the fuel wasted during engine idling to be identified. Fuel consumption can be posted up on the vehicle dashboard either as a list, or on a map. The fuel performance of different vehicles and drivers can thus be compared, by trip, by period, by vehicle...

The actual fuel wasted during the time an engine is idling can be shown.



Various different types of hazard are identified and indicated by icons.

## Surveillance

Eran Perzelan, Director of Business Development of Mobileye, spoke to us about evolution in this field, and did not duck the 'privacy' question.

### ■ What are the latest developments in intelligent telematics for car fleets?

**E. Perzelan:** "We make driver assistance systems which in effects means an intelligent camera installed in the car. Our input/warnings are displayed to the driver and supplied to a telematics device and provided to the fleet manager online. What happens is that our system can be installed as a stand alone device giving information on accidents and collisions etc., but you have no control. Once it is allied to a telematics device it becomes a very powerful tool because then you have control over the driver. This means that if the driver is not using turn signals, or driving too close to the car in front, you will know. You will know if he is braking very late or constantly getting into potential accident situations. When you have a telematics device and our system together, the telematics might tell you the driver has braked really hard, but our system will show that, for example, the braking was at the same time as a pedestrian collision warning, so you will know he didn't brake for nothing."

### ■ What about the eternal 'privacy' question?

**E.P.:** "This is becoming more topical,

especially in France at the moment. We are finding that unions are more likely to accept the device being installed in the car because it is there to protect their member. Where they have a problem is when the information is recorded on line. They have no problem in France, for example, installing our system as a stand-alone, because then the driver can turn it off. This is an issue in some countries but not others. Using Israël as an exam-

**“ Travelling personnel can arrive at a client's office on time.”**

ple, there has just been a legal ruling which says that during regular working hours the driver can be monitored. What fleet management systems are doing in order not to fall foul of privacy issues, is not giving exact location information. The situation can be compared to mobile phones – if someone really wants to know where you are they can find out by using your mobile phone data. There are of course all the other intelligent applications for telematics in cars, such as telling you that the car needs to go in for a service.”

### ■ Return on investment comes from fuel savings and fewer accidents?

**E.P.:** "That is exactly right. In Eastern Europe where accident rates have always tended to be high, our system has been able to turn aggressive drivers into defensive drivers. The ROI is therefore achieved

in just a few months. We had a six month trial with a major drinks company based in Greece. They recorded fewer accidents across the whole fleet, zero accidents in fact, and very substantial fuel savings. Not just accident types that our system directly prevents (forward collision, lane departure, pedestrian detection) but other accidents because drivers become more defensive. One cannot forget that the major concerns in the

corporate world today is "Corporate social responsibility". I see no bigger responsibility than the life of company drivers, and the welfare of the community they drive in. Of course an additional consideration is that a branded company car involved in an accident is not good for their image!"

There is clearly much innovation in the field of intelligent telematics. Over recent times, the role of the driver has come to be seen as vital in many areas – not the least of which is fuel economy. It seems clear that telematics will be used even more in the future to control driver behaviour: how far this will go, and how much drivers themselves will accept, remains to be seen.

The in-car camera identifies potential accident situations and helps the driver to avoid them.



## Driver guidance

"The buzz word at the moment is telematics, and there are a lot of telematics companies out there. But the next buzz word is driver assistance systems, and there will have to be a connection between driver assistance systems, telematics and maybe in-car video recording. Once insurance companies pick up on this, this will be a very powerful tool."

(Eran Perzelan, Director of Business Development of Mobileye)