WEBFLEET
TOMTOM TELEMATICS

# SAFER AND MORE EFFICIENT PASSENGER TRANSPORT THANKS TO FLEET MANAGEMENT TECHNOLOGY.

## Active Driver Feedback on driver performance means greener, safer and more efficient travel.

**The tachograph has been part and parcel of people transport for many decades. Ever since, all kinds of other aids have been appearing on the scene to help drivers – quite literally - on their way. Nowadays, there are new technological aids offering various other benefits, including better safety for both drivers and passengers and more efficient fuel consumption.**

**And these developments are still on going.**

## GPS

Modern transport technology started with global positioning systems (GPS). The first GPS (or satnav), became available for commercial use in the 1980s. Up until then, the network of 24 American GPS satellites was being used exclusively for military purposes. Since the 1990s, the number of GPS services has increased enormously. These started out as navigation systems for cars, buses and lorries, but later, as mobile phones became commonplace, these devices too were equipped with a standard GPS function. This growth was so rapid that the EU decided to send its own network of satellites into space so that it was no longer dependent on those of the United States. This project, in which the Netherlands also participated, was called Galileo. The system became operational in 1995.


*Luxembourg-based tour operator Sales-Lenz uses a fleet management system which provides active feedback to drivers.*

*"This system gives head office an insight into driving performances and well as the condition of the vehicles. Driving styles can be influenced in real-time. In this way we can positively influence safety for both passengers and drivers and bring about cost-savings because drivers start driving more economically. At the same time this brings down our carbon emissions. In the first month, for example, we made 7 percent savings in fuel"*

***Wolfgang Schroeder,***
*Managing director of Sales-Lentz*

## Accessible

The next step were the telematics solutions, which connect this GPS and the internet protocol (IP). This makes interaction possible, in the field of navigation too, and opens up a wide possibility of applications, especially with respect to vehicle tracking systems. Because of the large-scale application of GPS services and the lower costs of software and hardware, they have become accessible to everyone, including consumers and SMS businesses.

Precisely because of these interactive possibilities, the current, advanced generation of fleet management systems offers diverse prospects for improving the safety of the driver, their passengers and other road users. In contrast to freight traffic, quality plays a more prominent role in people transport. It requires a different style of driving and therefore a different type of driver. A driver is required who can drive not only efficiently, but safely as well, taking into account the comfort of travellers. Another difference with freight transport is the intensity with which buses and coaches are used. Often they can be on the road around the clock. For long-distance journeys, for example, to holiday destinations in Spain, interaction with head office can be extremely important. In the event of a breakdown, not only does the driver need to be picked up, the bus will have to be taken to a garage as well. In addition, fifty customers will be expecting a replacement coach to arrive. Real-time communication has become indispensable for this purpose. What's more, with a fleet management system it's possible to alert the hotel to say that the bus will arrive later than expected.

## Efficiency

Whilst the focus may be on customer satisfaction with people transport, with a fleet management system, a great deal can be gained in efficiency improvements with respect to the fleet and on-the-road personnel. Cost savings of between ten and thirty percent can be achieved. Take regional public transport services for example, where there are many buses on the road which need new drivers on a frequent basis, as well as regular maintenance. It's a complex logistical process, whereby a fleet management system provides the ideal solution for maximising efficiencies. Likewise, for middle-distance journeys and day excursions many benefits in efficiency can be derived. For example, bus A travels to Schiphol Amsterdam Airport to drop off 20 passengers. An hour later, bus B goes to pick up 20 passengers from Schiphol. A fleet management system provides an easy way of bringing together these two transport requests. The practicability of a fleet management system explains its huge popularity, especially in economically depressed times where every saving is a welcome one for businesses. What's more, as a business, it's vital to keep close tabs on your vehicles. An even more important question is: how can I manage my personnel so that we can make savings on fuel and maintenance costs? Or: how can we deliver our passengers on time and achieve such high levels of customer satisfaction that we retain our competitive edge? To achieve all this, you need information about engine performance, whether the vehicle is being driven too fast, or whether it's in a built-up area or not. Perhaps the braking is too harsh, the driver has gone through a red light, the wrong gear change has been made, the driver has continued running the engine whilst parked, or a corner has been taken too quickly? All this information can now be recorded using modern technology and be presented in clear and concise reports.

## More interaction

Dozens of businesses have since jumped on the bandwagon and are marketing GPS and IP-based solutions for fleet management, and for vehicle tracking and tracking & tracing systems. In itself, it is not that difficult to produce a GPS-based tracking system. The next step is to make the system more interactive so that direct communication is possible with the vehicle and feedback can be given to the driver about driving style, the condition of the vehicle and the engine and the most efficient routes. This feedback helps improve safety because the driver can be given real-time alerts about incidents and fuel status on a display panel. In this way, the driver is given constant reminders that the vehicle should be driven in a safe and economical way. Feedback systems provide the driver with information, for example, on exceeding speed-limits, rough steering, sudden braking manoeuvres, excessive revving, current fuel consumption and fuel economy. These systems can also be integrated with back-office systems, planning packages, payroll processing software and ordering systems, so increasing the range of the reporting possibilities.

Ultimately, this information will enable companies to optimise all their processes and to send instructions to their on-the-road personnel. Real-time reporting gives management more direct control. The reports can help companies identify their costs, how their productivity can be improved and, above all, show where margins can be increased. Smart navigation and traffic information will also reduce on-the-road times for personnel, so that more productive hours can be made. What's more, it makes no difference whether a fleet consists of five or five-thousand vehicles.

## ROI

One of the most attractive aspects of a sophisticated fleet management system is the fact that it pays for itself in next to no time. On average, this is three to six months, but ROI-times of as little as one month are even possible, depending on the use and the size of the fleet.

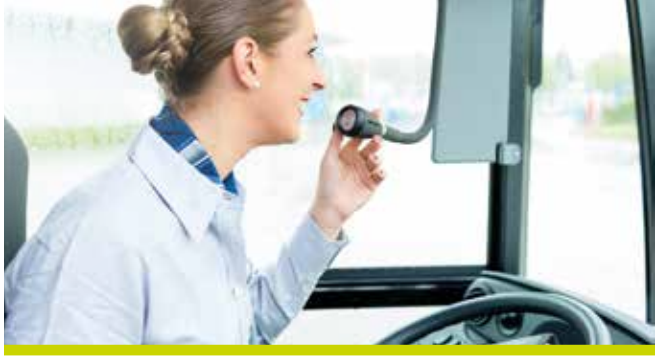
## THE ADVANTAGES OF A FLEET MANAGEMENT SYSTEM CAN BE SUMMED UP AS FOLLOWS DRIVERS CAN RELAX MORE USING ADVANCED NAVIGATION;

- This means a safer and more efficient driving style and congestion can be avoided;
- This is not just more environmentally friendly, but also leads to cost-savings and greater customer satisfaction;
- Real-time information about driving style means the driver drives more economically, likewise leading to savings in maintenance costs;
- Detailed management reports can easily be printed out to help influence the driving styles of on-the-road personnel. This means a safer and more efficient driving style and congestion can be avoided;
- This is not just more environmentally friendly, but also leads to cost-savings and greater customer satisfaction.

## Savings

With an advanced fleet management system, it is ultimately possible to reduce fuel consumption by between ten and thirty percent. For example, a car drives 50, 000 kilometres a year. That means annual savings of 5,000 litres in diesel. Given that diesel costs around 1.50 euros a litre, this means savings of 7,500 euros per vehicle annually. If you have twenty or so vehicles on the road, this can work out to be quite a tidy sum, especially in the current climate.

The mere installation of a fleet management system by itself is sufficient to give drivers a better awareness of their driving styles. For example, the Luxembourg tour operator referred to in this article is able to save seven percent in fuel costs without its management even having to implement additional measures. For the most part, these gains lie in the real-time feedback which drivers receive. If reports are rolled out on a weekly basis, a driver can no longer remember whether he braked too hard to avoid an elderly lady crossing the road one day, or whether he slowed down too quickly for a red light on another. Real-time feedback makes the driver mindful of his braking, but also of how much this costs



in extra fuel. The way in which corners are taken is measured on a scale of one to five. One signifies gently, whilst five is stomach-turning for passengers.

So a better driving style in people transport helps bring about better comfort levels and increased customer satisfaction.

In turn, this increases a company's competitive advantage, because coach operators will be much less inclined to send out drivers who are determined to get there as quickly as possible, or who are more likely to cause accidents because of their driving style.

## ETA

By combining a fleet management system with real-time traffic information, it's much easier to accurately calculate the Estimated Time of Arrival (ETA). For bus operators, as well as service operators such as contractors and courier services, this reinforces the organisation's image of reliability. Using a fleet management system, you know exactly how much time you need to get from A to B, taking into account traffic congestion and driving times. A planning package can be linked into the system so that you can generate a realistic delivery time via the web-browser. And an added advantage: the driver doesn't need to come into work first to pick up an order list. Instead, he or she can call this up directly on a smartphone or tablet, including ETA details and satnav directions. By handling the first order straight from home, the employee can fit in at least one extra repair job or delivery per day. Here too, big savings can be made.

And if the employee is held up in traffic and fails to make the appointment, the planner can notify the driver from the browser in the office, inform the customer, and – if necessary – call out another colleague who is able to get there at the appointed time. Studies have shown that congestion in the Randstad region of Holland causes significant delays, but with a fleet management system thirty percent savings in travel time are certainly attainable. Even in rural areas, minimum reductions work out at thirteen percent.

## Incentive

The advice to clients is to sit around a table with drivers at the end of the week and discuss driving styles. Even better, to make a contest out of it. If targets of five-percent less maintenance and ten-percent less fuel are set, then by awarding a percentage of these savings to the most economical driver, this will provide a huge

## NEW DEVELOPMENTS AND ADVANCES

TomTom Telematics is European market leader in fleet management solutions and continues working hard in planning new developments. In addition, the company continues to invest in current solutions. A good example of this is the WEBFLEET Tachograph Manager, a solution for downloading, analysing and archiving data on a tachograph. This enables a freight operator to satisfy the statutory regulations more easily.

WEBFLEET Tachograph Manager is a complete solution for digital tachographs. A freight operator can download data manually or remotely for the entire fleet. Amongst other things, driver data can be analysed, from driving time to rest periods. All this information can be securely stored on file and can be easily consulted.

Automated and planned external downloads from digital tachograph data help save valuable time and minimise the risks. Freight operators are kept in the loop regarding changes in the statutory regulations and are allowed access from any PC to data in the secure TomTom Telematics online archives. Templates and instructions make administration of the data much easier.

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>
> ***Ruben Willems,***
> *EVO policy consultant*

*"Businesses have to abide by the rules when it comes to use of the tachograph and associated driving and rest times, and of course, they are keen to do this as efficiently as possible", says EVO policy consultant, Ruben Willems.*

*Earlier this year this Dutch freight operators' association published a reference work describing all statutory regulations relating to the tachograph. "For that reason it's always good to see innovations such as WEBFLEET Tachograph Manager come on to the market which are helping to simplify compliance with driving and rest times, such as scanning devices and analysis systems."*

incentive. Without question, this can lead to even bigger savings for companies.

In the future, fleet management systems will become even more sophisticated, with even more details being generated about routes, driving styles, journey times, traffic and the vehicle itself. Also, the number of businesses creating apps and hardware for services supporting the fleet management system will grow. The fleet manager will become a hub, from where all information from the vehicle can be retrieved and passed on to the manager. In addition, fleet management will become a commodity which also becomes accessible to the consumer, not least because private cars too will be able to take advantage of the big savings that the system's feedback offers.

## Turnover

For people transport in particular, the expectation is that long-distance services will feel the pressure of competition from low-budget airlines.

A fleet management system will help keep the competition at bay for some time longer. But even for shorter journeys, day excursions and regional transport enormous benefits can be gained using advanced technology. Not only does this contribute to improved economic performance, but also to greater levels of safety.