

SAFETY AND TECHNOLOGY

A LOGISTICS MAGAZINE SUPPLEMENT

AI ROBOTS AS A LAST-MILE SOLUTION

★ Interview with Olly Craughan, Head of Sustainability at DPDgroup UK

ESSENTIAL SAFETY ADVICE

★ Insights from the Driver and Vehicle Standards Agency (DVSA)

CONNECTED AND AUTOMATED VEHICLES IN LOGISTICS

★ Interview with Mark Cracknell, Programme Director at Zenzic



LOGISTICS UK

Autumn 2023

Sponsored by





Empower your drivers. Boost productivity.

With Webfleet you get it done.

Your drivers are essential to your business. When they're out on the road, you want to be sure they have all they need to do the job safely, efficiently and with minimum stress. Webfleet equips you and your drivers with market leading tools designed to make their work simpler, safer and better.

Vehicle Express 001	Working times Work
OptiDrive Excellent	Orders today Remaining
Uploaded attachments Proof of delivery	Planned arrival 13:45 +13 min Tap to navigate



Find out more:
webfleet.com | +44 208 822 3605

Let's drive business. Further.

BRIDGESTONE
Solutions for your journey



David Wells OBE
Chief Executive, Logistics UK

Welcome

From self-driving vehicles to trucks fuelled by hydrogen, delivery robots to zero emission depots, the logistics industry is evolving fast, and technology and safety are at the heart of this transformation.

Much of the innovation we are seeing today is driven by the industry's determination to decarbonise its operations and realise the government's ambition of a net zero economy by 2050. An ongoing desire to increase efficiency, performance, and safety is also fuelling current technological progress, across wide areas of logistics.

Manufacturers are looking ahead to future legislation affecting road transport to ensure their vehicles meet the requirements laid out by government, while maximising opportunities to increase vehicle efficiency and safety. John Comer, Head of Product Management at Volvo Trucks UK & Ireland, explores these developments in this supplement.

While we are seeing logistics businesses embrace low carbon fuels and vehicles, significant challenges remain on the industry's path to decarbonisation, with the government still unable to provide certainty on the alternative fuels it supports. This is holding back purchasing decisions in many cases – Logistics UK continues to lobby for a decision to be made.

Innovation continues in all modes of logistics; we have been impressed with the industry's creativity. DPDgroup UK's deployment of autonomous delivery robots stands out; these low emission technologies, utilised in last-mile delivery, have the potential to increase road safety by removing conventional vehicles from busy areas, freeing up valuable road space.

Larger autonomous vehicles, such as trucks and vans, are on the horizon. We interviewed Mark Cracknell, Programme Director at Zenzic – champions for the UK's connected and automated mobility ecosystem – for this supplement to gain insight into key considerations of these vehicles.

It is exciting to look into the future, but what of the safety of today's vehicles? The Driver and Vehicle Standards Agency (DVSA) will outline essential compliance, along with experts from Logistics UK.

Logistics UK will continue to work with government and its members to forge an industry with the highest possible safety standards and technological innovation, for road transport operations today and tomorrow.



CONTENTS

5	Modern vehicle safety and technology: the challenges of today and tomorrow
8	Are AI robots the future solution for last-mile delivery?
12	How to stop vehicle and cargo theft before it happens
13	Vehicle safety in an autonomous world

16	Building the truck of the future: legislative timelines and safety design
20	Keeping vehicles safe – a DVSA perspective
24	Maintaining roadworthy vehicles
26	The safe carriage of dangerous goods

Editor

Eleanor Matthews
T: 07818 450545* | ematthews@logistics.org.uk

Design Cecilia Giorda

Production Tracey Garrett

Sponsorship and Advertising Manager

Robert Reed
T: 07818 450412 | rreed@logistics.org.uk

Contributors are Neil Barlow, Martin Candish, John Comer, Mark Cracknell, Phil Lloyd, David Jordan, Stuart Messham, Percy Thrower and David Wells.

ISSN 2632-7813 (Print)
ISSN 2632-7821 (Online)

Published by LOGISTICS UK

President Phil Roe
Chief Executive David Wells

T: 01892 526171*
F: 01892 534989
www.logistics.org.uk



Logistics UK is a trading name of
Freight Transport Association
Hermes House, St John's Road, Tunbridge Wells,
Kent TN4 9UZ
Registered in England Number 391957

Logistics UK offices in Tunbridge Wells,
Coventry and Belfast
Member Advice Centre
0370 605 0000* (9am-5pm weekdays)
Customer Services Centre
0371 711 2222* (9am-5pm weekdays)

*Calls may be recorded for training purposes

SPONSORS' MESSAGE



Emily Hardy

UK Marketing Manager,
Brigade Electronics



Brigade Electronics has been pioneering safety solutions for commercial vehicles and mobile machinery since 1976, by providing active and passive systems for all industries and environments across the globe. Safety is at the forefront of what we do, with a vision of zero lives lost in collisions on and off the road. As safety experts, we strive to continue to develop innovative new products with the latest technology, such as artificial intelligence (AI) cameras and predictive

radars. Over the last decade, technology has played a huge role in helping to streamline the fleet management process and improve safety standards. By providing drivers with both direct and indirect vision through blind spot detection systems and AI alerts to objects and pedestrians, optimal safety is provided for vulnerable road users.

★ <https://brigade-electronics.com/>



Beverley Wise

Webfleet Regional
Director UKI for
Bridgestone Mobility
Solutions

Fleet managers have had much on their mind of late - from pressure to decarbonise and continuing restrictions on vehicle availability to a skills shortage and a cost of business squeeze that's weighing heavy on company bottom lines.

In light of this, it would come as little surprise if these pressing matters caused fleet businesses to lose sight of key road risk management considerations.

Latest figures reveal a sharp increase in deaths on UK roads, however, signalling a worrying trend that should act as a call to action for companies to take greater control of fleet safety.

Not doing so exposes a company to serious legal and reputational costs, there is also a compelling financial case

for implementing effective initiatives. Vehicle off-road time, maintenance and insurance cost increases can all have a considerable impact on business profitability.

Telematics solutions can offer the digital insights needed to underpin effective risk management strategies, offering greater fleet visibility and enabling significant improvements in driving performance and vehicle maintenance.

With such tools to hand, there can be no excuses for safety management falling down the corporate agenda.

★ www.webfleet.com



Greg Ford

Head of Corporate, RED



'Safety' doesn't just embrace a range of physical goods and services to help support an organisation. It is an attitude of mind and a cultural thing, a philosophy to make sure whatever you or your workforce does, that it is done safely and, of course, effectively too.

Driving (safely) for or on business is no exception but can all too often get disregarded or pushed down the priority list. But it is one of the most dangerous and yet mainstream activities performed in work. Driving well really is a skill needed for life.

RED Corporate Driver Training offers a whole range of online and on road driver training to support your drivers, but it requires a partnership approach between supplier and customer to make sure that training delivered is well

targeted, relevant and effective. We can offer most of our services at 'your place or ours', and also help businesses get drivers through HGV licence acquisition - a continuing need right now.

We now offer 'SafetyFirst from RED' too, a simple and easy to use online platform that works to give you easy management access to the driver training status and driver risk profile of your community of drivers, and access for your drivers to complete tasks and read your important driving policy documents and updates.

Do contact us at RED to find out more.

★ www.redtraining.com

Modern vehicle safety and technology: the challenges of today and tomorrow

Technological developments and vehicle safety have been connected intrinsically since the inception of transport, with safety improvements being developed through better component design and the wider use of material compositions.

Although we should expect this to continue – with the transition towards self-driving vehicles – future technological enhancements will also need to come in the form of computer hardware and software to ensure that vehicles can accommodate the developments and their operators can continue to work at the highest possible safety levels.



Phil Lloyd

Head of Engineering Policy, Logistics UK

EVOLVING MODERN VEHICLES

Many of the modern safety features in today's vehicles, as well as of those of the future, rely on some form of computerised Advanced Driver Assistance Systems (ADAS) technology, from parking sensors to emergency braking systems; their correct functionality and interoperability are key to maintaining and using vehicles safely on our roads.

Additionally, ensuring the best possible air quality is a safety issue for those operating vehicles; although technological advances have had a huge impact in cleaning the emissions produced by internal combustion engines, the focus of technology in this area is now being directed towards alternative clean propulsion systems, including battery electric and hydrogen fuel cell engines.

For the motor vehicle sector, these enhancements come at a price; currently, electric vehicles (EVs) are more expensive than traditional vehicles to purchase. The fitment of additional technological enhancements, be they a legal requirement or a product enhancement, adds to the cost; so does implementing a sufficient recharging infrastructure.

MAINTAINING MODERN VEHICLES

These new technologies also require specialised maintenance, updates and upgrades, which not only add additional expense, but also require a different skill set from those undertaking this work. Maintaining your new modern vehicles may be beyond the capability of a small one-man workshop, with no, or limited, access to the required technology and/or the necessary skill sets to safely work on these vehicles.

Modern vehicles are becoming more sophisticated: ensuring they are well maintained, and safe to use, may become challenging, either for your own workshop or your third-party maintenance providers, without specialist knowledge and training.

While franchised dealerships will be prepared, as manufacturers stipulate their staff training and equipment requirements, there remains a question mark around the whole of the transport sector's preparation for the challenge of operating these highly technical vehicles, including those running on alternative fuels.

The Institute of the Motor Industry (IMI) estimates that, by 2026, the demand for suitably trained TechSafe technicians will have exceeded the industry's capacity; this situation will worsen as we head to 2030 without significant investment into training and development of the staff needed to service and maintain these vehicles.

If you, or your maintenance provider/s, have not already started your training programme, then now is the time to start, to ensure that the right level of information has been provided to those maintaining this new class of vehicle. And do not forget trailers; increasingly, these are as complex as the parent vehicle which tows them, so add trailer maintenance to your technicians' Continuing Professional Development (CPD) programme.

However, it is not all hardship; these vehicles will be cleaner, safer and over time more efficient, but we've still got a way to go yet and it is beholden on the sector to ensure that high standards of roadworthiness can be maintained,

despite the introduction of new, highly complex technologies.

THE FUTURE FOR GREEN TRANSPORT

The UK is required to transition to a net zero economy by 2050, but the government has yet to define its preferred route to achieve the decarbonisation of road transport; the one certainty is that diesel vehicles will not be a part of this journey. Trials are, or will shortly be, underway to see if electrification of the road infrastructure to power EVs is feasible, either through overhead catenary, e-road, or electric induction.

Hydrogen propulsion is also being explored, but its production and infrastructure rollout is yet to be viable. And there are many businesses that will wait for a greater level of certainty before wanting to, or being able to afford to, renew current fleets and step into an unknown area of transportation.

LEGISLATION TO ENABLE THE TRANSITION

Autonomous features in vehicles will require legislation; the Automated and Electric Vehicle Act 2018 has laid the provision for this, from which we have seen the introduction and allowable use of an Automated Lane Keep System (ALKS) in Great Britain.

As more of these systems become available, then data recording, use, and retention will be fundamental, particularly where there will be handovers between drivers and self-driving operations – for identification of control and hence accountability should anything go wrong.

For companies that have yet to consider their future operating model, failing to do so early may come at a heavy price. For some fleets – dependent upon your vehicle replacement cycle – you could be looking at a fundamental change within one to two vehicle replacements.

In the case of electric fleets, having to install the required infrastructure changes alone could cost millions and the

lead time for implementation run to years. Add to that any changes to vehicle maintenance arrangements, and operators may need to view this as a change programme which will require careful management and which could take a significant period of time.

ADVICE FOR BUSINESSES

My advice is to look carefully at your current and future business needs: what vehicles and trailers will be required to meet those needs, what technical features will be in place for those vehicles/trailers – many will be a legal requirement, so you will not have a choice – and how you will operate them.

This could mean a fundamental change to your procurement or contract arrangements, your refuelling and parking strategy and your maintenance arrangements. The outcome of all these deliberations will dictate your future operational expenditure profile, and the pace at which you bring about those changes and/or the way in which you operate in the future.

Benjamin Franklin is quoted as saying that “By failing to prepare, you are preparing to fail,” so if you have not worked out what your future modus operandi will look like yet, now is the time to start. And if you need any advice or guidance, remember that the Logistics UK Member Advice Centre is here to offer assistance and support as the industry transitions to a net zero future. Give them a call on 0370 605 0000, quoting your membership number. ■

FOR MORE INFORMATION

★ logistics.org.uk/membership/member-information-services/member-advice-centre



FM Conway enhances cyclist safety with Brigade's Sidescan® Predict

FM Conway is a leading infrastructure company delivering vital services in transportation, with expertise in highways maintenance. The company operates a large fleet of construction vehicles used to transport goods by road, therefore road safety is a top priority.

PROTECTING CYCLISTS AND SAVING LIVES

As part of its commitment to road safety, FM Conway wanted a system that could detect cyclists and be activated at all times – not just while the vehicle's indicators were in use. The company was also keen to find a product that did not create numerous false alerts and result in driver overload – something that is common on many existing systems.

Steve James, Transport Manager at FM Conway, explained more:

"Brigade approached us during the early development stages of its new Sidescan® Predict collision avoidance system and asked us to trial the device on our vehicles. The system met all the objectives we had set out, so it seemed like a perfect fit and ideal for what we wanted to achieve.

At FM Conway, we are passionate about safety – it is intrinsic to our company ethos – and this is reflected in our BS ISO 39001 certification. We strive to be at the forefront of new technology, so we were keen to see what Brigade's system could do to enhance our safety credentials."

REDUCING FALSE CREDENTIALS

Through the use of artificial intelligence, Brigade's Sidescan® Predict constantly gathers object detection data, such as the speed and distance of a cyclist or other vulnerable road user from the vehicle. Additional technology is embedded to gather information such as the speed, direction, acceleration and turning rate of a vehicle.

This data feeds an algorithm created by Brigade to calculate the risk of a collision with cyclists and pedestrians near to the vehicle.

Unlike existing systems which simply register the presence of a potential obstacle, the additional data gathered by the Sidescan® Predict system significantly reduces false alarms and increases confidence in the accuracy of warning alerts.

GREATLY LESSENING THE RISK OF FATALITIES

Designed for most rigid body vehicles, including rigid box vehicles, tippers, mixers, coaches and buses with a minimum length of 5.2m, Sidescan® Predict comprises six sensors which have a detection area of 2.5 metres, compared to the industry standard 1m to 1.5m. These features help to reduce the risk of fatalities by an additional 84%. Sidescan® Predict is also a DVSA recognised product.

Dave Thomas, a driver for FM Conway, added:

"As a driver, your worst nightmare is an incident occurring on the nearside blind spot. This [system] gives me peace of mind and there is no way I would want to drive a vehicle again without this device [Sidescan® Predict] fitted to it. It is like having another person sitting there guiding you."



Emily Hardy

UK Marketing Manager,
Brigade Electronics

FOR MORE INFORMATION...

★ Visit brigade-electronics.com





Are AI robots the future solution for last-mile delivery?



Eleanor Matthews
Editor, Logistics UK

Following a successful trial in Milton Keynes – which saw autonomous delivery robots perform more than 2,500 deliveries, covering 500 miles of pavements and tracks – parcel delivery company DPDgroup UK has confirmed plans to bring these robots to 10 more UK towns and cities in the next 12 months.

The robots, produced by Cartken, are fully electric and autonomous, small and lightweight, safe and city-friendly, co-existing easily with humans, pets, and objects, and navigating pavements and road crossings with ease.

We caught up with the Head of Sustainability at DPDgroup UK, Olly Craughan – who recently achieved the top spot in Motor Transport’s Decarbonisation Power Players list 2023 – to hear more about the company’s plans with AI robotics and how it is likely to transform the way we deliver goods in the UK.

Robot deliveries feel like a real glimpse into the future. How proud are you of the project and what does it mean for the logistics industry?

“DPD has a long-standing history of innovation; we are proud to be at the forefront of progress and the development of future technologies. We were the first company to provide a one-hour delivery window and we were early adopters of electric vehicles and HGVs run on hydrotreated vegetable oil.

“Robots open another door to the future of parcel delivery; they pave the way for a different way of delivering. They show that there are more options to last mile delivery than a van: alternatives such as robots and bikes are suitable too.

“We are proud that the robots are sustainable and operate on electric energy with low power needs; all our sites are totally powered by renewable energy and the robots charge from these sites.”

How long has the project been in development from the initial idea to the rollout?

“The project took around 18 months to complete, working in partnership with Cartken – which produced the robots – and liaising with local government to gain permission to operate the robots in an urban environment.

“We find that local administrations are receptive to having autonomous robot deliveries operated in communities and are supportive of the future development of the project. They love that the robots help with the decarbonisation of logistics and are sustainable, but also that they help to reduce road congestion. While you can have electric vans with no tailpipe emissions, a van is still a van on our roads, contributing to potential traffic congestion, whereas robots are an alternative solution that take vehicles off our roads; that is something local administrations are keen to explore.”

What inspired the creation of autonomous robot deliveries? Who really drove the project forward?

“The main drivers are Chris Meir, who is our director of IT and Innovation, and Stuart Woodruff, who is one of our DC managers in the network. They were inspired by seeing autonomous robots delivering non-postal sector items in Milton Keynes; they thought how innovative and beneficial this could be for parcel delivery and took the opportunity to link up with Cartken to start producing robots for DPD.”

Where do the robots fit into the DPD supply chain?

“The robots are the final stage in the supply chain, undertaking the last mile of a parcel’s delivery to the customer’s doorstep. Currently the robots deliver a single parcel at a time, but we have recently received delivery of a robot with four compartments, capable of making four deliveries and improving efficiencies for the service.”

How do the robots use AI technology to operate?

“The technology used to create the robots is extremely advanced. The robot uses AI capabilities to learn the routes it needs to take and to identify and react to objects in its path instantly and independently.

“The robot was at an event in Paris recently, Viva Technology, and you can imagine how busy the footfall of an event that size is. It was amazing to see the robot in action with so many obstacles in its way; obviously, the occasional person jumped out in front of it to see how it would work and its reaction was just instant, without mishaps.”

How have you ensured that the robots are safe to be moving independently on our streets?

“The robots are fully autonomous and utilise advanced technology to identify obstacles and react effectively. To increase its visibility, the robot has front and rear lights, and it has a small flag at about knee height.”

How are you protecting the robots and their cargo from theft?

“The robots have live camera capabilities; if someone was to pick up the robot, an alert would be issued, and we would see instantly who the perpetrator was through the live feed. We have found, though, that the public is very respectful of the robots.

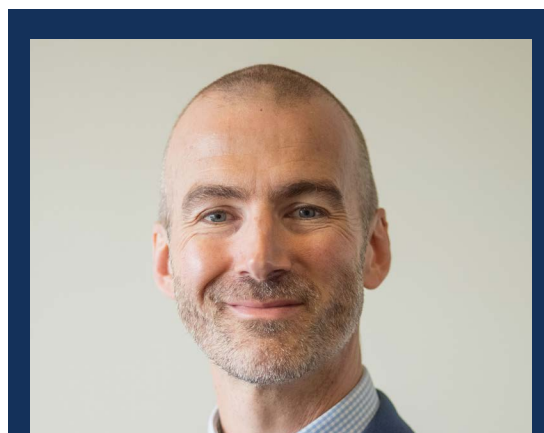
“Maybe as we expand in other towns, we may see instances increase of individuals picking up the robots and/or theft attempts, but I do not see it being likely, people are just intrigued by technology in general and enjoy watching them in action.

“To keep the customer’s package secure, there is a pin panel on top of the robot. The consumer who is receiving the delivery will be given a specific PIN code, which can be used to open the lid and retrieve the parcel.”

What challenges did you face getting the robots operational? How were these overcome?

“We had to undertake internal IT fixes and routing adaptations and amendments to get the robots operational; they differ to vans, as they drive on pavements and tracks etc., so we had to make those changes in the software.

“The public loves the idea of them. They are intrigued by the technology. One of the biggest challenges is the legislation around fully autonomous vehicles and/or robots. And that is where we are very lucky that the local authorities we have been working with are so open to robot deliveries. Fully autonomous vehicles on the road are a way off, obviously, but these robots are the start of the journey to their introduction.”



**INTERVIEW WITH
OLLY CRAUGHAN, HEAD OF
SUSTAINABILITY AT DPDGROUP UK**

What would you say to people who are sceptical about the use of robots?

“If you do not try new technologies, you are limiting progress. This is a first step. Already, we have progressed from a robot that delivers a single parcel at a time to, as I say, launching a vehicle with the capacity to deliver four at a time. That progression is very quick.

“It would be phenomenal to see fully automated and autonomous vehicles, already packed with parcels, driving to a location where a worker can simply walk out of their front door, get into the van, and start delivering. This would make the drive time much more efficient; instead of a vehicle being on the road for an hour or so before they make a first delivery, parcel deliveries would commence from the start of their working day and no time would be lost on a commute to work.”

What environmental and efficiency benefits are you seeing?

“The robots are much smaller than a conventional delivery vehicle, with a small battery to match. They are fully electric – no petrol or diesel is used – and are charged through a simple three pin plug. Their use takes vehicles off our roads, which of course supports decarbonisation.

“We will see the full extent of efficiency results as we expand the project, as we deploy robots capable of handling more parcels; currently, each robot can deliver around 25 packages a day, one at a time, but you need to start somewhere.”

How have your employees reacted to working with the robots?

“They think the robots are really cool – a bit futuristic, a bit Star Wars, very innovative.

“The concern in the media seems to be that robots will take over people’s jobs, but I do not see that happening at DPD. We always need people do a variety of roles here and someone will still need to load the parcels and undertake the other work around the journey of packages.”

And what about your customers?

“They love the novelty of the robots and understand that we are looking at innovative solutions to decarbonise our operations and become more efficient. It is all part of seeking out the best solutions to get to the UK’s net zero target; we need to reduce emissions by 43% in the next six and a half years, which will be a huge step without changes to the sector.”

What is next for autonomous deliveries? Faster robots? Bigger robots? Drone deliveries?

“Drone deliveries are very niche. They have use in urgent medical deliveries, especially in more isolated places, but the UK is pretty compact generally.

“For me, it is all about bigger robots and robots capable of carrying more packages. That is linked to government legislation with autonomous vehicles. The power of them, the size of them - obviously as they get larger, they cannot go on footpaths and tracks, they would have to go on roads. We are reliant on the government easing that legislation to



allow their use to be possible, but obviously the technology has to be proven to be safe.”

Do you intend to utilise this technology in other projects? Is there anything in the pipeline that you can tell us about?

“Our EcoLaunchpad brings together experts in sustainability, technology, and innovation to develop and test new ideas that can help DPD further reduce its carbon footprint. This partnership assists in DPD’s goal of reaching net zero by 2040.”

The EcoLaunchpad will be a ten-week immersive programme where participants will have the opportunity to validate their solutions and have access to DPD’s network and resources, and mentorship from industry experts.

The business is also working with L Marks, leading global innovation specialists, to find innovative solutions to decarbonise last mile delivery, our transport fleet, and buildings. L Marks will scout and identify businesses to apply for a unique opportunity to take their innovative ideas to the next level.

“We have another sort of pillar of that project and that is about robotics; not just in delivery, but also the potential use of robotics in depot hubs, as well as offices where we could utilise the technology, and extending the use of AI in those sorts of situations to make processes work more effectively as well.”

How important is it for companies like DPD to be at the forefront of AI and automation technology?

“It is like any emerging technology, if businesses like us do not trial and adopt the products, there will be no case for them to be developed.

“It is essential that we lead in this area and trial new technologies, so we can test, and then hopefully, prove that they work, so that the businesses developing these products understand the need and the use cases. They may decide on a different direction for the product from our feedback, to make it more suitable. It is important that we work in partnership with those developing the technologies.” ■

FOR MORE INFORMATION
★ <https://green.dpd.co.uk/>

Road safety back in the spotlight

Road deaths are on the rise. Latest figures from the Department for Transport (DfT) revealed that almost 1,700 people were killed on Britain's roads in 2022, representing a sharp increase of almost nine per cent.

For road users driving for business, the safety risks are particularly acute. Up to a third of all road incidents involve someone at work at the time.

Vehicle repair costs and insurance premiums have simultaneously soared – an issue compounded by inflation and economic volatility, high energy prices and supply chain disruption.

The need for businesses to take control of fleet risk has, consequently, become more pressing than ever, and telematics platforms can play a crucial role in helping them to do so.

BEHIND THE WHEEL

Driver behaviour insights from systems such as Webfleet enable fleet managers to take the pulse of fleet standards behind the wheel, to set performance benchmarks and to establish targets for improvement. Drivers themselves can be empowered to minimise incidents of speeding, harsh braking, cornering and distracted driving with real time performance feedback, via in-vehicle navigation devices.

Telematics data can also help to ensure robust service, maintenance and repair (SMR) processes. Maintenance planning tools allow fleet managers to plan maintenance intervals more efficiently based on measured mileage.

In addition, telematics insights can help make critical maintenance predictive and preventive.

Vehicle engine fault codes, for example, can be relayed to fleet managers, ensuring maintenance is carried out as soon as problems develop, helping prevent more serious mechanical issues. And where systems are integrated with leasing providers' software platforms, this process can happen automatically, taking the burden off both the manager and driver.

ENRICHING INSIGHTS

Integrated camera systems offer even greater opportunities to improve driving and operational standards.

Webfleet Video, for example, employs the latest in connected dashcam technology, with machine vision and artificial intelligence (AI) raising the bar in tackling risky driving behaviour.

Analysis of images and video data enables the CAM 50 to "see" and recognise risky driving behaviours, such as

distraction, fatigue and mobile phone usage. This gives managers a better understanding of the reasons behind driving incidents.

Webfleet Video now offers a fully integrated wireless multi-camera solution, capturing side and rear views to expand on fleet visibility and offer an extra layer of evidence. Cargo views heighten vehicle security and can support employee guidance on the loading and unloading of goods.

Moreover, managers can gain a better understanding of the reasons behind driving incidents, enabling training programmes to be developed that are more tailored, and for reward initiatives for safe driving to be more accurately implemented.

The technology also provides the option to warn drivers of risky behaviours by emitting an instantaneous alert that empowers them to self-correct in real time.

Elsewhere, integrated camera systems paired with driver behaviour monitoring can also help fleets cut their fuel bills. Food manufacturer Greencore, for example, has improved its mpg by almost four per cent, notably by reducing incidents of idling.

By taking such data-driven steps to protect their fleets, businesses are better placed to keep their drivers safe behind the wheel and, significantly, protect their all-important bottom line.



Beverley Wise

Webfleet Regional Director UKI for Bridgestone Mobility Solutions

FOR MORE INFORMATION...

★ Visit www.webfleet.com



How to stop vehicle and cargo theft before it happens



Kenneth Malmberg

Senior Director,
Market Development
and Alliances

Concerned about rising package and vehicle thefts with last mile deliveries? Ease of mind lies in enhancing vehicle security and deterring cargo theft before it happens. Start by replacing physical keys with digital ones. Many delivery drivers are leaving vehicles running with the keys in the ignition to speed up delivery times. With a digital key, the key fob and blade aren't replaced. They are enhanced with remotely controlled digital locking and immobilisation control so the work of locking and unlocking the vehicle can become digitally automated.

Digital keys offer a fundamental security boost to your fleet, enabling features such as:

- Automatically locking doors as the driver walks away from the vehicle and unlocking as the driver approaches.
- Shutting off the engine when the driver exits the vehicle, minimising idle times.
- Digital immobilisation automatically prevents vehicle theft by immobilising the vehicle even with the keys left in the ignition.

Vehicles that are being stolen will be reported immediately. If a vehicle starts moving without an approved digital key present, the platform immobilises the vehicle and notifies the driver, fleet managers, and authorities instantly. This quick response reduces the time it takes to recover stolen property and vehicles.

Additionally, removing the master driving rights from the physical keys means they can be left in the vehicle, and drivers access the vehicle using NFC employee badges or via an app on their phone. This benefits the fleet by

- Remotely issuing digital keys to drivers for the specific vehicle they are to drive that day.
- Issuing digital keys to maintenance and service workers who need access to repair the vehicle.
- Replacing expensive physical keys with digital keys.
- Prevent vehicle lockouts by always having the capability to remotely unlock a vehicle, or use two local means to unlock including phone and NFC key card.

In the UK, a distribution fleet is using hotel style key cards and a smartphone app to replace keys for their drivers. The system has been well received and the drivers appreciate the convenience of not needing to keep track and manage vehicle keys.

With the right technology, you can enhance theft deterrence and detection while speeding up recovery efforts. Ensure a more productive delivery experience by protecting your fleet, cargo and vehicles, while making your drivers, jobs more efficient. Contact Ridecell if you're interested in learning more about the ROI of adding keyless to your fleet. ■



FOR ARTICLE SOLUTION...

★ <https://ridecell.com/solutions/fleetshare/>

★ Company page
<https://ridecell.com/>

Vehicle safety in an autonomous world

We sat down with Mark Cracknell, Programme Director at Zenic, to find out more about how he's helping accelerate the deployment of connected and automated mobility to deliver benefits to UK businesses and the travelling public.

Let's start at the beginning. What are the benefits of connected and automated mobility (CAM)?

At Zenic, we tend to think of this in four key areas and the first is safety.

From a societal standpoint, we recognise that a number of people die on our roads every year. Depending on which stat you look at, upwards of 86% of accidents on the road have a contributory human factor.

I think I'm a safe driver. I think I'm a good driver. Am I as good as I think though when I'm driving back from holiday and the kids are shouting because they can't get on Netflix? Or when I'm tired? Or when I'm not feeling well? Other factors might mean that I'm not a consistent driver at times. Leveraging technology so that driving on our roads is consistently safe is one of our primary objectives.

The second benefit is productivity, both personal and industrial. A pre-pandemic stat concluded that 225 hours per year are spent in traffic jams on a person's daily commute, which is neither productive nor fun. If you don't have to be the driver on your commute you can spend that time more productively. I'm not suggesting your employer can make you work as soon as you start your commute, but there are obviously other productive things you could be doing in that time. Of course, leveraging CAM technology into a fleet and logistics operations means the productivity of the service you provide and the operations is increased with better scheduling of vehicles, smoother journeys, more reliable journey times on a network that is more connected as well as automated.

The third benefit we often talk about is access to transport. Around half of disabled people report that access

to transport is a real issue for them in their day-to-day lives. If we can leverage a broader spectrum of mobility options with new vehicle types and new vehicle services which are unlocked by technology, then we can provide a greater equity to transport: whether it's because you have a mobility issue or whether you live in a rural community where the archetypal bus comes once per week because those services are expensive to run. If you can leverage technology to be more responsive, more dynamic, lower cost, we can improve access to transport dramatically.

And the fourth benefit of CAM, which I guess is a follow-on benefit from the previous three, is that there's a huge economic opportunity for the UK.

It's estimated that by 2035 the CAM market could be worth up to £42bn. The question is: what role can the UK play within that market? Are we going to own the space? I don't think we're quite in a position to make that assumption. However, what we do believe is that the UK's strength in loads of areas – the operational side, the software, the cyber security – and that there's opportunity to generate real growth in the UK economy and, as a result of that, there's huge job opportunities than can arise from this new market that we're seeing.

According to your presentation at Logistics UK's Fleet Engineer 23, Zenic is "Championing the UK Connected and Automated Mobility ecosystem". What is the company's mission and vision for the future?

Zenic is an interesting organisation in a really unique position. We are a not-for-profit organisation that operates in the middle axis of government, industry and academia.



Stuart Messham

Editor, Logistics UK

We are a private company funded by central government, but also our industry partners. And what's really exciting about that is that it allows us to work with all those partners in a really neutral way.

We work very closely on policy and funding interventions with government. So, when we're talking to industry we can represent a government voice. On the other hand, we are very engaged with industry and represent a very strong, combined industry voice back to government.

So that's why we say we're here to champion the CAM ecosystem because we speak on behalf of, not just our industry partners, but also government.

I say this slightly flippantly, but Zenzic doesn't do any of the 'real' stuff: we don't build the vehicles and we don't develop the software itself. Our job is to support those who are making the developments and those who are setting the regulations and policy for the use of those developments.

So, our job is really to bring people together: we bring together industry forums – which is why we present at Logistics UK events – we represent this concept of CAM and we bring people together to deliver more effectively.

How do Zenzic's three pillars of Insight, Innovation and Collaboration help you achieve your goals? And which one is the most important?

Picking one of Zenzic's pillars as the most important is like picking your favourite child: all three of the pillars are required to do what we do effectively and have equal merit.

Insight is really about understanding and knowing what's going on. CAM is very emergent and moving at a very fast pace. A lot of things we took as gospel truth six months ago have changed dramatically and now we know so much more, so we take a different view. We learn so much as we go.

We often have people coming to us and wanting to know more about CAM and automated vehicles, but don't know where to start. It's our job to know what's going on and who's doing what. Through our engagement and our networks, we pride ourselves on being quite knowledgeable and that really kind of gives us a bit credibility: a right to play in this space because we do know what's going on and who's doing what in the UK system.

Innovation is really about 'doing a real thing'. I'm a big believer that we don't just talk about stuff, we don't just do research for the sake of it, but that we strive to do things to make a tangible and visible difference. And our Innovation pillar really is about doing that.

This is where we see a lot of the programmes that you might be familiar with. Our investment into SMEs – which we call our CAM Scale-Up Programme – is where we provide funding to small and medium enterprises (and start-ups as well) to help them develop products and get to market quicker, sometimes by as much as 18 months because of the access we give them to testing facilities.

We also support big funding interventions coming through government. So the deployment programme we announced alongside government back in February 2023: seven projects

that are putting our self-driving services onto the roads by 2025. That's part of our Innovation portfolio: the chance to take a real, tangible step forwards in the CAM space that has safety and economic benefits and increased access to transport.

Our Collaboration pillar is a bit of a wrapper around the other two and strikes the very heart of what we believe: that no-one can do this on their own. Even if we had a tech giant here in the UK with billions to invest every half-hour, even then you wouldn't be able to do everything on your own.

You're reliant on government for regulation, you're reliant on the infrastructure and the road network to be there, you're reliant on the transport operators to allow you access to the network to support what you're doing. Collaboration for us is bringing people together to make the sum much greater than the parts.

We do this by holding workshops to bring tech developers together with fleet operators, the insurance sector talking to road infrastructure providers. Collaboration knits everything we do together and is a huge part of why we exist.

Zenzic's position within the automated mobility automation system makes it ideal for gathering research to help steer the roadmap. How does the CAM Testbed work and how close is the UK to achieving its ambitious automation goals?

This is what I call "The Glorious Day", when CAM is all singing and dancing and the world's a better place.

Zenzic's central position within the CAM ecosystem does afford us a unique visibility as to what is going on. CAM Testbeds UK was one of the first things Zenzic established when we started six years ago, and that was really quite a fundamental strategy that says: regardless of what you're developing and where you want to deploy, you've got to make sure it's safe, test this new technology and really build confidence, not just with the regulators who have to approve the technology, but with the public to say you can trust them: you can put your 13-year-old daughter in a self-driving taxi to school and feel comfortable about it.

CAM Testbeds UK was set up to help people who are deploying new technology. We have six UK Testbeds that exist, broadly between Birmingham and London, covering physical and virtual test environments: controlled grounds, real-world urban streets in London and everything in between. And that really allows us to build out a safe understanding of what needs to happen and makes the UK an attractive place for me developing this globally to come and test. There's a number of companies who've set up in this country off the back of this ecosystem that we're building.

The roadmap that Zenzic has built is not just our ivory tower where we squirrel ourselves away for a year and come up with a mad plan of what we want it to do and put it out there and pretend it's the real thing. We have 200 organisations across the UK that have all contributed to the roadmap, we've had workshops, we've had Post-it notes

all over the wall, we've argued and debated about what we want to see and when it's going to happen and everyone involved broadly subscribes to this vision that we have.

When I speak to my friends and family and I tell them what I do they ask 'Is that a real thing?' and 'When am I going to see it?' And frankly, they're great questions to ask. When we set out the roadmap we recognised that 2025 is a really pivotal date.

We knew that by this time we would need to have all the pieces of the jigsaw in place for the whole thing to come together and to start seeing it happen. One of the big things is legislation: in their policy paper last year, government set out the ambition to have all the regulations in place by 2025 to align with our roadmap so that we could start to see these things rolling out.

Look around today and you can see small technology trials taking place: if you're in the right part of Greenwich you might have seen some self-driving vehicles going round; if you're in the West Midlands around the University of Warwick you will see some other automated vehicles being trialled.

What we announced with government this year is that, by March 2025, if you go to Sunderland, Edinburgh, Belfast or Birmingham along a logistics route along the motorway you will be able to see real services happening which are delivering goods.

ASDA, one of our partners, is trialling a depot-to-depot logistics route. We've got industrial logistics up in the Nissan plant in Sunderland. All of these will be running real operational services. Passenger services will have paying customers on the bus in Edinburgh or the shuttle in Sunderland.

If you are in those areas you will see CAM being used in action and making a difference in the real world. You're not going to see everything in action everywhere, but for me 2025 will certainly be a major kick-off point.

These projects will be the North Stars for CAM where other local authorities and logistics services across the country can begin to look into leveraging what's already happening successfully into their own operations. Between 2025 and 2035 you will then see a tangible build-up of CAM in deployment on UK roads.

A lot of people are still nervous about CAM technology. What measures and regulations are in place to give people more confidence?

The public's buy-in to CAM is one of the most fundamental enablers and a topic that comes up a lot.

Firstly, it's always difficult to trust what you don't know and what you have no experience of. It's what we've recognised from a number of pieces of work that we've done and the government did a piece of work last year to capture public sentiment called the Great Self Driving Exploration.

What that found is that people's perception and comfort and trust of these things was greatly influenced once they'd had a chance to experience it. By providing services and letting people use them you can build trust in the

technology. So that's something we're looking at, giving people more opportunities to experience the technology so they can become more comfortable with it and have more confidence in it.

The other thing is the regulatory regime: the idea that someone somewhere who knows exactly what they're doing has looked at it, put it through its paces and confirmed that it's safe is very important. To use the emerging legal words here 'safe as a careful and competent human driver'. That's the bar we set.

What does that look like? Well, this is the subject of all the work that's going on right now. There's a programme called CAVPASS (Connected and automated vehicles: process for assuring safety and security) an internal government programme that's putting all the mechanisms in place to ensure that it's safe.

To summarise, there's a lot of work going on to make sure you understand not only how the technology works, but how it behaves.

One thing we're looking at is 'scenarios'. In my job prior to Zenic when I led research teams at Transport for London, I used to joke that all the things that 'never happen' happen every day in London: Boxing Day roller discos, flocks of ducks crossing major junctions etc.

Things we wouldn't expect to see in our daily lives and certainly not on our driving test, but things that do occur and therefore would need to be navigated by self-driving vehicles. So, companies are building a library of scenarios so we can truly put a self-driving vehicle through its paces.

The sign off on a self-driving vehicle does not just involve the technology of the vehicle, but also how it behaves in an environment and in different scenarios. CAM Testbeds UK, and our partners, help people develop technology and make it robust in its development process, then it goes to a regulator which carries out an equally robust independent assessment of how it behaves. No vehicles will get onto UK roads without going through this hugely robust two-stage process.

How can freight and logistics firms begin to collaborate with you who aren't already?

We're always keen to expand our scope and to liaise with prominent organisations like Logistics UK as awareness really is a key thing.

Autonomy, connectivity, self-driving are technologies that are coming to the market, so we want to make organisations across the UK aware of them and their benefits and implications.

The second part is engagement. We are always open to have conversations with your members who want to find out more. There's a huge amount of resources on our website and on our roadmap.

If you're completely new to this, that might be a difficult way in, so we have our stakeholder teams and research teams that are more than happy to have conversations with people and to share what we're doing and answer any questions people may have. ■

FOR MORE INFORMATION

★ <https://zenic.io>
★ email info@zenic.io
★ LinkedIn: <https://www.linkedin.com/company/zenic/>



Building the truck of the future: legislative timelines and safety design



John Comer

Head of Product Management, Volvo Trucks UK and Ireland

**Winston Churchill famously said:
“The farther back you look, the further ahead you can see.”**

Having just recently reached a milestone birthday and in one way or another been around trucks all my life, it’s a privilege to be a key part of the product management team at Volvo Trucks for three decades, for a brand built on the values of safety and its key strapline: ‘driving progress.’

During this time, change has been constant. However, the rate of change has stepped up due to many factors and while the profile of a new truck – for example, the Volvo FH launched in 1993 – over a typical 20-year life span may externally look the same, product evolution will mean that there is very little common underneath, driven by technology, customer demand, production techniques and legislation.

The 1960s boyhood sketches of the truck of the future are arguably more space age compared to those in production now.

THE DRIVELINE

In terms of air quality, the industry has made massive strides in reducing particulate matter (PM) and oxides of nitrogen (NOx) from Euro 1 in 1993 to Euro 6 in 2013.

The new RED Driver 2024 model range.

Features include:



Invested in ideal vehicles for the job?
They're only as good as the drivers in them...

The RED Driver 2024 model range can be specified with all sorts of safety and efficiency features to suit your fleet through a comprehensive range of courses from **advanced driving techniques**, **HGV licence acquisition**, **CPC training**, to **speed awareness**, **Fuelsave training** and more.

For more information visit redtraining.com or call 01332 810007

RED
CORPORATE
DRIVER TRAINING



The change from Euro 5 to Euro 6 on its own saw an 80% reduction in NOx and 50% in PM. This meant not only engine development – cab movements and chassis package demands to fit both selective catalytic reduction (SCR) and diesel particulate filters (DPF), and with further developments from step A to the current E on tighter on-board controls. All the above achieved, whilst trying to maintain and even improve fuel consumption.

Now, we have a new regulatory target via VECTO (Vehicle Energy Consumption Calculation Tool) to control CO2 emissions. Using this tool, vehicle manufacturers must achieve a 15% reduction in CO2 by 2025 compared to the baseline of production set in 2019. There is no surprise that due to drag and rolling resistance there is a large focus on aerodynamics and low rolling resistance tyres, coupled with friction savings from the engine right across the driveline.

The 2025 target is tough, but the good news is the changes are also delivering savings on fuel when the new technology has been adopted; our I-Save engines with turbo-compounding are breaking all the key fuel consumption records.

The 2030 target has recently moved from a reduction in emissions of 30% to 45%, and to achieve this, alternative drivelines with zero tailpipe have the biggest part to play. Volvo Trucks has already taken the lead with a full range of medium and heavy duty trucks in the marketplace. There are many legal and operational challenges that have been fully documented elsewhere, however, they are trucks and the way we qualify and specify is no different to diesel, it just takes more time. We have transitioned before from coal to diesel, and more recently we have the learnings from diesel to liquefied natural gas (LNG) where the key to success was collaboration between operators, drivers, telematics, workshops, energy providers and legislators.

Alongside the carbon reduction targets, we already have the end of sale dates confirmed by the UK government. Sales of new petrol and diesel cars and vans must end by 2030, and all new cars, vans and trucks of 26 tonnes and under must be zero emission by 2035, with 2040 a backstop for all new road vehicles. On paper, these dates are some time away, but realistically, in some cases, one or maybe two replacement cycles in the future, so legal pressure is there from all angles, but most operators are focused on doing what is right for the planet.

What we need from government now is more positive support on ensuring the infrastructure on charging and the quality of the road network; not further regulation on zero emission mandates, the timeline is already in place.

Electric power has been with us since the advent of the auto industry; advances in technology and the drive for fossil free power is now shaping it.

THE ROLE OF THE DRIVER

The driver is legally in charge of the vehicle, with a very high level of automated support. This started in earnest in the 1980s with the introduction of anti-lock braking systems (ABS), which were mandated in the early 90s. Over the last three decades, this has evolved with the development of Controller Area Network (CAN bus), into a fully integrated network between the engine, gearbox, brakes, and auxiliary brakes – improving safety, comfort, vehicle efficiency and control.

The development of transmissions from the two pedal I-Shift in 2001 has meant that Volvo heavy duty trucks have not offered a manual option since 2017 for any application including heavy haulage. The change to two-pedal transmission communicating with the engine meant that engine braking could be optimised based on gear selection today. The whole system is supported by connectivity to telemetric maps to optimise the gear changes ahead based on gathered road data – giving predictive cruise control to support fleet efficiency.

Automation along with driver training is a key way to reduce accidents. Advanced driver support systems are now required legally with electronic stability control, forward collision warning, emergency braking, and lane change support, as part of the General Safety Regulation (GSR) on two and three axle trucks.

It is vitally important to explain to drivers what these systems can and cannot do; this is supported by an interactive online driver manual <https://driverguide.volvotrucks.com>. Simply enter the last seven digits of the vehicle identification number (VIN) for information.

2024 GENERAL SAFETY

There are additional regulations for all new trucks registered from 5 July 2024 in the EU to support the safety around vulnerable road users. The General Safety Regulations 2 (GSR2) mandates a moving off information system (MOIS) to the front, and blind spot information system (BSIS) to the side for pedestrian and cyclist protection. The system also mandates a reversing camera, tyre pressure monitoring,

alcohol lock preparation, emergency brake lights, driver alert and intelligent speed assist.

This legislation is not retained as part of Brexit; the UK government is consulting on it now. If given the go ahead, the legal implementation date could be late 2024 by the time it gets through the legal process. This is a concern for EU-based vehicle manufacturers who, due to Brexit, are now working through a new GB type approval scheme. The UK now has a late mandate on key safety items. This could lead to further divergence of regulation across the EU, which increases administration and impacts on the offer, resulting in the same truck sold and marketed in Europe having to meet different GB based regulations, or not aligning to EU regulations for we have chosen not to adopt them.

Add these into further scattered regulations in cities – for example, the London progressive safe scheme from October 2024 that will require trucks that have a direct vision rating of less than three stars to be equipped with moving off and blind spot support systems – and the administration for all is further increased.

The concern with three-star direct vision – although important – is that it focuses on one area: the vision you can see 180 degrees to the front and side. In London, the traffic situation is so dynamic that you need systems to assess what is coming up the side as well.

The Direct Vision Standard (DVS) and the safe system are confusing to some operators. With further development of GSR in this decade, there will be greater progress on target zero accidents with a fully holistic approach to road safety for all cities. Zero accidents in a truck is a tough call, given the human interface and the physics of large vehicles – however it targets focus and research to meet it.

As highlighted earlier, it is important to explain how all these systems support the driver. We have a high level of automation, but the vehicles are not autonomous; the driver is in control. Autonomy is still being evaluated and in closed areas has much potential, where the driver role is repetitive such as a container port or building site. It will be interesting to see how these developments roll out in day-to-day operations, particularly in managing the loading and charging of the vehicle, where telematics and data arguably will have a bigger role in managing the vehicle than today.

MODALITY – WEIGHTS AND DIMENSIONS

Back in 1956, Malcolm McClean gave us the box that changed the world, with interchangeable modal units. Truck design transitioned due to this from rigid eight wheelers to the artic, which accounts for 50% of all trucks today. This fully supported the modal change for the truck, which has never been in competition with any transport mode; it has a key role in final collection and delivery.

There has been some movement in modal shift on to rail. It will be interesting to see how this develops with the transition to electric vehicles, or how diesel with renewable biofuel could reduce their emission profile by

being allowed to operate at higher weights as a longer heavier vehicle. A key concern for this energy transition is the current regulations around weights and dimensions. There is a concession on the overall payload carried to counter the driveline weight of two tonnes. The issue is, how do you achieve this and maintain legal axle weights; the limiting factor on the payload is the unladen weight of the drive axle.

NEW STARTS

Working in the truck industry today is an interesting place. The industry is changing at a pace, and it is the perfect time and place to bring on new talent, in all areas of the business: drivers, technicians, engineers and logistics specialists. Post-COVID-19 it is vital that we nurture this available talent in a very competitive career market.

It is also interesting to see, after years of manufacturer consolidation, that there are new start up truck companies entering the arena, driving technology and different solutions. As they enter production it will be interesting to see how the business models adapt and change based on total cost of operation (TCO).

There is always an area for new startups. When I was born, Volvo Trucks was not present in the UK truck market – which was the biggest truck producer in the world – arriving in 1967 they took the transitional opportunities available on weights and dimensions to take market leadership in tractor units by 1972. With the long-established strapline of driving progress, today we are making great progress with the electric transition.

WORKING TOGETHER TO MAKE A CHANGE

The important thing to remember is that none of us can do this on our own. The future solutions are all about working together; collaboration is the key. ■



Keeping vehicles safe – a DVSA perspective



Neil Barlow

Head of Vehicle Policy and Engineering, Driver and Vehicle Standards Agency (DVSA)

DVSA has just published its strategy and vision to 2030 which begins to explore the prospect of the huge change that technology can bring for all of us. This includes the tools to help us look after our vehicles and how they function as we move towards greater automation. It could also bring changes to how we regulate. We saw hints towards that in the recent calls for evidence on the MOT (which, while aimed more at light vehicles, has much relevance to this sector) and on potential options for heavy vehicle testing of Earned Recognition vehicles. However, we still need continue to get the 'basic' things right.

VEHICLE INSPECTION

One of the key principles in vehicle operation is that of planned and preventative maintenance. A lynchpin of this is an established set of vehicle inspections at a set interval. Those inspections must be at a standard above that of the annual test (the MOT) to ensure that a vehicle never drops below that in normal service.

From our roadside work, we see vehicles tend to deteriorate the longer it has been since their annual test. This indicates that they got up to that standard for the test, rather than are generally consistently above.

While we know many operators will be doing the right thing, it is clear that not all do. The Guide to Maintaining Roadworthiness sets out all the requirements in quite some detail and is applicable to all sectors. A few pointers are highlighted below.

INSPECTION INTERVALS

One of the most important elements of good vehicle maintenance is appropriate inspection intervals. They will vary depending on the type of vehicle and how it is being used. For example, heavy goods vehicles (HGVs) with lightweight loads operating under easy conditions may only need

Notify



Safety intelligence to revolutionise your workplace safety culture

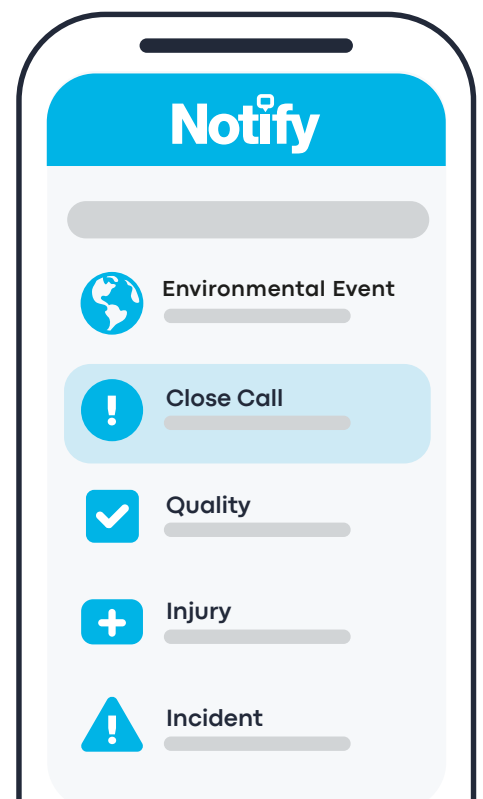
Notify's SHEQ management system digitalises and automates processes, saving time, eliminating blind spots, and enhancing workplace health, safety and productivity.

Notify will allow you to:

- Log and track incidents, accidents, near misses and positive safety events on and off site
- Create and schedule dynamic audits, vehicle checklists and safety inspections
- Easily create and complete risk assessments on the go
- Schedule and track actions in real-time
- Stay on top of all quality and environmental issues
- Visualise and interrogate your data with our interactive dashboards



Transform your safety
culture with our software
and mobile apps today



inspecting every 10 to 13 weeks. Those used for general haulage may need inspecting more regularly – every six to 10 weeks. Heavily used vehicles and/or trailers may need inspecting more often to make sure they are in a safe condition to be used.

Key to any decision-making process on inspection intervals is to make sure that thinking is logical. If you are unsure, it is always sensible to err on the side of caution and choose shorter interval inspections.

RISK-BASED APPROACH

DVSA looks at risk when considering the likelihood of issues occurring with HGVs and buses. Factors we use include:

- Age of the vehicle
- Usage
- Driver reported defects
- Previous safety inspection results

These can provide useful indicators that help you work out your inspection regime. Older vehicles, a harsh operating environment and a track record of things being imperfect are all good reasons for an inspection interval being short.

Operators on the Earned Recognition Scheme are seen to be exemplary operators and are able to prove this when they bid for contracts. They are also less likely to have their vehicles stopped at the roadside for inspections.

New operators which have held an operator licence for less than six months join the Road to Earned Recognition.

DRIVER WALKAROUND CHECKS

Most operators and drivers are aware of the basics of doing a walkaround check but sometimes the overall system doesn't work. For the process to be worthwhile, there needs to be a follow-up process where reported defects get rectified and a way of handling situations where a reported defect means a vehicle should not be used. We often hear the blame for things going wrong directed to drivers for not doing checks right – and whilst that sometimes is the case, often the issue may be that the operator doesn't listen to what is reported!

It is also worth noting that there is a real culture issue here – drivers should not be put under pressure to say a vehicle is okay when it is not.

A large proportion of vehicle defects found at the roadside should have been picked up during drivers' walkaround checks. Therefore, it seems clear that making sure these systems function could be a quick win for many operators.

EXTERNAL MAINTENANCE PROVIDERS

Many larger operators use maintenance providers to make sure their vehicles are safe and roadworthy. Unfortunately, at annual test and roadside, DVSA vehicle services assessors still find too many issues where HGVs are not at the right standard. This can also reflect badly on the operator as this could call into question whether regular maintenance is being carried out between annual tests.

Don't let this happen in your organisation. The operator will still end up with a vehicle that has been prohibited

with all the usual inconvenience associated with a vehicle off the road. You should make sure that:

- They have suitable facilities and access to the correct tools.
- There are enough staff, and they are competent.

You should consider how you can check the quality of work carried out, and also ensure your contractual arrangements with them cover all that is needed.

Operators need to make sure they make vehicles available to providers and that there are arrangements for both inspection and repair. We have seen situations where the maintenance provider is blamed for roadworthiness issues when actually, all they were contracted to do was inspect (and not repair).

COMMON DEFECTS

The most common found either at the roadside or at annual test are:

- Wheel maintenance and tyre condition
- Brake systems and components
- Suspension
- Spray suppression, wings and wheel arches

All systems should be checked as part of maintenance. The fact we find most problems with these may help give some focus on where to put more effort.

CONCLUDING

Many operators take their maintenance regimes seriously and have strict maintenance regimes in place. But it's clear that there's much more room for improvement throughout the industry – our statistics on annual test and roadside performance show that. There needs to be much more emphasis on ensuring the annual test standard is seen as a minimum service specification, and not a once-a-year highlight. This should be achieved through appropriate service contracts with maintenance providers, the right service intervals for the right vehicles and circumstances, not to mention meaningful driver daily walkaround checks. ■

BE PREPARED

DVSA sends regular email alerts to operators via their managers. Useful articles are also found on the **Moving On** blog which tackles wide ranging subjects on vehicle safety and compliance.

Operators can keep up to date with changes by signing up to receive optional email alerts from DVSA.

FOR MORE INFORMATION

★ <http://www.gov.uk/government/organisations/driver-and-vehicle-standards-agency>

RED Corporate Driver Training

RED Corporate Driver Training is the specialist sister operation to RED Driving School – the leader in the UK. We recognise the importance of good driving standards, from passing a first-ever car driving test to the world of safe and effective deliveries, transportation, logistics and competent driving for or on business.

With the continuing shortfall in professional drivers in the UK and road safety statistics that remain stubbornly static with around 1,700 road deaths, 30,000 killed or seriously injured and an enormous cost to businesses and wider society of road collisions per year, this is really no time to drop driving safety standards.

RED Corporate Driver Training can help support your focus on driver training and standards with a comprehensive driver risk management and driver training course range. This includes truck driver licence acquisition in a range of categories including towing, and runs through a course range that includes everything from advanced driving techniques to speed awareness, Driver CPC and more. With RED's dedicated training facility at Donington, in the heart of the country, plus our wide network of fleet trainers, we can normally meet your needs with a strong customer focus and a commitment to quality delivery. We cater for car, van and truck drivers too.

In addition to our great choice of courses and delivery methods (online assessments, online e-learning, webinar, workshop, one-to-one in vehicle, etc), RED is just launching "SafetyFirst" – its new driver risk management customer platform. Cloud-based, and flexible for use on PC, tablet or smartphone, it provides the overarching control and visibility you need over your fleet. You can organise the details of each of your drivers and vehicles in one dynamic system, helping to monitor your commitment to driver safety, organise ongoing training as needed, and also monitor and check driver licence status. Individual drivers can access the system to complete online training and grey fleet drivers can also self-declare their vehicle's safety and legality to drive for any business needs. You can even host your important driver manuals, policies and other important driver safety assets in the system online. We would be pleased to arrange a demonstration of this new SafetyFirst system.

Having a comprehensive driver training approach (not just basic driver licence checking, for example) is increasingly

important – risk needs managing and on road is no different – if you outsource aspects of your driver risk/training, or even if you need support with a more ad hoc training programme or a focused Safety Day at our Donington facility, then we would be pleased to think you will consider RED Corporate Driver Training.



Greg Ford

Head of Corporate, RED

FOR MORE INFORMATION...

★ Visit www.redtraining.com





Maintaining roadworthy vehicles



Martin Candish

Head of Compliance Information, Logistics UK

Road safety and compliance is paramount in every fleet, whatever its composition or size; owners and drivers of vehicles and trailers are required legally to ensure that their load, passengers, and the vehicle itself is in a roadworthy condition and will not cause any danger, either to the operator or someone else who may come into contact with it.

The *Guide to Maintaining Roadworthiness*, written in conjunction with Logistics UK, the Traffic Commissioners, Road Haulage Association and Confederation of Passenger Transport, provides operators with clear advice and directions on how to meet the conditions for operator licensing and to remain compliant with Traffic Commissioner and industry agreed standards.

Martin Candish, Head of Compliance Information at Logistics UK, provides an overview of the key areas of focus and shares advice on maintaining roadworthy vehicles.

LOAD SECURITY AND ENFORCEMENT

“The DVSA is increasing its focus on vehicle load security enforcement,” begins Candish. “If loads are carried insecurely, they can present a danger or a nuisance to people or property; operators must ensure that the load carried by a vehicle or trailer is secured fully at all times.”

“It is essential that both operators and drivers have clear processes in place to fulfil these safety requirements and

if they do not appear to be working, then the necessary changes need to be made before further loads are moved,” says Candish.

CLEAR AREAS OF RESPONSIBILITY

“The operator/owner of the vehicle has different responsibilities from the driver”, says Candish. “The operator oversees the maintenance of the vehicle to keep it in a roadworthy condition, whereas the driver must ensure that the vehicle they are using at that time is in a roadworthy condition.”

Operators are responsible for carrying out safety inspections, driver defect reporting, providing driver training and awareness courses, booking in servicing and maintenance in line with the manufacturer’s recommendations, and ensuring the MOT is completed on time.

Drivers are responsible for checking the vehicle and load before using on the road, then monitoring the in-use condition of their vehicle and any load carried, reporting any

FOR MORE INFORMATION

★ <https://www.gov.uk/government/publications/guide-to-maintaining-roadworthiness>



identified issues and/or defects, and taking appropriate action, particularly when road conditions are bad.

THE IMPORTANCE OF WALK-AROUND CHECKS

“Driver walk-around checks are imperative to safe road operations; they must be carried out by the driver diligently and without exception before any journey begins,” says Candish.

Driver checks include items such as lights, tyres, steering, brake operation, fuel/oil levels, warning devices and mirrors. If a fault is discovered, the driver must record the fault in writing and then report it following the correct company procedure. Digital systems can be used for recording defects, providing they meet specific criteria such as being tamperproof, and can provide hard copy information if required.

“We recommend that drivers complete and sign a defect report after every check, even if no fault is found, as it can be used to prove that any fault found at a roadside check happened en route,” says Candish. “In addition to the initial walk-around check, drivers should regularly look over their vehicle throughout their shift to monitor its condition; the frequency of these checks would depend on the type of vehicle and its use.

“Transport Managers have a responsibility to provide their drivers with the time, knowledge, and tools to enable them to complete robust checks to ensure vehicle defects are located and reported early,” says Candish, “Regular training is vital to ensure that drivers are fully aware and capable of doing what is expected of them.

“Transport Managers must provide continuous and effective management by laying out clear processes and ensuring that reported defects are followed up and rectified.

“Road safety and compliance is a priority for Logistics UK, and we work closely with our members to encourage them to place safety and compliance at the heart of their operations,” says Candish.

“Logistics UK prioritises its members’ safety and wellbeing within the industry by leading multiple sessions with transport managers, both in person and online, as well as offering telephone support via its Member Advice Centre, to advise on new legislation and on how to keep employees safe and compliant in undertaking their jobs.

“Logistics UK will continue to provide resources and learning opportunities for its members to ensure they remain up to date and informed of any new regulations or changes,” concludes Candish.



The safe carriage of dangerous goods



Percy Thrower
 Manager, Dangerous Goods Information, Logistics UK

Logistics businesses have a responsibility to transport goods in a safe and efficient manner, and for those charged with moving goods classified as ‘dangerous’ – including explosives, bleach, lithium batteries and aerosols – they must adhere to additional safety regulations.

“Improper transportation of dangerous goods can lead to serious accidents and pose a risk to human life, the environment, and infrastructure,” says Percy Thrower, Manager of Dangerous Goods Information at Logistics UK.

“Every year, companies and individuals are prosecuted for violations of dangerous goods laws across the globe. Anyone involved with the documentation, packing, transport, and handling of dangerous goods must be aware of their legal responsibilities and ensure they have received the appropriate training.”

Legal obligations are outlined in the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). The purpose of the Agreement is to ensure that dangerous goods can travel internationally by road without hindrance provided that the goods are packed and labelled in accordance with the provisions of the Agreement

and that the vehicles used comply with technical requirements outlined.

While ADR is an agreement between member states and there is no overall enforcing authority, the Department for Transport is responsible for most of the policing in the UK, through The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (CDG Regs) which together regulate the carriage of dangerous goods by road and are highly prescriptive.

CATEGORIES OF DANGEROUS GOODS

Dangerous goods are categorised in nine groups: explosives, gases, flammable liquids, flammable solids, substances liable to spontaneous combustion and substances which in contact with water emit flammable gases, oxidisers and organic peroxides, toxic and infectious substances, radioactive materials, corrosives substances, and miscellaneous substances.

“Some of these categories cover highly dangerous goods, such as acids with the potential to create poisonous fumes, whereas others include more everyday items such as paints and pesticides, which have properties which could become dangerous if handled incorrectly,” says Thrower. “Unsurprisingly, fireworks are classed as an explosive and should be handled with care in line with health and safety recommendations; as we approach Bonfire Night, it is imperative that anyone moving these products is well versed in the requirements of their safe travel.”

ADR specifies the type of packing required for each substance, together with details of the labelling and marking requirements, including the action to be taken where different dangerous products are carried in the same vehicle; certain goods must never be mixed.

“Special care must be taken when loading, unloading, and handling these goods,” says Thrower, “a thorough understanding of the requirements, as outlined in the ADR and CDG, is absolutely essential for safe and legal practice.”

Businesses must ensure they have completed the relevant transport documentation relating to the consignment, to include information such as the UN Number, the packing group, tunnel code, the hazard class, together with any subsidiary hazard; the number and a description of the packages; the gross mass (also net for explosives) in

grams or kilograms; and the name and address of both the consignor and consignee.

DANGEROUS GOODS SAFETY ADVISERS

Dangerous goods safety advisers (DGSAs) are responsible for helping to prevent the risks inherent in the carriage of dangerous goods, specifically the hazard to people, property, and the environment.

31 December 2022 saw the requirement for any business that consigns, transports, packs, fills, loads, or unloads dangerous goods to appoint or have access to an advisor.

FUTURE LOGISTICS

“With emerging technologies and the decarbonisation of the logistics industry changing the way we move goods, regulations must keep pace with these evolutions,” says Thrower.

ADR allows the use of electric vehicles (EVs) to carry dangerous goods if they meet the requirements of chapter 9.

Further requirements on the safe and legal carriage of dangerous goods – including protection against terrorists, full documentary obligations, and multimodal considerations – can be viewed in the ADR. ■



DAVID JORDAN, DEPUTY OPERATIONS DIRECTOR – SERVICES AT LOGISTICS UK

“Individuals involved in the carriage of dangerous goods by road must receive training tailored to their responsibilities and duties,” says David Jordan, Deputy Operations Director – Services at Logistics UK.

“Logistics UK provides comprehensive training courses and workshops in the safe and legal carriage of dangerous goods via road, rail, sea, air, and inland waterway. We are one of only a few organisations who can train and advise across all transport modes. We offer public, in-house, and online learning options. These range from refresher courses to modal related courses such as shipping dangerous goods by road, as well as DGSA (Dangerous Goods Safety Advisor) training.”

Logistics UK Training has just launched a new online interactive Dangerous Goods Awareness e-Workshop, now available as part of its Dangerous Goods Academy training portfolio. This introductory course provides an opportunity for attendees to engage with one of the business group’s DGSAs, who will provide legislative guidance to those involved in the carriage of dangerous goods.



FOR MORE INFORMATION
★ <https://logistics.org.uk/dangerous-goods-1>



Sidescan[®]Predict

Side-detection sensor system with Artificial Intelligence

- Calculates if a collision is likely to occur in the nearside blindspot
- Differentiates between stationary and moving objects
- Evaluates the speed and direction of a VRU
- Warns the driver ONLY if a collision is predicted



01322 420 300
brigade-electronics.com



Sidescan@Predict: DVSA
Recognised Product