

Pioneering technology encourages eco-driving

Author: Gareth Chadwick, MindsinMotion.net<gareth.chadwick@mindsinmotion.net>

Emissions-friendly fuels may get the most exposure, but there's a lot more to sustainable mobility than sustainable fuels.

[N104 Image 1](#)

Intelligent traffic (or transportation) systems (ITS) have been enhancing vehicle management for the best part of a decade, providing fleet and vehicle managers with real time information on things like speed, ticketing, passenger data and positioning.

Now, Swedish ITS technology company Pilotfish Networks, is pioneering the use of ITS to implement eco-driving programmes on buses.

Drivec system

The company has partnered with driving technology company VDI to produce the Pilotfish Drivec system, tailored for public transport buses. The system, which has already been widely trialled in the logistics sector, is being rolled out into the public transport sector to allow operators to encourage and support their drivers in eco-driving.

Encouraging eco-driving

With Pilotfish Drivec, which is based on Pilotfish's wireless vehicle gateway platform WANDA, an initial eco-driving training programme introduces drivers to the eco-driving concept and how they can learn to drive more efficiently. The driver's actual performance is then monitored by Pilotfish Drivec and the resulting feedback used, where necessary, to support drivers in improving their performance.

Remote monitoring

The system enables fleet managers to remotely monitor key data such as fuel consumption, braking and accelerating in vehicles in real time. At the same time, it compensates for variable factors outside the driver's control, such as route, load, weather conditions and idling at bus stops, to provide an overall assessment of excessive fuel consumption for each vehicle. By analysing the data, managers can identify where the driver's eco-driving efficiency could be improved.

The technology is currently under trial in the Swedish town of Uddevalla, where it is installed in some of the 68 buses run by the local operator - one of Sweden's largest. The first installation abroad is planned later this spring.

Improved efficiency

According to Erik Nordenfelt, managing director of Pilotfish Networks, tests run by the Swedish Road Association show that Pilotfish Drivec can improve driving efficiency in buses and reduce fuel costs by as much as five to ten per cent – and maintain those reductions over a prolonged period.

“As well as improving communication between each bus and the control hub, the reduction in fuel use has obvious environmental benefits, and the cost savings go straight to the bottom line,” says Nordenfelt.