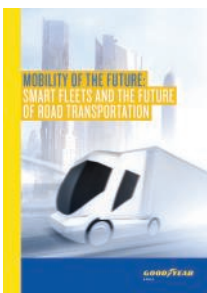


Future gazing

'Mobility of the future: smart fleets and the future of road transportation' was the theme of a conference in Brussels last month, organised by Goodyear. Steve Banner reports



Running long-haul heavy trucks on LNG (liquefied natural gas) could help cut CO₂ emissions and improve air quality, while at the same time reducing the European Union's dependency on crude oil and enhancing security of supply. So said Joao Aguiar Machado, head of the European Commission's (EC) Directorate-General for Mobility and Transport (DG MOVE), at a conference in Brussels last month, organised by Goodyear.

"We're seeing increased interest in LNG among hauliers, and the EU's council of ministers is supporting the development of an alternative fuels infrastructure that will result in a network of LNG stations across Europe," he told delegates. "Drivers [and transport planners] will be able to use telematics systems to find the nearest gas refuelling stations."

What Machado was talking about is the LNG Blue Corridors project. This envisages a network of 14 LNG refuelling stations at key locations along four corridors criss-crossing the EU, from north to south and east to west, and augmenting existing commercial LNG outlets. The scheme also includes a plan to put around 100 LNG-powered heavy trucks – constructed by manufacturers including Volvo, Renault Trucks and Iveco – on the road. Iveco, for example, recently unveiled its LNG Stralis tractor unit, with a claimed range of almost 500 miles.

Due for completion by 2017 at a cost of £11.5m, the project is supported by the EC under the Seventh Framework Programme, and involves 27 partners from 11 countries. Among partners listed is Nottingham-based dual-fuel conversion specialist Hardstaff Group.

Theme of the Brussels conference was 'Mobility of the future: smart fleets and the future of road transportation' – also the title of a white paper from Goodyear, launched at the event. Compiling this paper involved researchers quizzing 576 fleet managers from nine European countries, including the UK.

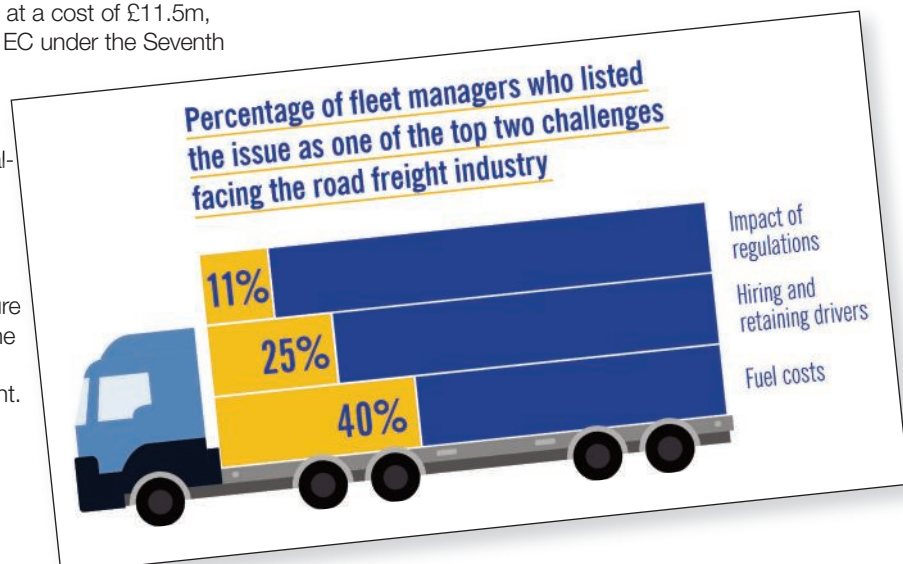
Looking at the data, 40% stated that the price of fuel is their biggest concern – and, unsurprisingly, 92% are monitoring fuel consumption, 76% investing in driver training to improve fuel efficiency and 72% setting fuel consumption targets. Oddly, that last figure drops to 56% for UK-based fleet managers.

More incentives

Just over half (53%) of those questioned for the report wanted more incentives for operating environmentally-friendly trucks, while 60% would like support for buying fuel-efficient tyres. Incidentally, only 20% had invested in onboard TPMS (tyre pressure monitoring systems): however, the white paper argues that they should be mandatory on trucks. Meanwhile, the study also found that at least 30% of fleets do now check the labels that accompany tyres, detailing fuel efficiency, safety and noise levels.

"It is clear that fleets are already investing in technologies designed to reduce fuel consumption, but they need further support from European and national regulators," insisted Michel Rzonczef, vice president of Goodyear's commercial business unit for Europe, the Middle East and Africa.

However, the paper also points to the issue of driver retention. A quarter of managers stated that recruiting and retaining drivers was either their biggest or second-biggest concern, and the report argues





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that government initiatives are needed to encourage young unemployed people to consider truck driving.

What about driverless trucks to solve the problem? Ben Kraaijenhagen, vice president of foresight and environment at MAN, believes it won't happen. “There will always be a driver onboard,” he stated. “People would find the idea of a truck without one completely unacceptable.”

That said, trucks fitted with the automotive equivalent of an aircraft's autopilot will come, he suggested – enabling them to drive themselves down long, uninterrupted stretches of motorway, or through roadworks while the driver occupies himself or herself with other duties.

Joachim Fehrenkotter, managing director of German transport firm Spedition Fehrenkotte, agreed. “A truck driver will become more like the captain of a ship who monitors the vessel's functions, but is not required to be at the wheel all the time,” he said.

Fuel saving

Mercedes-Benz has already anticipated this trend with its Future Truck 2025. On display at last month's IAA Hanover show, it was equipped with its own autopilot under the ‘Highway Pilot’ banner, with radar, proximity and camera sensors providing the ‘eyes’.

Technology can, however, be tripped up by legal considerations, warned Nigel Base, commercial vehicle manager at the SMMT (Society of Motor Manufacturers and Traders). “There is a lot of discussion about vehicle-to-vehicle and vehicle-to-infrastructure communications,” he observed. “Throw in automated braking, cruise control, lane assist, etc, and you can see technology marching ahead... The issue is that legislation can lag behind.”

Returning to alternative fuels, while cryogenic gases, such as LNG, may represent a viable option for some operators in future, other solutions will also remain valid. In urban areas that may mean diesel-electric hybrids, such as MAN's Metropolis research vehicle, shown at the IAA Show back in 2012, suggests Kraaijenhagen. Switch it to battery power and it produces zero emissions. “What's more, it can

get down to below 65 decibels,” he asserted.

Goodyear's white paper also mentions research into Fischer-Tropsch fuel, synthesised from coal, natural gas and biomass. “This reduces emissions but remains too expensive to replace diesel in a free market,” the report observes.

What of conventional diesel fuel-saving? A surprising revelation from this report is that 27% of European operators still make no use of telematics, with a further 16% only making sparing use of it. The other 57% do employ telematics, however, with 25% of the total describing the technology as vital.

Coming at fuel saving from another angle, the report supports proposals that the EC should assess the safety and environmental impact of bigger and heavier trucks up to 25m long and grossing at up to 70 tonnes by 2016. It would also like to see trucks heavier than the generally permitted limit for cross-border EU traffic allowed to traverse borders where they are already in use on domestic work.

But do not underestimate opposition to heavier trucks among Europe's institutions and nations, warned DG MOVE policy officer, Jan Szulczyk. “There is not enough agreement across the EU in favour of increased payloads, and such a proposal would never get through the council of ministers and the European Parliament,” he insisted. “Every time larger and heavier vehicles are talked about, it all gets very emotional and the topic is killed.”

As for fleet managers interrogated for the report, they would like to see greater standardisation of road transport regulations across the EU. More than two thirds (68%) are in favour. Supporters of increased harmonisation included Ferd Feidt, managing director of Luxembourg-based Betons Feidt, which supplies concrete and other materials to the construction industry. In his home country, the firm can operate at 44 tonnes on four axles, compared with 36 tonnes in Germany, 38 tonnes in France and 39 tonnes in Belgium. Feidt said this degree of variation from one EU market to another makes no sense. “There are too many jurisdictions and we need clear European-wide standards,” he insisted. **TE**

