



LOGISTICS UK

Fleet Engineer

Tuesday 03rd June 2025





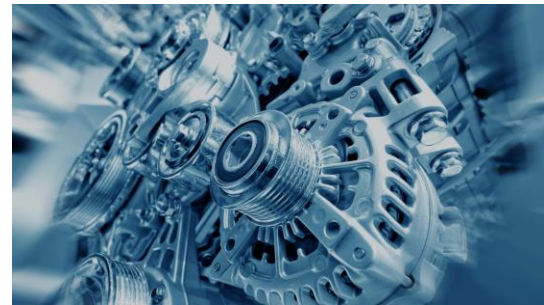
LOGISTICS UK

Welcome and scene setting

Phil Lloyd

Head of Engineering Policy
Logistics UK

Use Sli.do for your questions
Join at: www.sli.do **#FE25**



Domestics

LOGISTICS UK

Got to hurry



Got to Go



Got to listen



Please use your phones!

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Use Sli.do for your questions
Connect to free WiFi network:
Username: britishmotormuseum

Join at: www.sli.do #FE25

#FE25



Today's sponsors

LOGISTICS UK



Brigade



INTANGLES
A DIGITAL TWIN COMPANY

IRTE

Bevan^{GROUP}

Today's programme

LOGISTICS UK

Start	Finish	Session name
9:00	9:05	Chair's welcome & Logistics UK introduction
9:05	9:40	What's going wrong with maintenance leading to PI's and what options are available to operators to modernise their maintenance regimes
9:40	10:15	Benefits for predictive maintenance and how this will be used
10:15	10:50	New era of Trailers – changes to design and manufacturing
10:50	11:10	Coffee break & networking
11:10	11:35	Putting the brake on testing
11:35	12:00	Beyond the Checklist - Smarter Inspections & Automated Workflows
12:00	12:25	AI Development - What it will mean for maintenance
12:25	12:45	MPRS
12:45	13:45	Lunch break & networking
13:45	13:50	Chair welcome back
13:50	14:10	Training for tomorrow's world
14:10	14:35	Approving new systems and vehicles
14:35	14:55	Euro NCAP
14:55	15:30	Enforcement and recalls
15:30	15:35	Chair's close & open discussion

Vehicle Inspections Service Demonstrations

LOGISTICS UK

Experience our engineers in action!

Ever wondered what our vehicle inspections cover or what the most commonly found defects are? Make your way to the curtainside brewery truck kindly provided by **Bevan Group** during the breaks and one of our engineers will walk you through an inspection.

- Learn first-hand about the different types of inspection we offer.
- Discover the most common (and most surprising) defects we find.
- Test your knowledge as the engineers turn the questions back to you!

Find the team by the Bevan Group MAN / Carlsberg truck just outside the venue.



The world moves on

LOGISTICS UK

Evolving maintenance regimes in a highly autonomous future.



Physical / visual inspection techniques

+ Digital interface / AI predictive



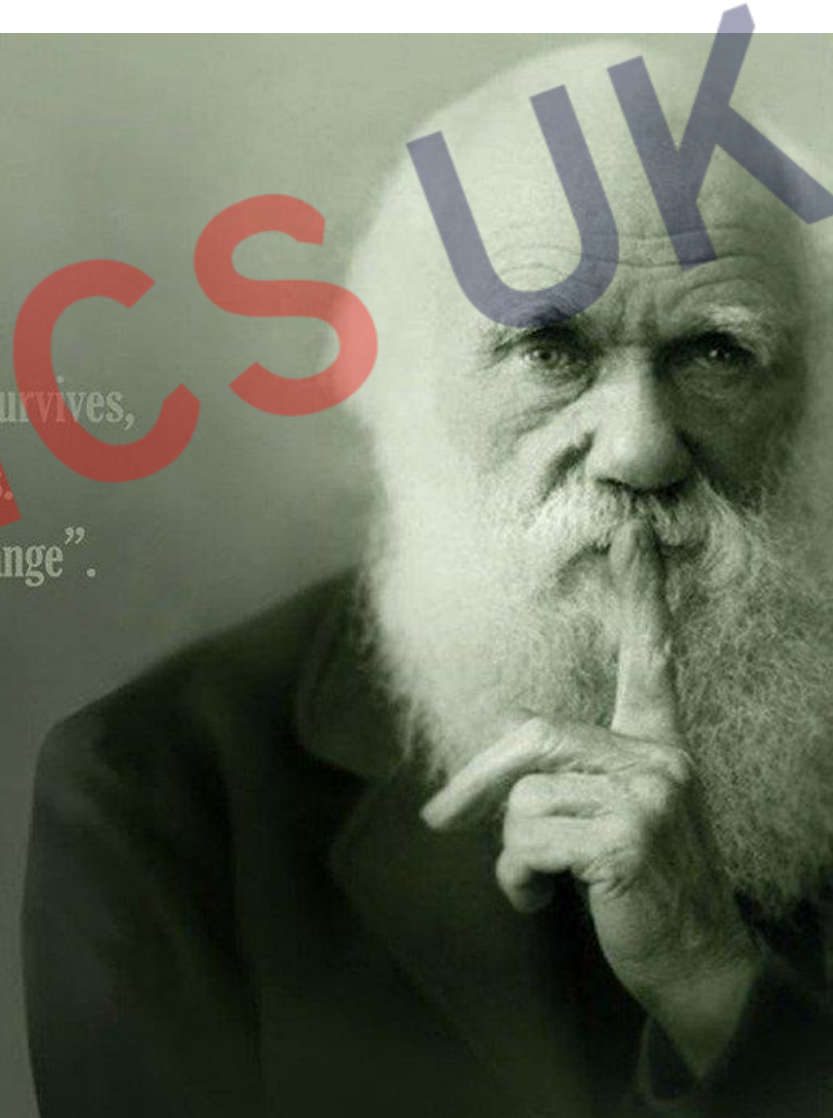
Times they are a changing

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“It is not the strongest of the species that survives,
nor the most intelligent that survives.
It is the one that is most adaptable to change”.

Charles Darwin





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Fleet Engineer

Tuesday 03rd June 2025





What's going wrong with maintenance leading to PI's and what options are available to operators to modernise their maintenance regimes

Kevin Rooney

Senior Traffic Commissioner for the West of England
Office for Traffic Commissioners

Use Sli.do for your questions
Join at: www.sli.do #FE25



- The journey to the Public Inquiry room
- Getting to the root cause
- Understanding irtec
- What's in your R&M contracts?
- From the Public Inquiry room
- And a few reflections on the second day in the job...

- S-marked PG9 – or prohibition at annual test

The PI Journey



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The PI Journey



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Repair immediately (major defects):

- **nearside front lower A Windscreen: with an obstruction, damage or discolouration which materially affects view to the front or the sides through the area of windscreen swept by the wipers. O license stuck in the swept area (23.1.a.ii)**

- S-marked PG9 – or any prohibition at annual test
- Visitors



- S-marked PG9 – or any prohibition at annual test
- Visitors
- The fleet check



The PI Journey

- S-marked PG9 – or prohibition at annual test
- Visitors
- The fleet check
- The workshop inspection

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- S-marked PG9 – or prohibition at annual test
- Visitors
- The fleet check
- Workshop inspection
- The “SIPCAT”

The PI Journey

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Safety inspection due		Safety inspection actual dates			VOR	Mileage			Safety inspection & driver defect reporting					Prohibition assessment		Comments
Next SI due date	Next ISO week due	Actual SI date (dd/mm/yy)	Actual ISO week	Actual number of days	VOR recorded	Last SI mileage (km)	Recorded mileage (km)	Total mileage (km)	SI fully compliant?	Dangerous defects found on SI?	Driver defects found?	Related driver defect report?	What braking performance assessment was carried out?	Was a PG9 issued after this inspection?	Evidence of significant failing of maintenance system?	Comments
		12/09/2022	37				487210	487210	Minor issues	No	Yes	No	Roller brake test (unladen)	No		Specified Date: 06/12/2021, No maintainers name on PMI. TYRE pressures and ages not recorded. N/S electric window fault, ENGINE management light on N/S/R spray flap none rectify.
05/12/2022	49	05/11/2022	44	54		487210	489354	2144	Minor issues	No	No		Roller brake test (laden)	No		TYRE pressures and ages not recorded
28/01/2023	4	15/12/2022	50	40		489354	492629	3275	Minor issues	No	Yes	No	Roller brake test (laden)	No		No tyre tread depths or pressures recorded. No maintainers name. O/S/F cab hinge, EML light on, DPF/AD blue light on, O/S/F Door does not open, exhaust tip fallen off. Not rectified.
09/03/2023	10	26/01/2023	4	42		492629	495239	2610	Minor issues	Yes	Yes	No	Roller brake test (laden)	No		Front bumper damaged, engine management light on, O/S wiper blade worn, O/S/F TYRE WORN. No Tyre section.
20/04/2023	16	08/02/2023	6	13		495239	495650	411	Minor issues	No	Yes	No	Roller brake test (laden)	No		Engine light on, Not rectified, O/S headlamp on O/S/R wing insecure, O/S markers lamps 50% inop, O/S wiper split on end, sharp edges N/S and O/S, Wiring insecure at front Rectified. MOT 13/02/23 495658Kms, Advisories Windscreen damaged, front anti roll bar bush's worn and O/S/R outer tyre cracked and perished. MOT 13/02/23
03/05/2023	18	13/03/2023	11	33		495650	498524	2874	Minor issues	Yes	No		Roller brake test (unladen)	No		No maintainers name, tyre tread and pressure not recorded. Regen light on, O/S side guard end cap loose, O/S/R mud wing moved, exhaust bracket loose, O/S/F hub worn and broken. All rectified.
05/06/2023	23	10/06/2023	23	89		498524	505138	6614	Minor issues	No	Yes	No	Roller brake test (unladen)	No		No maintainers name, tyre tread and pressure not recorded. O/S/R brake light inop, rear number plate damaged, O/S/R wing not covering tyre, Engine light on. All rectified. Advised O/S/F had seal leaking and hand brake valve leaking when off, requires to be booked back in. O/S/R tyre perished. NO more PMIs after this date on file discussed with Trevor.
02/09/2023	35	21/07/2023	29	41		505138	509262	4124	Minor issues	Yes	Yes	Yes	Roller brake test (unladen)	No		17/07/23 508930 DDR air suspension faulty NO ACTION. PMI shows O/S/F air bag leaking, engine light on, all defects rectified except the leaking hand break and engine light. (O/S/R outer tyre measured at 5mm) PMI not dated when signed off.
13/10/2023	41	07/09/2023	36	48		509262	512337	3075	Minor issues	No	Yes	No	Roller brake test (laden)	Yes	No	O/S/R outer tyre at 1mm. Replaced age date not recorded.
30/11/2023	48	17/11/2023	46	71		512337	515101	2764	Minor issues	No	No		Roller brake test (unladen)	No		Vehicle involved in RTC. Mileage taken from Prohibition removal date, as the mileage on PMI is incorrect and so is the date 13/03/23. Tyre section not fully completed.
09/02/2024	6	18/12/2023	51	31		515101	516003	902	Minor issues	Random failure	Yes	No	Roller brake test (unladen)	No		Rear number plate requires immediate attention No action.
11/03/2024	11	21/02/2024	8	65		516003	518352	2349	Minor issues	Random failure	Yes	No	Roller brake test (laden)	No		No wash wipe and horn, rectified. Tyre section not filled in. Maintainers name stamped. Present for annual test.

- S-marked PG9 – or prohibition at annual test
- Visitors
- The fleet check
- Workshop inspection
- The “SIPCAT”

SECTION 1A - Question assessments

Click on a number to go to the question

1 Satisfactory	4 Unsatisfactory	7 Satisfactory	10 Report to OTC
2 Satisfactory	5 Unsatisfactory	8 Unsatisfactory	11 Satisfactory
3 Mostly satisfactory	6 Unsatisfactory	9 Unsatisfactory	12 Satisfactory

TM/RP assessment	TM	Unsatisfactory
Visit assessment		Report to OTC
Recommended action*		Report to OTC compliance

- S-marked PG9 – or prohibition at annual test
- Visitors
- The fleet check
- The workshop inspection
- The “SIPCAT”
- The MIVR
- The call-up to public inquiry...

THIS LETTER REQUIRES URGENT ATTENTION

PUBLIC INQUIRY INTO YOUR GOODS VEHICLES OPERATOR'S LICENCE OH1234567 GOODS VEHICLES (LICENSING OF OPERATORS) ACT 1995 (the Act)

I refer to your heavy goods vehicle operator's licence and variation applications to specify Neil Barlow and Phil Lloyd as transport managers.

The Traffic Commissioner has reviewed your licence and has decided to hold a **public inquiry**. The public inquiry allows you the opportunity to explain what you are doing to ensure compliance with the rules and undertakings attached to the licence. The presiding Traffic Commissioner will then decide whether they can trust you to comply in the future, whether any action against the company's operator's licence is needed and, if so, what form that action might take. The traffic commissioner will also consider whether your application should be refused, granted in full or in part.

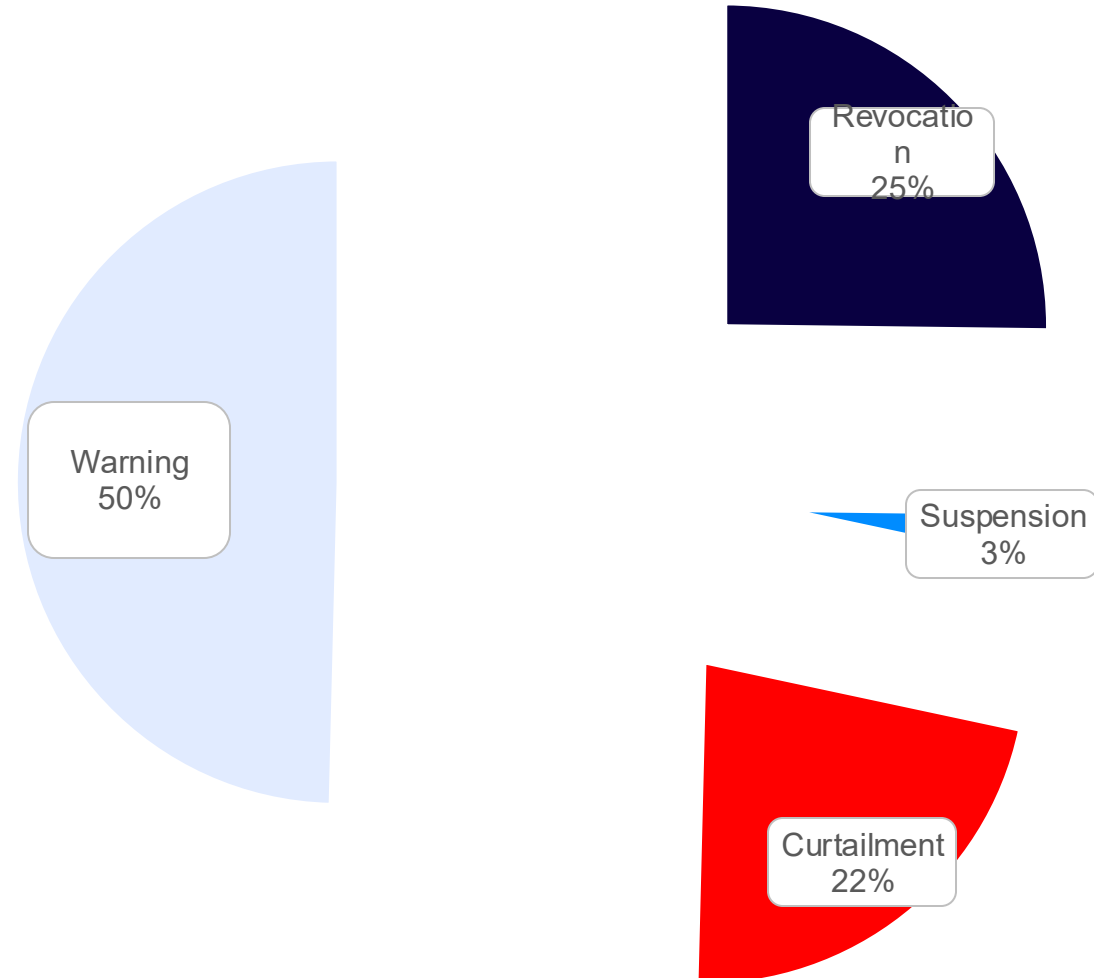
Date of the Inquiry

The inquiry will be held at **The Public Inquiry Room, Office of the Traffic Commissioner for the West of England, Jubilee House, Croydon Street, Bristol BS5 0GB** on **Thursday 17/04/2025** at **1030 hours**.

The Traffic Commissioner is unlikely to allow a postponement, unless the circumstances are exceptional. **If you do not attend, the case will be heard in your absence.**

The PI Journey – the outcome, WTA 23-24, goods regulatory

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Why, why, why, why, why, and why was that?

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- Get to the root cause

Why, why, why, why, why, and why was that?

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71]		Service Performance	NA
72]		Secondary Performance	NA
73]		Parking Performance	NA

Why, why, why, why, why, and why was that?

LOGISTICS UK

FAULT NEEDING RECTIFICATION	IM No	Fault No	ACTION TAKEN TO RECTIFY FAULTS
1 - Needing immediate attention:			
NS one side lamp damaged	63		Replaced
NSR lamp damaged	63		Replaced
NS 2nd axle weel rims and hub damaged	6		Replaced N/S 2nd axle hub, brake pads, wear sensor, studs and nuts Retorqued all weel nuts and fitted weel nuts indicator supply fitted new rims
OSR position light inop	63		Replaced bulb

Maintenance Provision Rating Scheme (MPRS)



You're here [IRTE Workshop Accreditation](#) Maintenance Provision Rating Scheme (MPRS)

About MPRS:

The commercial vehicle maintenance sector plays a vital role in ensuring the safety, reliability, and efficiency of transportation networks worldwide.

Licencing types and levels

irtec is a renewable accreditation scheme that assesses the safety and competence of technicians who maintain and repair vehicles in the commercial vehicle, trailer and passenger carrying industries.

You can gain irtec licence at 5 different career levels which reflect your job role and experience.

Technicians who take the irtec test are assessed on their theoretical and practical skills and, if successful, are awarded an irtec licence that is valid for 5 years.

Once accredited, irtec technicians agree to abide by the **irtec code of conduct**, receive a licence card, certificate and are placed on the **irtec Technicians Directory**. As an additional benefit, irtec licence holders are eligible to apply for a free **Halfords Trade Card**.

Licensing levels

Service Maintenance Technician



Inspection Technician



Advanced Technician



Master Technician



Check your R&M contract

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From the Public Inquiry room

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From the Public Inquiry room

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And the second day in the job...

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What's going wrong with maintenance leading to PI's and what options are available to operators to modernise their maintenance regimes

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Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25

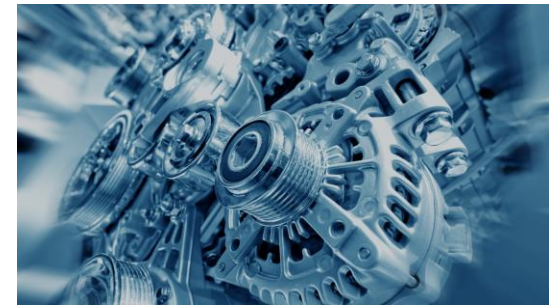


Benefits for predictive maintenance and how this will be used

John Armes

Digital Service manager
Daimler Trucks UK Limited

Use Sli.do for your questions
Join at: www.sli.do **#FE25**



KEEPING OUR TRUCKS ON THE ROAD WITH DIGITAL SERVICES AND SOLUTIONS

June 2025

John Armes Digital Services Manager –Daimler
Truck UK Ltd



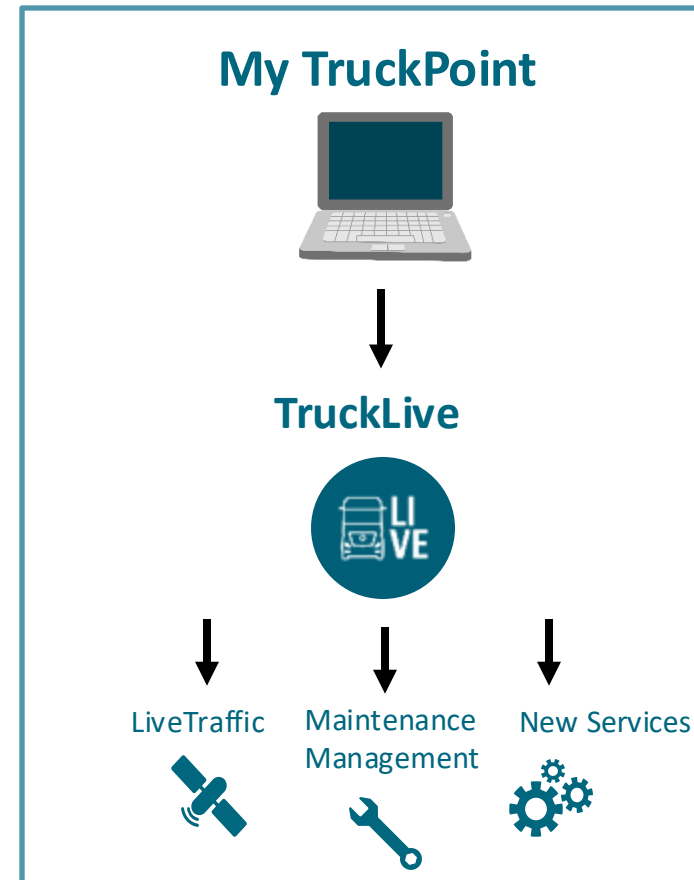
Mercedes-Benz
Trucks you can trust

**AS TECHNOLOGY DEVELOPS WE NEED TO HELP OUR CUSTOMERS
KNOW THE STATUS OF THEIR TRUCKS AND THEIR WORKSHOPS
IN**



WHAT IS MY TRUCKPOINT?

- **Umbrella** for our **digital services**
- **FREE** for the life of the vehicle.
- Two services at launch:
 - **Live Traffic**
 - **Maintenance Management**
- Further two services due to be launching in 2025
 - **Flash over the air (FOTA / POTA)**
 - **S24h+ Breakdown service**
- More services planned for the future



TRUCKLIVE

- Packaged up digital services into an easy to understand and useful bundle for the customer
- A free entry point into our digital services
 - Upgrade path to Uptime and Fleetboard
- Plus, TruckLive enables our R&D to collect telematics data for use in:
 - Product specification
 - Performance Monitoring and improvements
- We need a **legal contract** in order to supply services especially where we collect customer data



LIVE TRAFFIC SERVICE



Live Traffic

- The LiveTraffic service provides real-time traffic information to the navigation system.
- Provides dynamic routing and more accurate arrival time estimations




From 1st May 2024 vehicle production:
TruckLive will be required in order to use Live Traffic!



MAINTENANCE MANAGEMENT SERVICE (AVAILABLE NOW)



- **Digital tool** designed for **fleet managers**
- Helps **minimize vehicle downtime** by proactively managing maintenance
- Basic version of the **Uptime** paid service.
- Provides:
 - Upcoming maintenance tasks
 - Events e.g. Vehicle Faults
 - Status Information:
 - e.g Oil Pressure, Fuel & AdBlue, Brake wear %



W1T96700920

Model Atego

Type 816 4X2 V 05

FIN W1T96700920

Licence plate number

Vehicle first registered date 30/11/2023

Mileage 26,575 km

Operating time 468 h

FB

TL

...

Edit

Details

Contracts

Technical status

Documents

Competences

Maintenance


Events

Status Data

Upcoming Maintenances (7)

<input type="checkbox"/>	Status	Maintenance type	Due in days	Due at date	Due in km	Due at km	Due in operating hours	Due at operating time	Actions
<input type="checkbox"/>	✓	Time - based servicing	134	16/08/2024	15454	42029	273	740	...
<input type="checkbox"/>	✓	Engine	499	16/08/2025	57483	84058	1014	1482	...
<input type="checkbox"/>	✓	Rear axle 1	499	16/08/2025	57483	84058	1014	1482	...
<input type="checkbox"/>	✓	Transmission	864	16/08/2026	99513	126088	1756	2224	...
<input type="checkbox"/>	✓	Coolant	864	16/08/2026	99513	126088	1756	2224	...
<input type="checkbox"/>	✓	Diesel particulate filter	1360	25/12/2027	156645	183220	2764	3232	...
<input type="checkbox"/>	✓	Front axle inspection	3522	25/11/2033	777931	804506	13705	14172	...

UPCOMING MAINTENANCES



W1T967

FB

TL

...

Edit


Model Atego


Type 816 4X2 V 05

FIN W1T967

Licence plate number

Vehicle first registered date 30/11/2023

Mileage  26,575 km

Operating time  468 h

Details

Contracts

Technical status

Documents

Competences

Maintenance

Events

Status Data

Upcoming Maintenances (7)

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<input type="checkbox"/>	✓	Transmission	864	16/08/2026	99513	126088	1756	2224	...
<input type="checkbox"/>	✓	Coolant	864	16/08/2026	99513	126088	1756	2224	...
<input type="checkbox"/>	✓	Diesel particulate filter	1360	25/12/2027	156645	183220	2764	3232	...
<input type="checkbox"/>	✓	Front axle inspection	3522	25/11/2033	777931	804506	13705	14172	...

MAINTENANCE EVENTS



W1T967



Model Atego
Type 816 4X2 V 05

FIN W1T967

Licence plate number

Vehicle first registered date 30/11/2023

Mileage  26,575 km

Operating time  468 h



Edit

Details

Contracts

Technical status

Documents

Competences

Maintenance

Events


Status Data

Event List (1)



This vehicle uses the TruckLive service. With the maintenance package included, you receive events for maintenance, customer service and events in the Info category. To receive even more events for your vehicle, you can upgrade to the Mercedes-Benz Trucks Uptime premium service.

> [Learn more](#)

Event Category	Event	Occurrence	Mileage	Close Event
 Customer care	<u>Brake</u>	28/03/2024, 15:20	25,540 Kilometers	✓

4

13

20 / Page

EVENT EXAMPLE

The screenshot displays a vehicle management interface for a truck with VIN W1T96. The background shows a sidebar with tabs for Details, Contracts, and Technical status. The main area displays vehicle information: Model Atego, Type 816 4X2 V 05, Mileage 26,575 km, and Operating time 468 h. An 'Event List (1)' section shows a single event. A modal window titled 'Event: Brake' is open, providing details about the event and recommendations.

Event: Brake

Event Category Customer care

Occurrence 28/03/2024, 15:20 Mileage 25,540 Kilometers

Antilock brake system : The control unit has detected a fault.
A fault was discovered.
An event message in the color 'Red' is displayed in the on-board computer.

Recommendation

Inform the driver. Observe display in instrument cluster. Observe the operator's manual. Please check the states at the vehicle. Further messages may be generated by the system 'Mercedes-Benz Trucks Uptime'. If the problem continues, please contact an authorized Mercedes-Benz Trucks specialist workshop.

If you have already managed this case, you can continue directly with closing it.

Buttons: Cancel, Continue to close

TruckLive Maintenance events are transferred to XENTRY Portal

XENTRY Cockpit

GEORGIOS SALTSOGLIDIS
 - Daimler Truck AG Nutzfahrzeugzentrum Hannover

Fahrzeugliste

Flotte >

+ Angebot erstellen

WITY4X9ZTH6A6... JeCO&NLv	6Q+C-; B*vc;pcVtF Bwx3D	- Langenhagen	UP
WDBUYZILXSJU... ECFM95N6T - 7...	27X6UxqTI-/?G2d... SkW/c7&1	- Langenhagen	UP
WDBNFTKHMN... 4HPFCZW3R - f...	27X6UxqTI-/?G2d... SkW/c7&1	- Langenhagen	UP
WDD4PJ3W0V... S9PRAY28 - D...	27X6UxqTI-/?G2d... SkW/c7&1	- Langenhagen	UP
WDBMG9TFIPE... K4BPPK1YX - 7+...	27X6UxqTI-/?G2d... SkW/c7&1	- Langenhagen	UP
WDB943LDWS6... 343M3P29Q - h...	27X6UxqTI-/?G2d... SkW/c7&1	- Langenhagen	UP
WDBDKYYSR5V... 05KIT3HV7 - QH...	27X6UxqTI-/?G2d... SkW/c7&1	- Langenhagen	UP
WIT963403105... KA-XX-123 - GEO...	REMONDIS Herne ... 728362726	- Langenhagen	TL

WIT963AAB49999991 / W-PX 3455

Bestehendes Angebot

In Bearbeitung

Wartung

Der Signalwert des Bauteils 'A70 b1 (NOx-Sensor...

10.03.23

Wartung

Der minimale Reifendruck am rechten Rad der Achs...

09.03.23

Wartung

Fällige Wartung 'Getriebe'

21.03.23

Reparatur

Die Plausibilitätsprüfung des AdBlue® Systems zeig...

13.03.23

Wartung

Der Signalwert des Bauteils 'A70 b1 (NOx-Sensor...

10.03.23

Wartung

Der minimale Reifendruck am rechten Rad der Achs...

09.03.23

Wartung

Fällige Wartung 'Getriebe'

21.03.23

Reparatur

Die Plausibilitätsprüfung des AdBlue® Systems zeig...

13.03.23

VEHICLE STATUS

Maintenance

Events

Status Data

Liquid levels

Oil pressure



3500.0 mbar

Fuel



96 %

Windscreen wiper fluid



OK

Ad-blue level



98 %

Actuality of the data



Updated on 15/05/2024, 14:18

Tires and brakes

Category	Front axle 1	Front axle 2	Rear axle 1	Rear axle 2	Rear axle 3
Tire pressure left outside	--	--	--	--	--
Tire pressure left inside	--	--	--	--	--
Brake pad left	9.6 %	--	12.8 %	--	--
Brake pad right	12.4 %	--	12.0 %	--	--
Tire pressure right inside	--	--	--	--	--
Tire pressure right outside	--	--	--	--	--

If no values are shown for a particular axle, the given vehicle configuration probably does not have that axle.

S24H+ BREAKDOWN SERVICE (COMING SOON)



Service 24h+

- Service24h is the roadside support service from Daimler Truck
- Customer can log a breakdown request directly from MyTruckPoint
 - Simple: Most fields are prefilled
 - Customer can add a description and optionally upload an image
- Remote Diagnostic Test &
- Precise vehicle location sent to the technician

Objectives

- Higher roadside fix rates as technician is prepared (Parts etc.)
- Faster arrival time due to precise GPS location being shared
- Easier / More convenient to log a breakdown issue

Online Breakdown Request



Remote Pre-diagnosis



Vehicle Locator



FLASH OVER THE AIR SERVICE (FOTA/POTA) (COMING SOON)



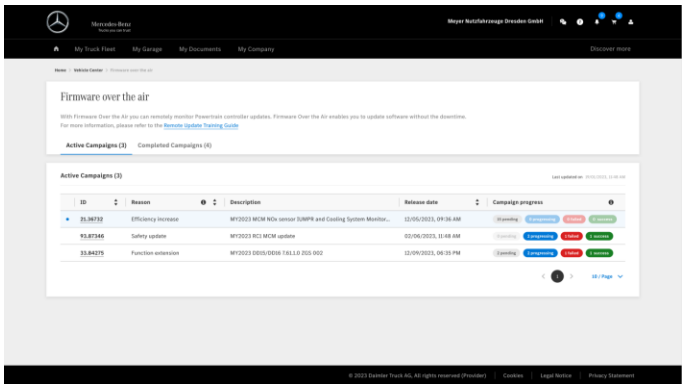
Flash over the air

Updates Anywhere



Over-the-air updates **allow** vehicle owners to **receive software updates** for their vehicles **without needing to visit the workshop**

Online Portal



Vehicle owners will receive **information** about the updates planned for their vehicles via **MyTruckPoint**

Driver Information



Drivers will be guided through the process to ensure the vehicle is in the **proper state** and they have **sufficient time** to process

VEHICLE COMPATIBILITY

Compatible Vehicles

- ICE: **Actros**, **Arocs** and **Atego** vehicles
- ZEV: **eActros 600**

Incompatible Vehicles

- Econic / Canter / Fuso / Unimog
- eActros 300 & 400
- Compatibility **may** be extended to include **eActros 300 & 400** in future





MERCEDES BENZ UPTIME INTRODUCTION



WHAT IS MERCEDES BENZ UPTIME?


Uptime is service innovation that takes data from connected vehicles.

This data is then processed and analysed in real time, and converted into specific instructions for our Customers, Mercedes-Benz Service Partners (Home Dealers) or the monitoring centre.

This can allow vehicle breakdowns to be avoided. Workshop visits for repairs and maintenance can be optimised and downtime can be reduced.

HOW TO ACCESS UPTIME

UPTIME WEB PORTAL



Mercedes-Benz
Trucks you can trust

Provider/Privacy statement Log out ? Help

Overview Fleet History Administration

Welcome Max Mustermann

Find information about important conditions of your vehicles. We will support you with recommended actions.

Current cases

2

Actros_S-CR 7867

2

Actros_S-CR 86

4

2

Information

The AdBlue® fill level is too low [2.5% - 7.5%] (4)


Cusumer shutoff active (2)

Tire pressure sensor battery weak (1)

Provider Cookies Privacy statement Legal notice Contact

Fleet: Testfleet, User: Max Mustermann

FLEETBOARD COCKPIT



Einsetzanalyse Meldungen Service

Wartungsplanung Zustandskontrolle Wartungshistorie

Flotte: ptraining

Wartung durchführen

Suchen Zurücksetzen

Filter

Servicearbeit Nachster Service nach Fälligkeit Fälligkeit Alle

Filteroptionen

Filtertext...

Fahrzeug	Servicearbeit	Uptime Meldungen	Typ	Fälligkeit	Uptime Priorität	Tage bis...	Datum/Uhrzeit
1 GER-PT 122	2. Manutenção por tempo		Fahrzeug	Überfällig		0	01.08.2015 10:19
2 GER-PT 125	Hauptuntersuchung + 2 weitere	Komplettrad - schneller Druck...	Manuell	Überfällig	Urgent	1	07.08.2015 14:54
3 GER-PT 101	Wash the Truck + 5 weitere		Fahrzeug	Überfällig		10	17.08.2015 12:05
4 GER-PT 130	Motor + 3 weitere	Kühlmittelstand niedrig	Fahrzeug	Überfällig	Fleet Action	36	13.07.2015 10:32
5 GER-PT 142	2. Manutenção por tempo + 1 weitere	Druckverlust	Fahrzeug	Überfällig	Fleet Action	62	12.08.2015 12:09
6 GER-PT 131	Filtro de ar		Fahrzeug	Überfällig		109	16.07.2015 08:50
7 GER-PT 102	Inspeção olio dianteira + 3 weitere		Fahrzeug	Überfällig		120	13.07.2015 10:03
8 GER-PT 501	1. Manutenção por tempo		Fahrzeug	Überfällig		156	06.08.2015 13:40
9 ptraining	1. Manutenção por tempo + 1 weitere		Fahrzeug	Überfällig		157	04.08.2015 12:39
10 ptraining	1. Manutenção por tempo + 1 weitere		Fahrzeug	Überfällig		160	10.08.2015 08:55
11 GER-PT 505	1. Manutenção por tempo + 1 weitere		Fahrzeug	Überfällig		160	07.08.2015 10:25
12 GER-PT 508	1. Manutenção por tempo + 1 weitere		Fahrzeug	Überfällig		163	08.08.2015 09:15
13 GER-PT 202	2. Manutenção por tempo + 1 weitere		Fahrzeug	Überfällig		175	28.07.2015 11:20
14 GER-PT 144	3. Manutenção por tempo		Fahrzeug	Überfällig		212	20.07.2015 13:16
15 GER-PT 120	Filtro de ar + 11 weitere		Fahrzeug	Planmäßig		108	14.07.2015 14:36
16 GER-PT 145	Inspeção de segurança + 11 weitere	Verbraucherabschaltung aktiv.	Fahrzeug	Planmäßig	Fleet Info	111	28.07.2015 11:25
17 GER-PT 503	1. Manutenção por tempo + 7 weitere		Fahrzeug	Planmäßig		162	15.07.2015 11:07
18 GER-PT 203	2. Manutenção por tempo + 7 weitere		Fahrzeug	Planmäßig		163	27.07.2015 10:00
19 GER-PT 301	Motor + 11 weitere		Fahrzeug	Planmäßig		178	13.07.2015 16:05
20 GER-PT 204	Motor + 7 weitere		Fahrzeug	Planmäßig		178	27.07.2015 10:27

24 Datensätze

VEHICLE COMPATIBILITY

Compatible Vehicles

- **Actros**, **Arocs** and **Atego** vehicles
- **Econic** vehicles
- **eActros** 300, 400, 600

Requirements

- Build from 2019 onwards
- TDC Truck Data Centre – Option code J3V



TRUCK DATA CENTRE





Fleet Actions
Customer Actions



Retail Actions
Dealer Actions



Urgent Cases
Monitoring
centre Actions



FLEET ACTIONS / CUSTOMER ACTIONS



Fleet Actions are actions that the customer can complete themselves, such as topping up AdBlue,

Customers are informed of recommended actions via the Uptime portal

Benefits: Helps avoid unnecessary workshop visits.

Support the customer in ensuring they are managing these actions in a timely manner

RETAIL ACTIONS / DEALER ACTIONS



Retail Actions focus on planning R&M tasks at Dealer level with minimal disruption to the customers operation.

Dealer is informed of these actions via the **Xentry Cockpit**

Customer Benefits: It allows you efficiently bundle R&M tasks; thus making the unplanned, planned

Our dealers task: Complete daily checks of the Xentry portal and take proactive approach to contacting the customer

URGENT CASES / CAC ACTIONS



Predicted breakdown events. The monitoring centre calls the vehicle contact at the customer

If **dealer support** is required, the monitoring centre will notify you

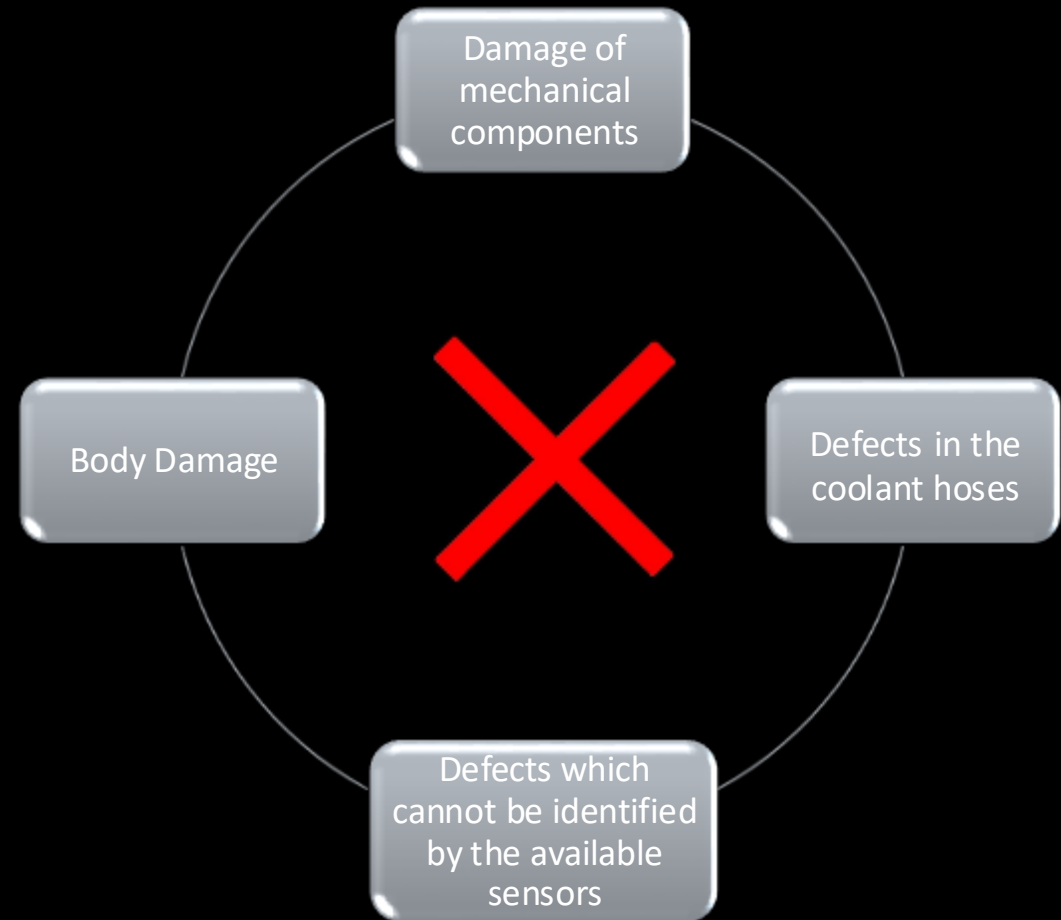
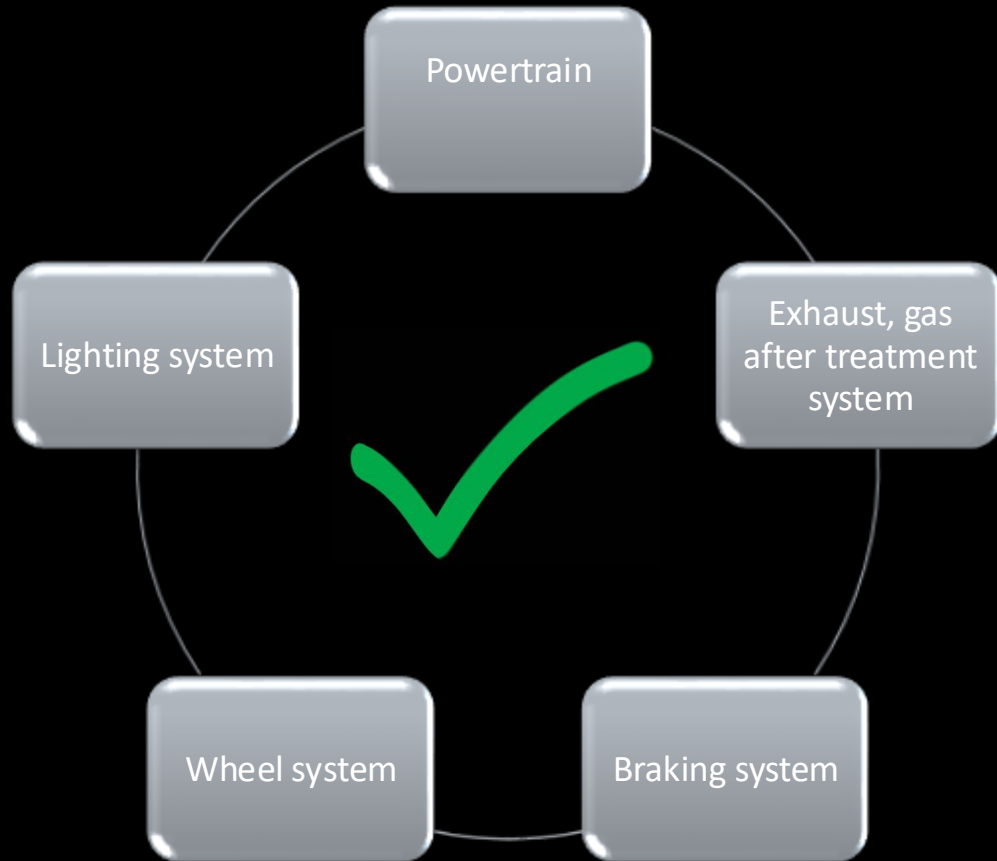
Benefits: It can reduce the stress of a breakdown for the customer

What is the dealers role? Dependent on whether you are the Home Dealer, or the identified Service Partner identified by the monitoring centre

HOW DOES UPTIME WORK?

Uses a combination of electronic sensors, and algorithms, to continually monitor various elements of your vehicle.

WHAT CONDITIONS CAN BE DETECTED?



Now **standard** on
applicable Service
Contracts

Included with:
Service Complete and ISP

Available at £20 pm for customers
with no contract in place

SETUP TASKS

- Customer must nominate **default dealer**
- Possible to **modify dealer** on a per vehicle basis
- **Contact person** needs to be defined
 - Needs to be setup for Urgent Actions





UPTIME



Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25



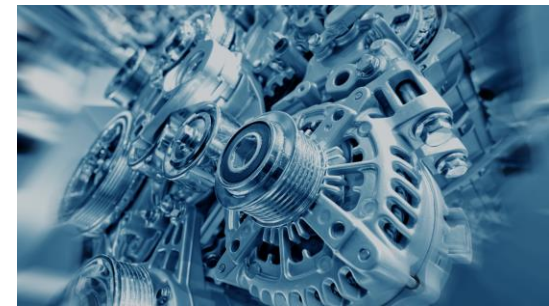
LOGISTICS UK

New era of trailers – changes to design and manufacturing

Richard Owens

Technical Support Specialist & Marketing Manager
Don Bur

Use Sli.do for your questions
Join at: www.sli.do **#FE25**

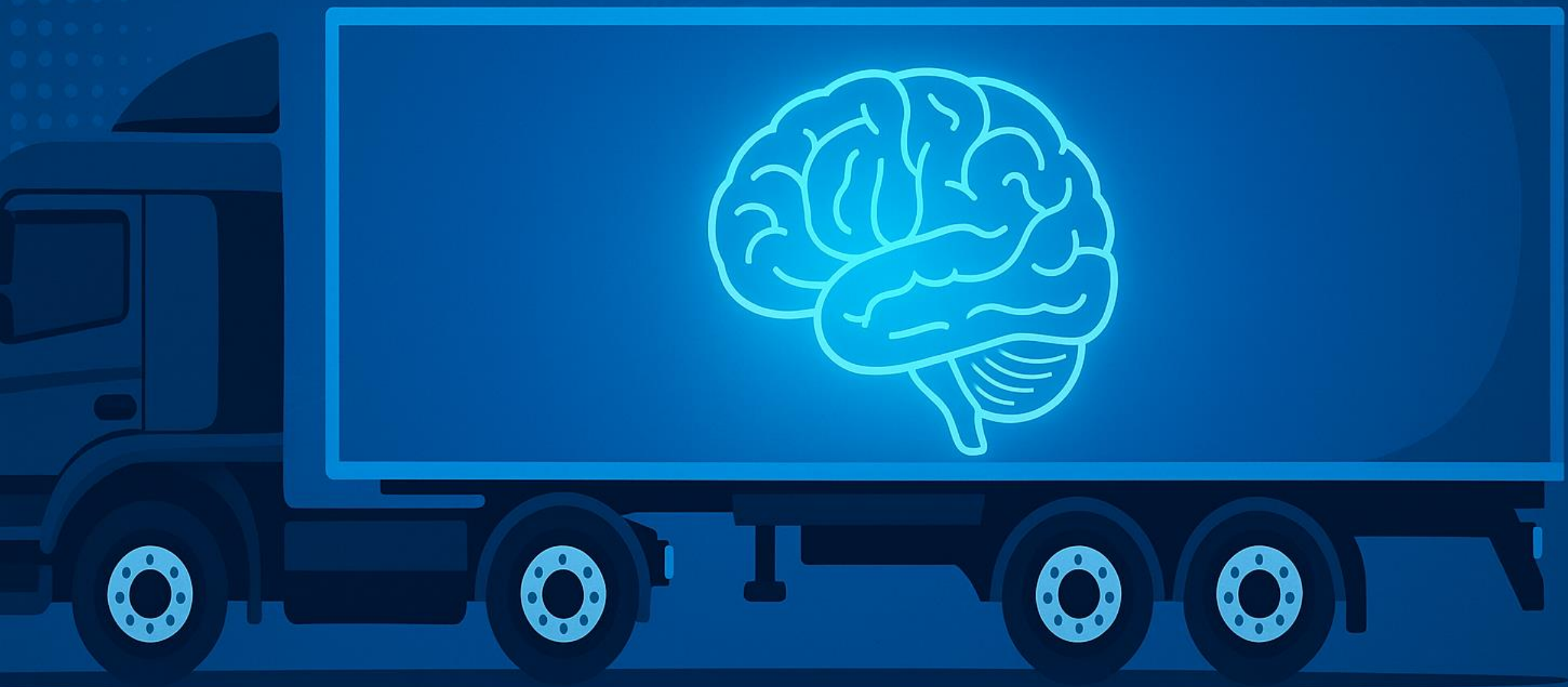




Hi!

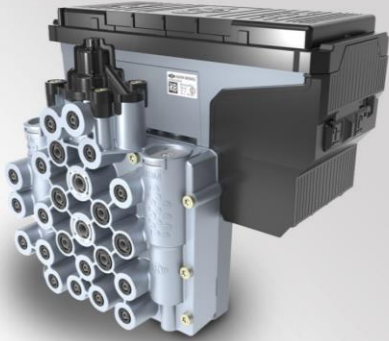
- 'Smart' Trailers
- VECTO
- Generator Axles vs Propulsion Axles
- The Future Of Safety
- Innovative Design
- Beefing up your security

'Smart' Trailers





Common Current ECUs / “Braking” Systems



■ Knorr-Bremse

- TEBS G2.2 (Standard/Premium)
- iTEBS X

■ ZF / Wabco

- TEBS-E (Standard/Premium)
- iEBS (Basic/Standard/Premium)

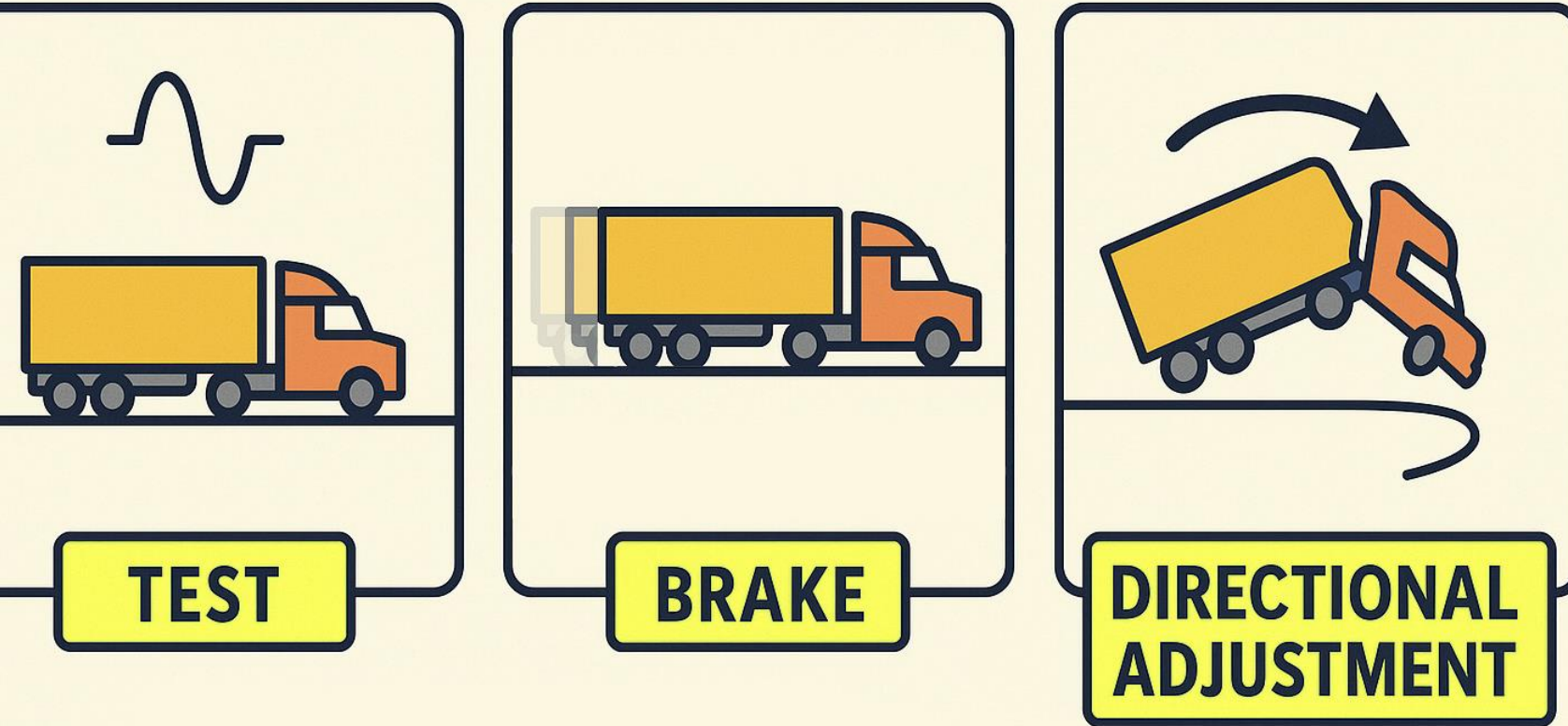
■ Haldex

- EB+ Gen 4 (Standard /Premium)





Functions (Version Dependant)



- ABS Modulation
- Proportional Braking
- Roll Stability
- Smart Parking
- Hill Hold (Via tractor)



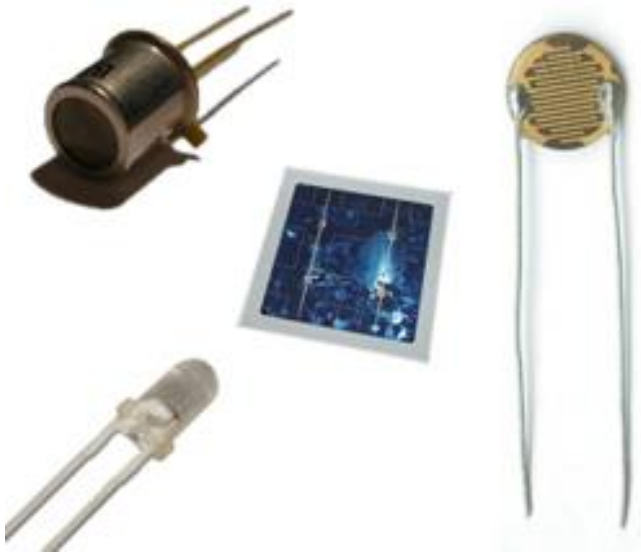
What Your Trailer Knows!



More than you think!



Sensor Array (Version Dependant)



- **Air Bag Pressure / Load Cell**
- **Supply Pressure**
- **Control Pressure**
- **Voltage**
- **Longitudinal & Lateral Accelerometers**
- **Tilt Sensor**
- **Wheel Speed**
- **Suspension Height Sensors**
- **Axle Lift Control Sensors**

- **Support For**
 - Brake lining wear (Disc/Drum)
 - Door Sensors
 - Reversing Sensors & Cameras
 - Soft Docking
 - Lamp Monitoring
 - EBPMS (Output only)
 - Data Output For Telematics
 - TPMS Tyre Pressure (Via CAN or App)
 - Tyre Temperature
 - Disc/Hub Temperature Sensors



T-CAN Data (Dependant on Equipment)



- **Braking system**
 - Brake demand
 - Brake pressure (supply, circuit, control)
- **Wheel data**
 - Wheel speeds
 - ABS activity per sensed wheel
- **Load data**
 - Axle loads or estimated GVW (if configured)
- **RSS / stability**
 - Lateral acceleration
 - Vehicle Inclination
 - Stability intervention status
- **Suspension / ride height**
 - Height values
 - Lift axle status



T-CAN Data (Dependant on Equipment)



- **VIN Number**
- **Wear monitoring**
 - Brake pad wear (if sensors are fitted)
- **Faults & diagnostics**
 - DTCs (Diagnostic Trouble Codes)
 - ECU status flags
 - ODR (On Demand Report) Data
- **TPMS**
 - Tyre pressure & temperature (if integrated with TPMS system)
- **Electrical system**
 - Supply voltage
 - Power fault status
- **Trailer status**
 - Coupling state
 - Reverse signal
 - Parking brake state



How do you see this data?



- **On-Trailer Interface**
 - Haldex Info Centre
 - Knorr-Bremse TIM
 - ZF/ Wabco Smartboard
- **Telematics**



On-Trailer Interface







Telematics - GPS





Telematics Solutions

Feature	ZF Transics / Scalar	BPW Idem	SAF Axscend	Microlise
ECU Integration	✓	✓	✓	⚠ Partial – inferred/limited direct access
TPMS Support	✓	✓	✓	⚠ Limited
Axle Load Monitoring	✓	✓	✓	✓
Brake Wear	✓	⚠ iC Plus Estimation	✓	✗
Door / Reefer Sensors	✓	✓	✓	✓
EBPMS Capability	✓	✓	✓	✓
ODR Support	✓ (with ZF System)	⚠ DTC's only	⚠ DTC's only	✗
ISO 7638 Fault Detection	✓	✗	✓	⚠ May be limited to alert-level reporting



Telematics – Fleet Overviews

0 Days	458,488km	ON-ROAD					
0 Days	441,721km	ON-ROAD					
1 Day	461,407km	ON-ROAD					
119 Days	430,709km	ON-ROAD					
7 Days	514,027km	ON-ROAD					
0 Days	497,985km	ON-ROAD					
1 Day	509,609km	ON-ROAD					
6 Days	489,356km	ON-ROAD					
15 Days	541,886km	ON-ROAD					

- Fleet ID
- Location
- Last Use
- Park duration
- Odometer
- EBS Validity / Voltage
- EBPMS Score (BPV)
- TPMS
- Due Service
- Current Bogie Weight



Telematics – Fleet Overviews



Summary

Warning
Overall Status Is Warning

Tracked
Last Reported On [redacted]
1.3 Mile E Of South Mimms

Maintenance System
No Maintenance Events Scheduled

Compliant
No Outstanding Maintenance Events



Status



EBS/DTC



EBPMS



Load



TPMS

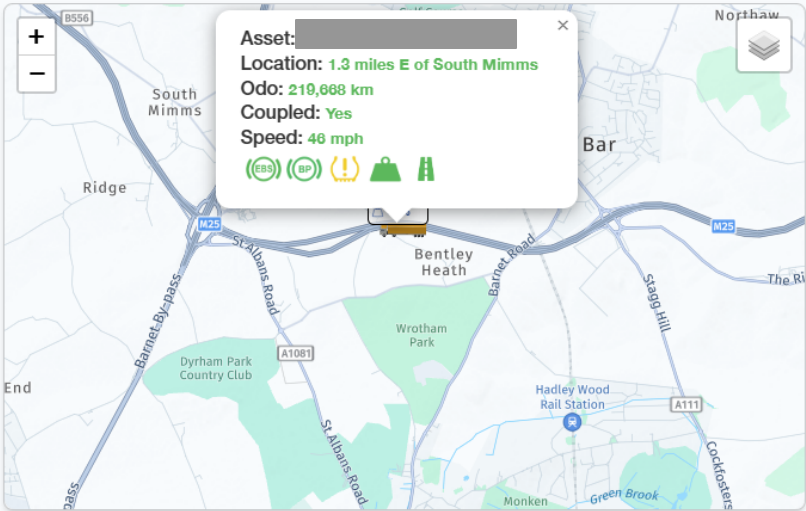


ON-ROAD



Location

21st May 2025 15:22



EBS Information

S Type
KNORR-BREMSE

EBS Serial Number
[redacted]

EBS Detected Version
TCPG.730.040.0
01.006
(24/03/25 16:05:40)

EBS Skew
NONE

Odometer (KM)
211813

EBS Diagnostics (DTCs)

Active DTCs With Breakdown

14

14

0

Check Immediately: 0
Check At Next Halt: 0
Maintenance Only: 0
Other Active: 0

Last Line Power
22 days ago
2025-04-29 11:00:36

EBS Last Seen
22 days
2025-04-29 11:07:03

Last Amber Light Update
1 month ago
2025-04-10 08:29:09

Last DTC Update
22 days ago
2025-04-29 11:02:35

50

Wnat

11



Example Data

0 Days	151,057km	ON-ROAD	CHECK ISO7638	(53%)			25%
0 Days	193,059km	ON-ROAD	CHECK ISO7638	(51%)			81%
0 Days	275,331km	ON-ROAD	CHECK ISO7638	(54%)	!		80%
0 Days	340,763km	ON-ROAD	CHECK ISO7638	(53%)			28%
0 Days	127,830km	ON-ROAD	CHECK ISO7638	(55%)			57%
0 Days	276,893km	ON-ROAD	CHECK ISO7638	(53%)	!		39%
0 Days	26,687km	ON-ROAD	CHECK ISO7638	(55%)			65%
0 Days	206,470km	ON-ROAD	CHECK ISO7638	(48%)			20%
0 Days	158,724km	ON-ROAD	CHECK ISO7638	(50%)			61%
0 Days	125,667km	ON-ROAD	CHECK ISO7638	(50%)			52%
0 Days	15,604km	ON-ROAD	CHECK ISO7638	(55%)			25%
0 Days	15,604km	ON-ROAD	CHECK ISO7638	(55%)			15%
0 Days	172,814km	ON-ROAD	CHECK ISO7638	(49%)			51%
0 Days	197,075km	ON-ROAD	CHECK ISO7638	(52%)			57%
0 Days	129,714km	ON-ROAD	CHECK ISO7638	(53%)			48%
0 Days	121,566km	ON-ROAD	CHECK ISO7638	(51%)			32%
0 Days	237,757km	ON-ROAD	CHECK ISO7638	(53%)	!		43%

- Sample check
- Filter by assets in transit
- Filter by assets without ISO connection



Example Data

<div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div></div></div>						
0 Days	211,118km	ON-ROAD	(EBS)	(53%)	!	43%
0 Days	230,681km	ON-ROAD	(EBS)	(52%)	!	39%
0 Days	251,109km	ON-ROAD	(EBS)	(53%)	!	46%
1 Day	200,003km	ON-ROAD	(EBS)	(52%)	!	56%
1 Day	235,867km	ON-ROAD	(EBS)	(50%)	!	40%
1 Day	154,600km	ON-ROAD	(EBS)	(52%)	!	35%
2 Days	150,653km	ON-ROAD	(EBS)	(53%)	!	37%
2 Days	178,517km	ON-ROAD	(EBS)	(52%)	!	51%
2 Days	44,947km	ON-ROAD	(EBS)	(54%)	!	36%
3 Days	191,672km	ON-ROAD	(EBS)	(51%)	!	37%
3 Days	90,222km	ON-ROAD	(EBS)	(52%)	!	40%
3 Days	167,434km	ON-ROAD	(EBS)	(52%)	!	65%
4 Days	241,927km	ON-ROAD	(EBS)	(52%)	!	44%

- Filter by assets in transit
- Filter Critical Tyre Pressure
- Drill down
 - 1 with an OS rear tyre at 11 PSI

50027E27

Manufacturer

-

Fitting

-

Tyre Positioning

Back Axle (position 3)

Outer-most Tyre (position 0)

Left Side From Rear

11 PSI

1 BAR

(11 PSI at 15°C)

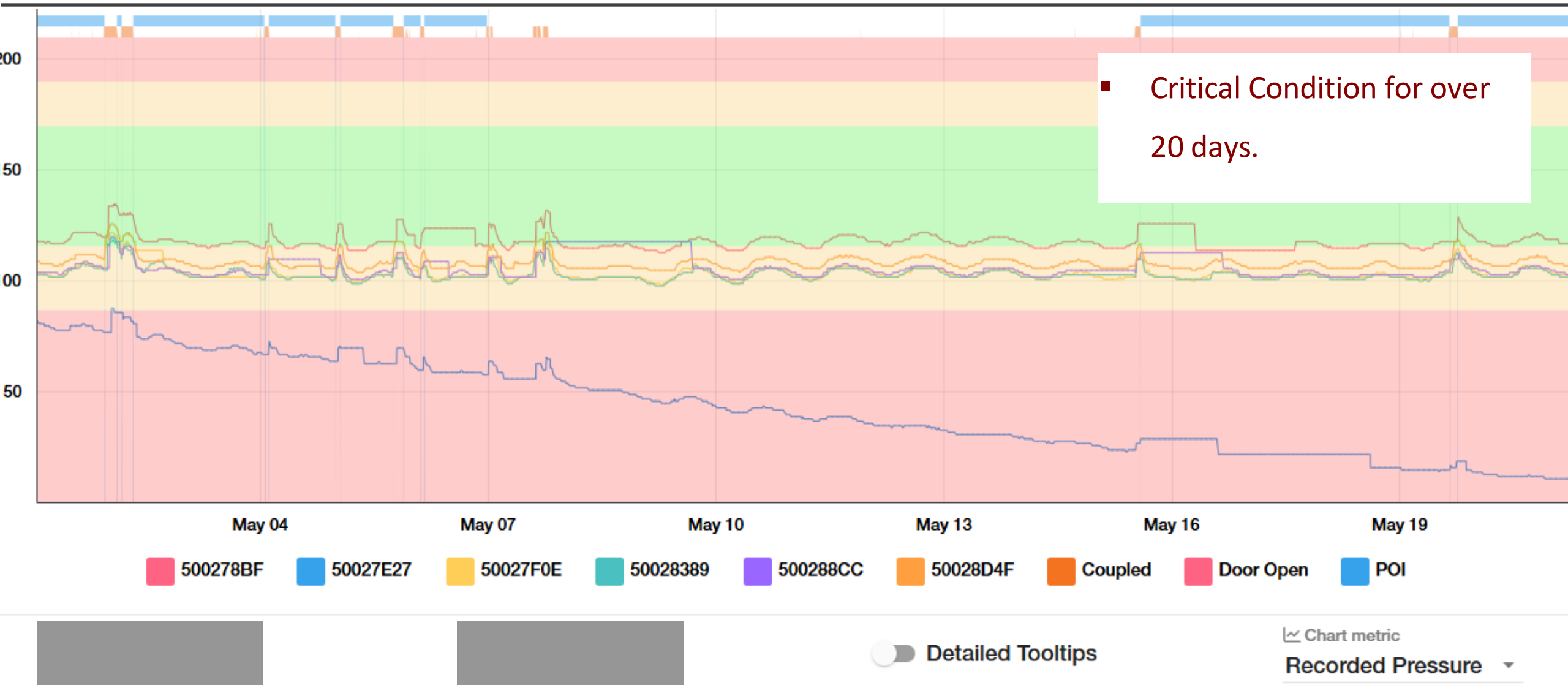
5 hours ago

21/05/25 10:40





Example Data

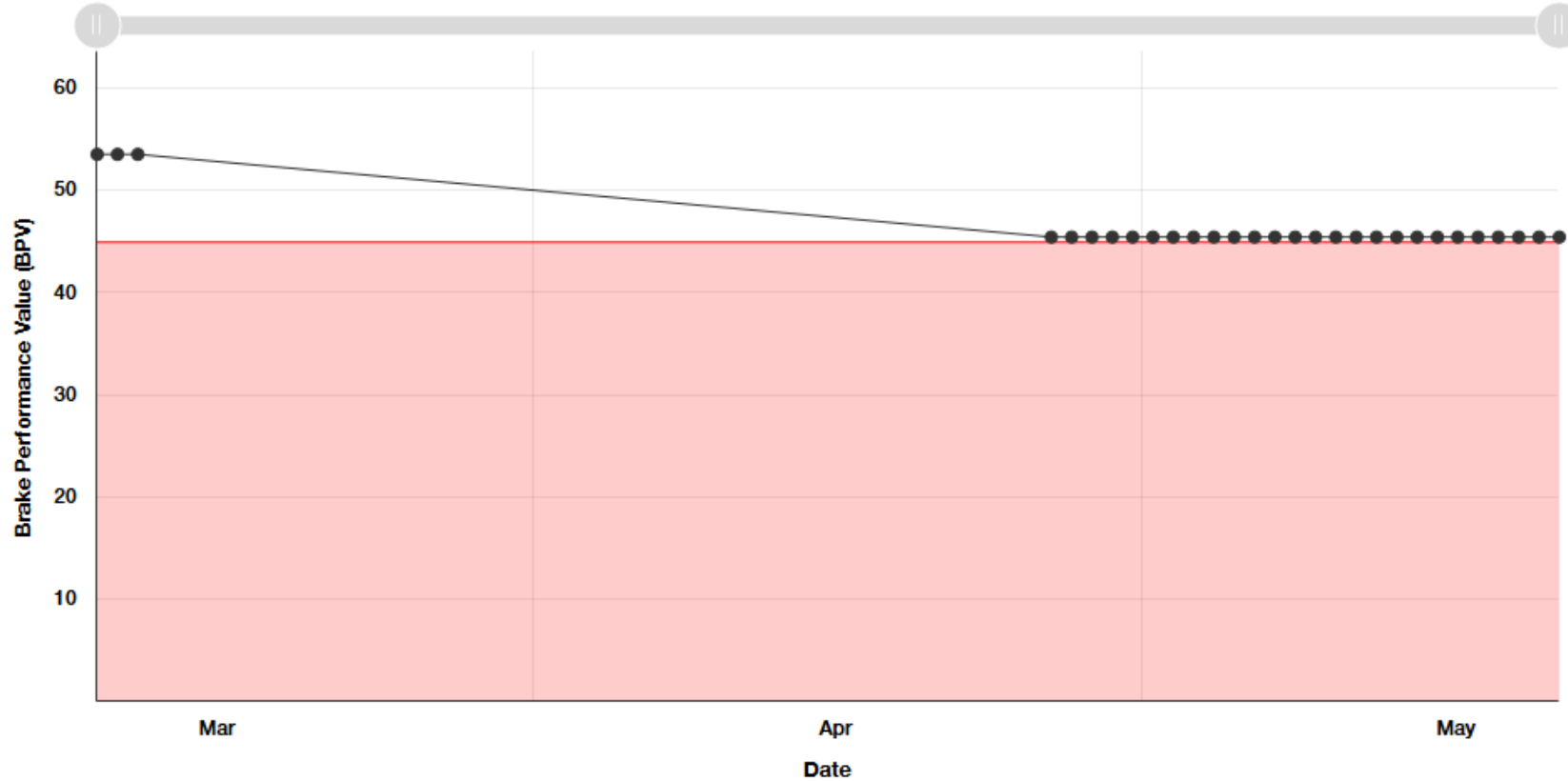




Example Data

Brake Performance Value History

BPV Change: -8.1%



- Asset with a BPV of 45% for 30 days



Example Data

<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>							
0 Days	374,755km	ON-ROAD					
0 Days	233,613km	ON-ROAD					
0 Days	128,799km	ON-ROAD					
2 Days	24,799km	ON-ROAD					
1 Day	23,294km	ON-ROAD					
0 Days	25,301km	ON-ROAD					

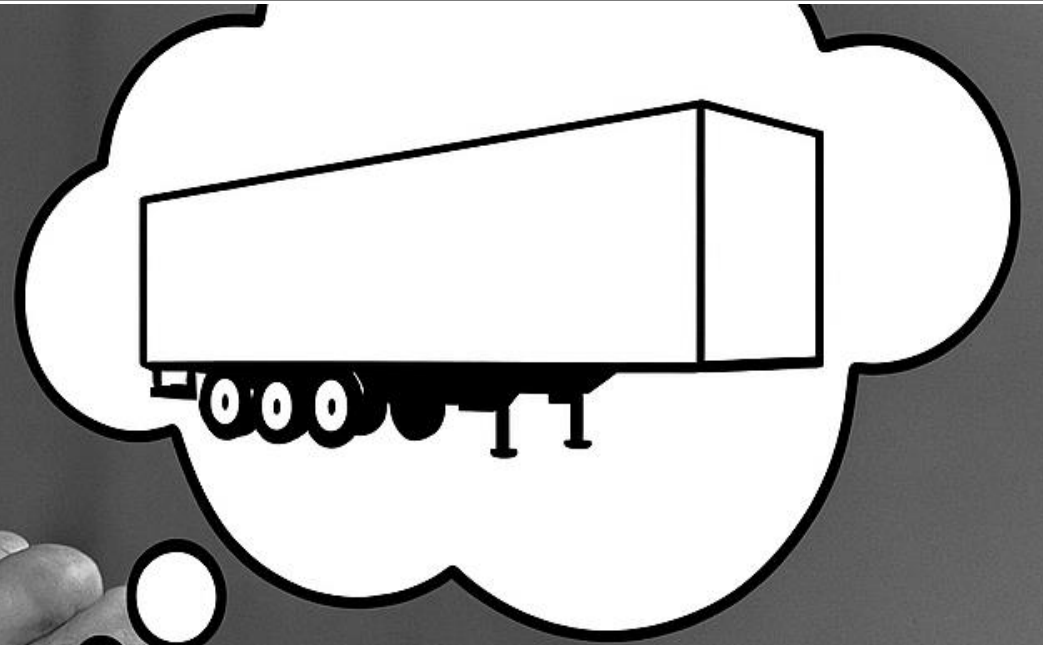
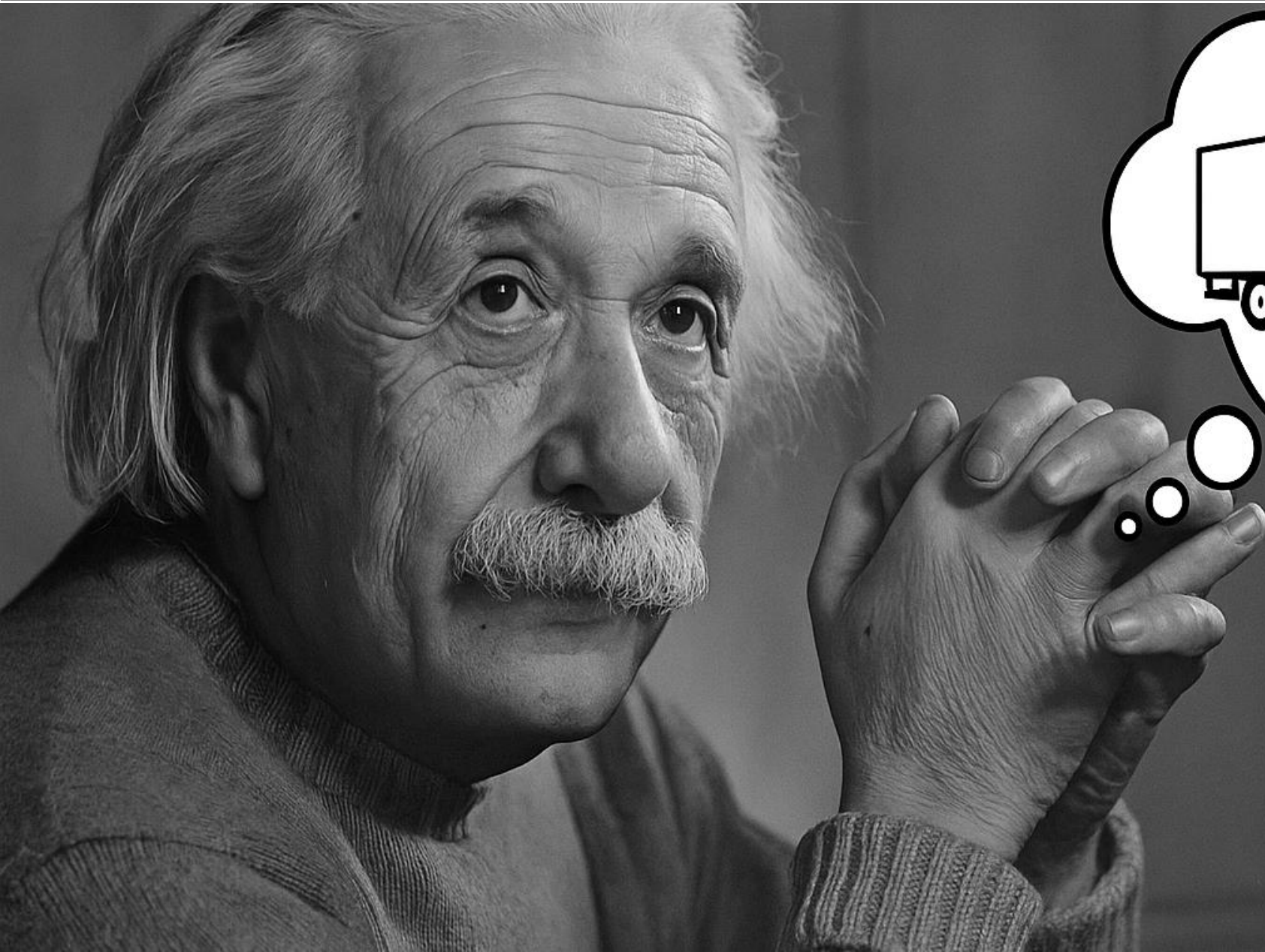


Bogie Weight
31806 Kg
(177% of maximum bogie capacity)

- Filter by assets in transit
- Filter by assets with overloaded bogie



How Smart Are You Now?





GSR2 - Reg 155/156 – Cyber Security

TRAILER SETTINGS



VECTO



Vehicle Energy Consumption Calculation Tool



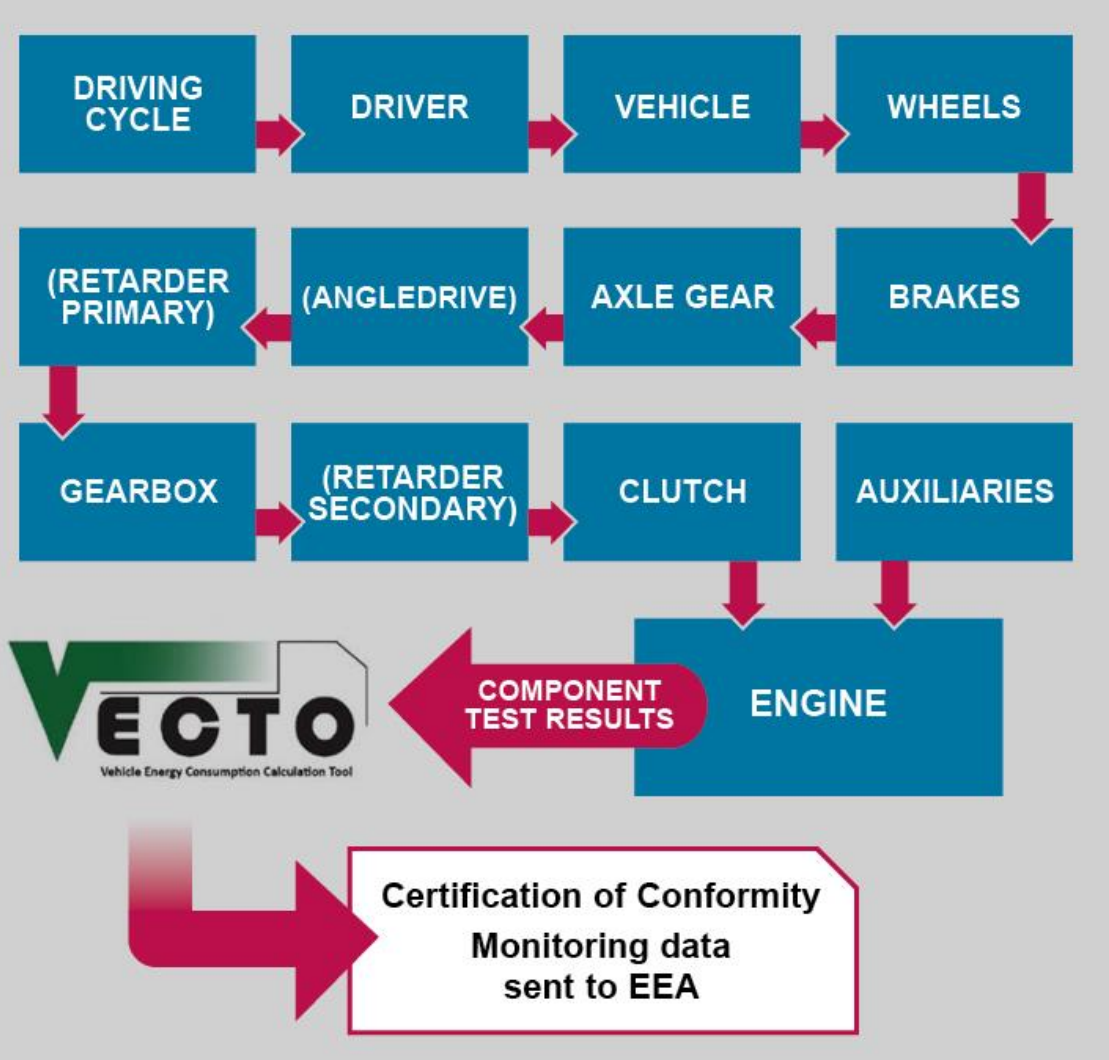


EU Target: Reduce CO2 by 10% by 2030





VECTO – The Reality



- Jan 2024 -> European Trailers Only
- 4m overall height
- Limited pre-set aero devices
- Clunky 'Engineering-led' interface
- EU CoC Certification



Future Fleet Planning – Avoid The Shock

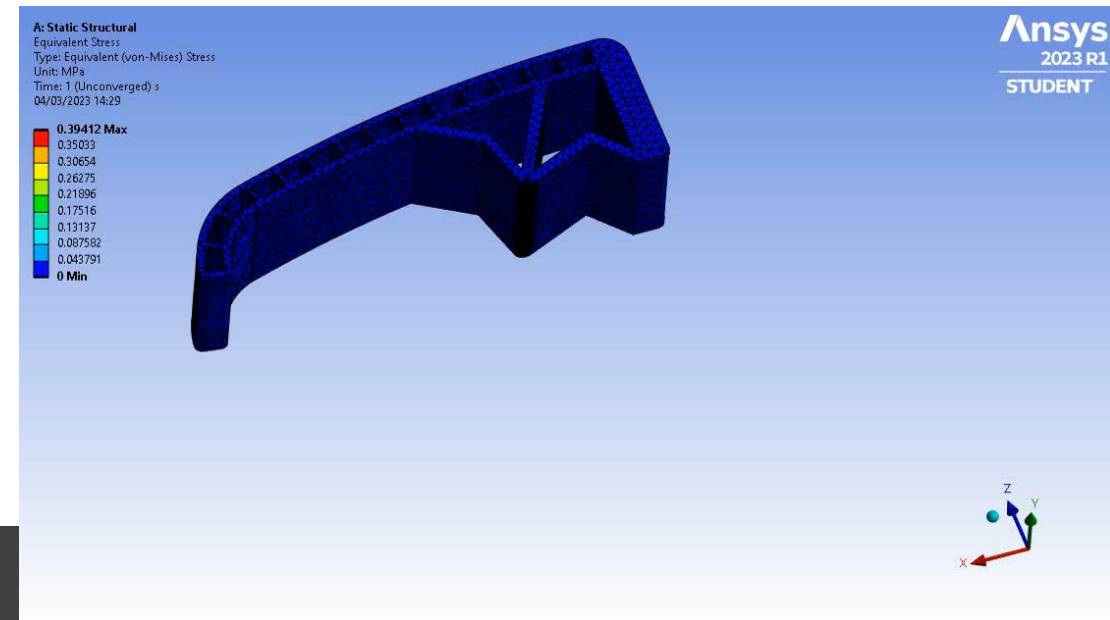




What's New In Aerodynamics?



- Aerodyne Boat-Tail
- Flexible/Compressible
- Up to:
 - 6.7% drag-saving
 - 2.6% fuel saving
- VECTO CFD Verified
- Pat Pending



E-Axles

Generator vs Propulsion

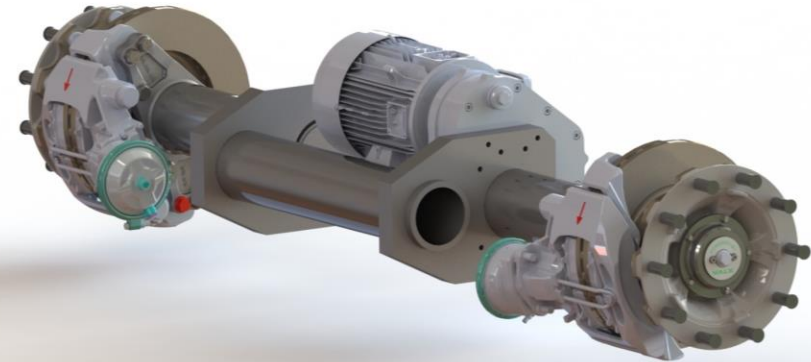
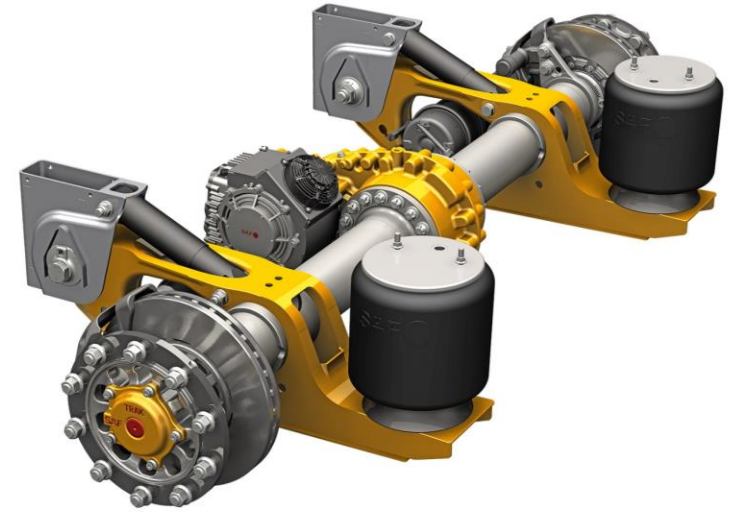


Generator Axles



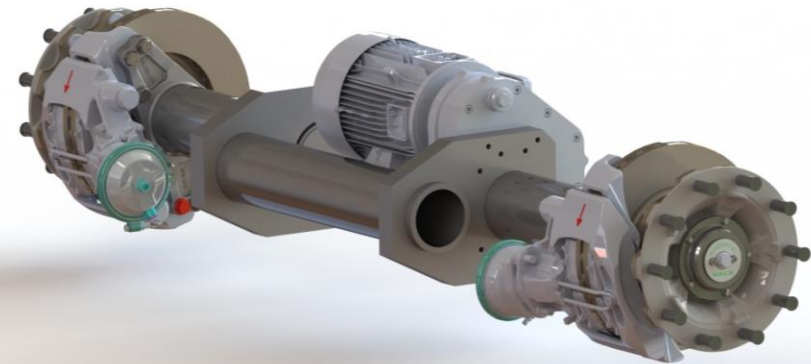
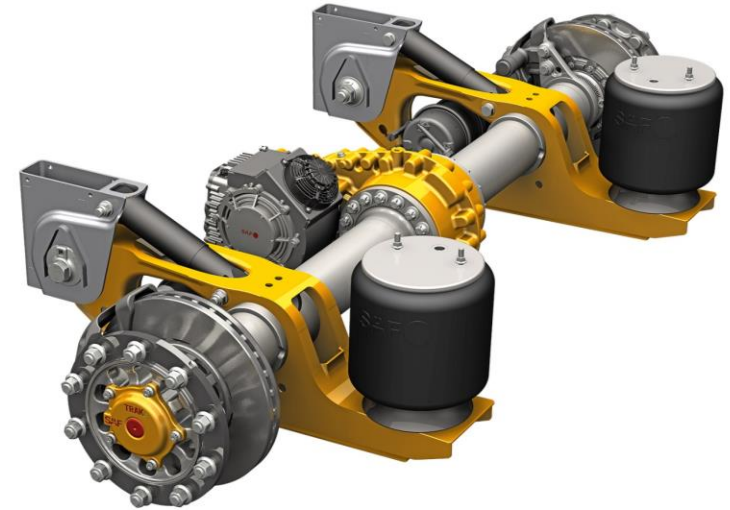


Existing Solutions





Existing Solutions

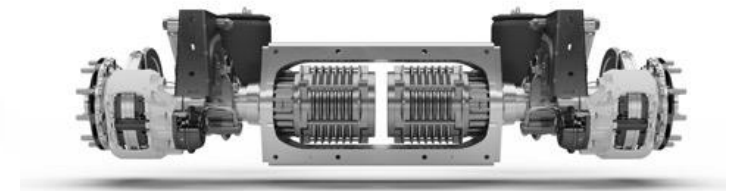




BPW ePower Generator Axle

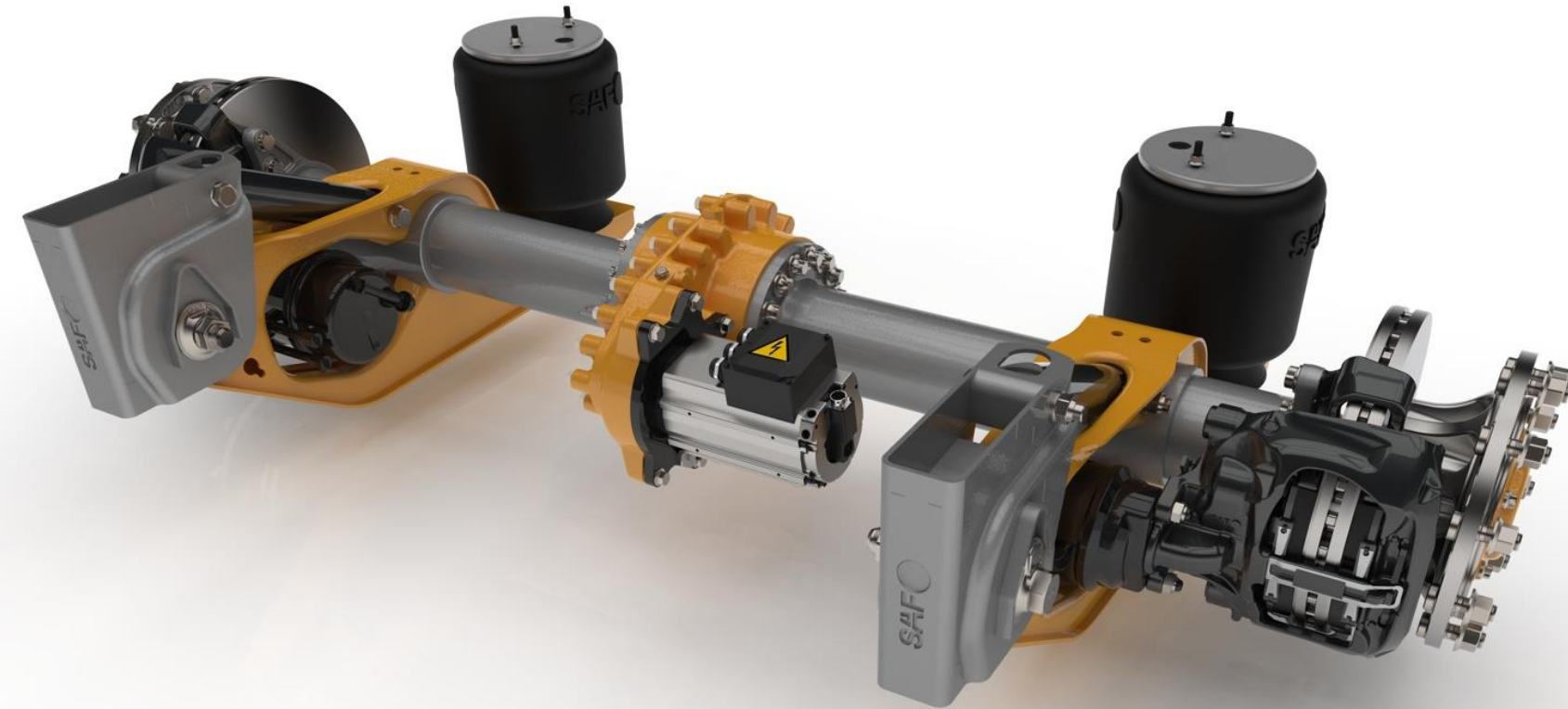


- 22.5" Wheels
- Dual generators
- Smart charging
- Braking energy recuperation
- Weight Penalty: 300kgs
- 2x8 kW Generator
- Integrates with Thermo King Units





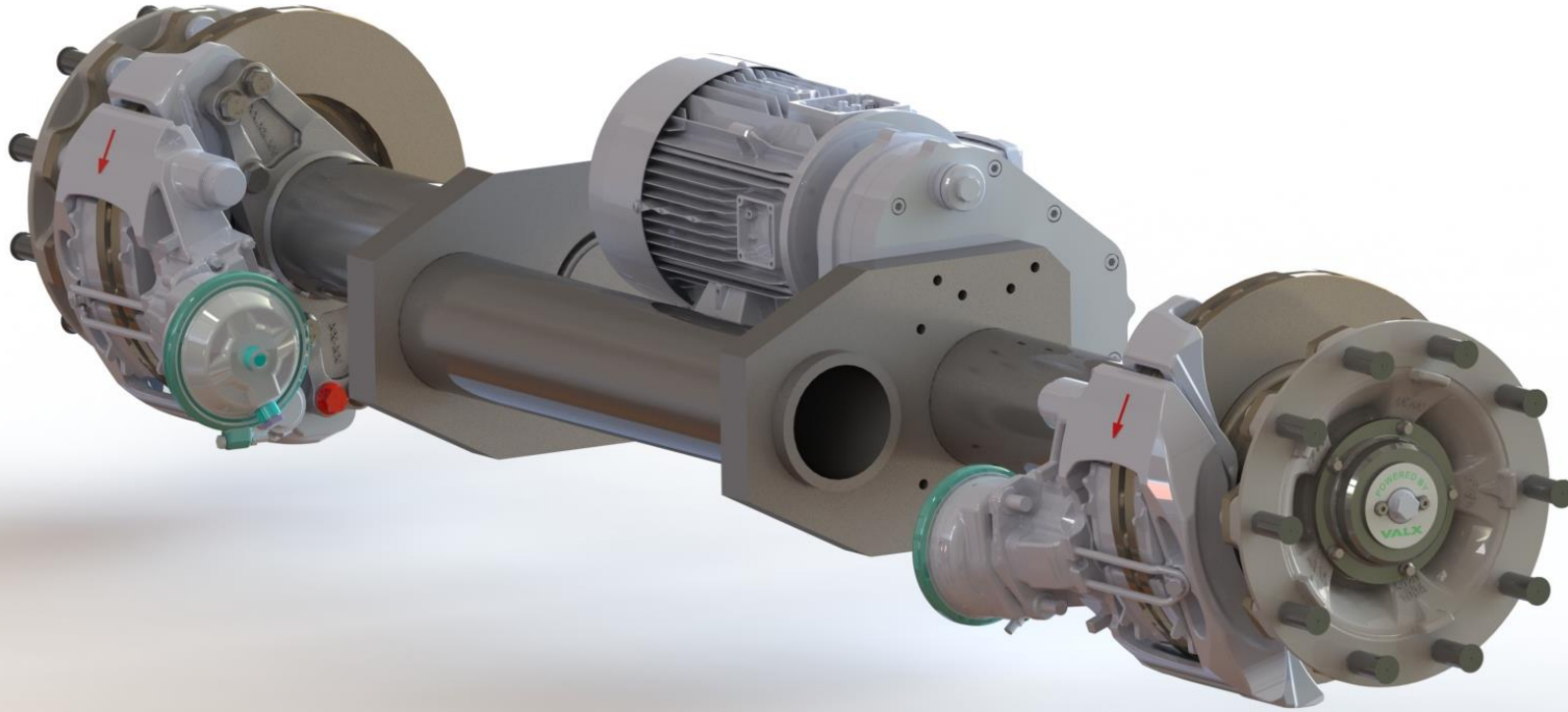
SAF Holland TRAKr (r for recuperation)



- 22.5 & 19.5" Wheels
- 18 kW PMS generator
- Standard Braking Components



Fuwa Valx E2!HD Energy Axles



- 14kW Peak
- 9kW Continuous
- Battery Pack –
400V/3/50hz



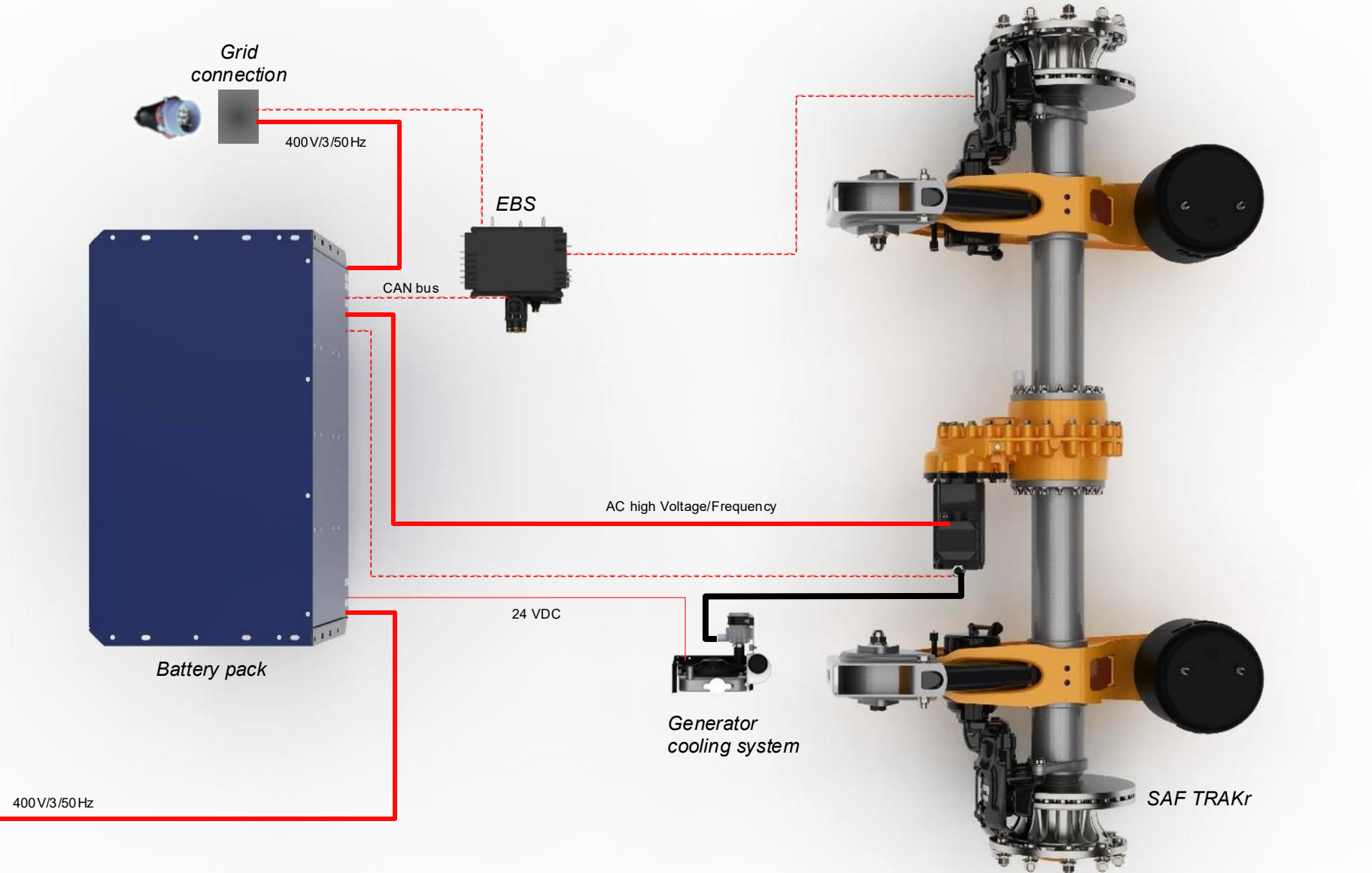
So What's It All For???



- Fridge Units
- Lifting Decks
- Moving Floor Trailers
- Tail-Lifts
- Silo & Tanker
- Transportable E-Forklift



SAF / Advolt / Carrier Eco System



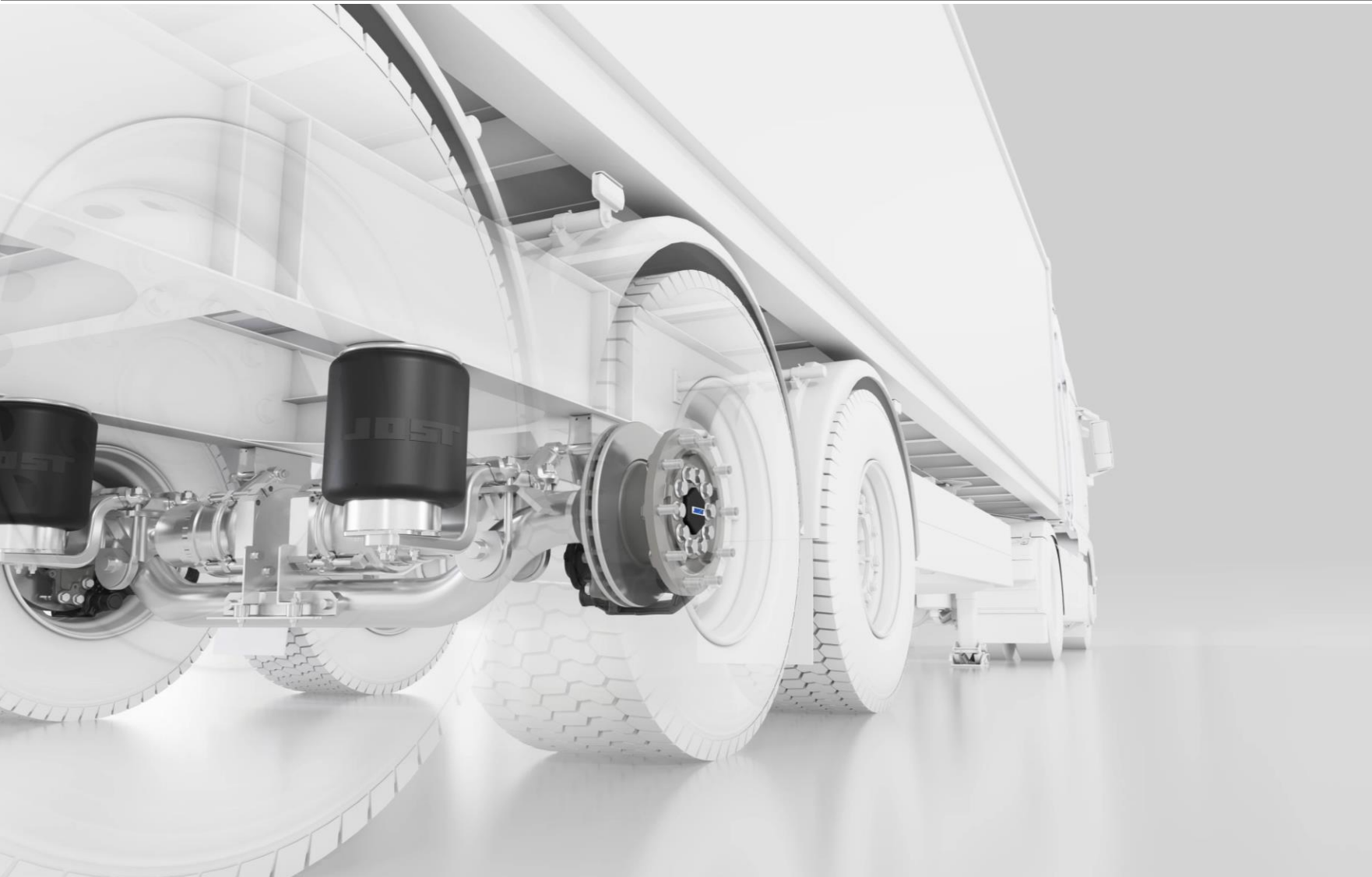


Propulsion-Assist Axles





JOST Propulsion e-Axle



- 90 kW Output
- 2x 1100Nm Torque
- 48V LiFePo Batteries LiFePo batteries (60–180kWh)
- Developed with Trailer Dynamics
- Regen braking
- Smart electric drive that assist the tractor unit
- Adapts to load weight and route topography
- 20% CO₂ saving in field testing



ZF TrailTrax®



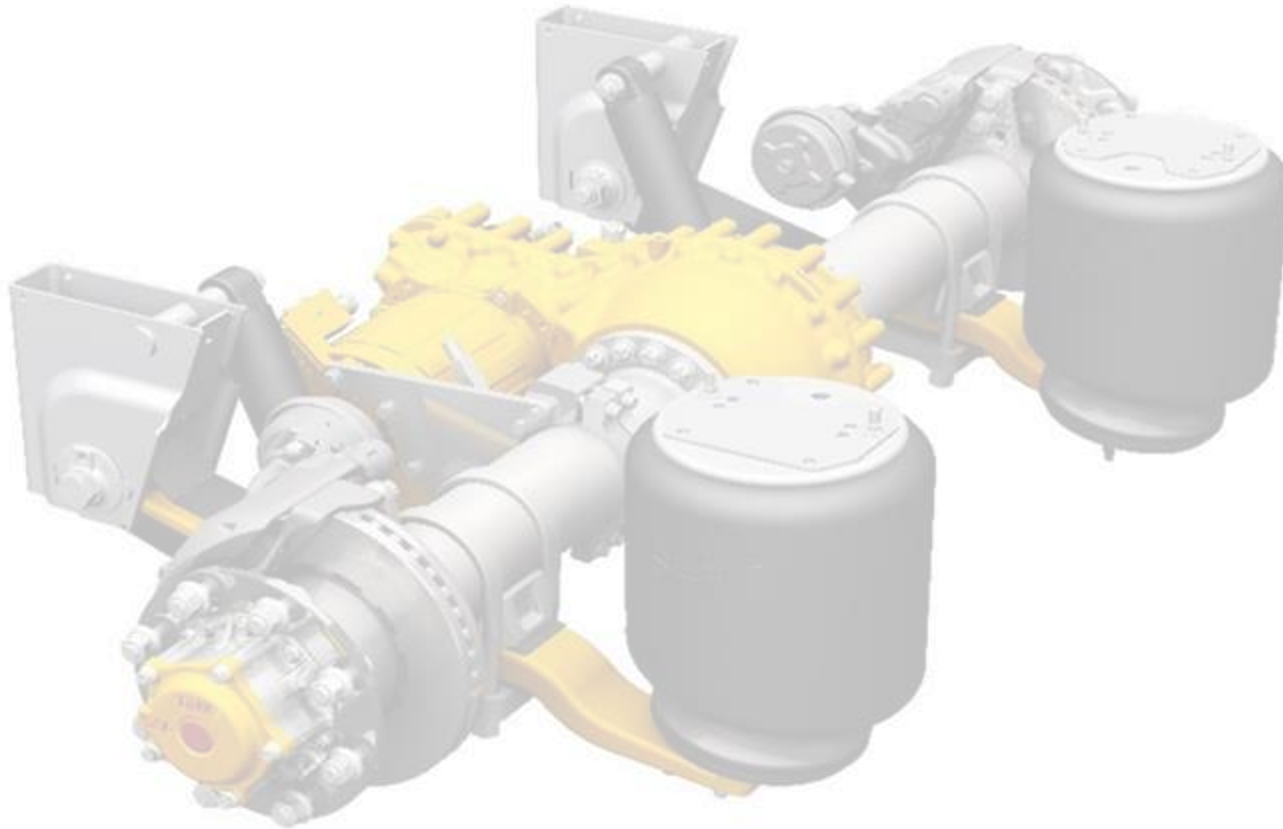
- 210kW Continuous
- Includes battery pack
- Trailer EBS Integration
- Up to 16% Diesel Saving
- Recuperation of braking energy
- Supports other electrical auxiliaries





SAF Holland TRAKe (Recuperation + “Traction Support”)

- In Development





The Battery...



- **Recuperation**

- 19 kWh (325-720 kgs)

- **(Propulsion) Samsung**

- 35 kWh Packs (250kgs ea.)
- 6 x Packs = **210 kWh**
- 6 x 250kgs = **1.5 tonnes**

The Future of
Safety
&
Innovative Design



Understanding The Importance of ISO Power

- The ISO Suzie coupling powers the trailer ECU (the “brain”)
- The Trailer ECU powers and controls:
 - **Roll Stability System (RSS):** Prevents roll-over during sharp turns.
 - **Anti-Lock Braking System (ABS):** Prevents wheels from locking during braking.
 - **Load Sensing Valve (LSV):** Adjusts braking pressure based on the trailer’s load weight for optimal performance.
 - **Braking Response Time:** Provides faster reaction times between pedal activation and brake engagement, reducing stopping distances.
 - **Suspension Control:** Ensures the trailer’s suspension adjusts to the correct ride height, critical for maintaining proper trailer clearance, especially for high double-deck trailers.





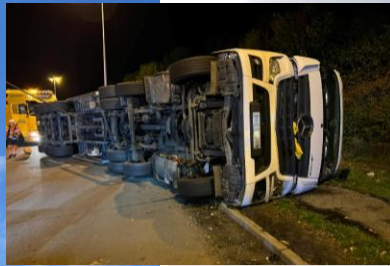
Why Does The Problem Exist?

- Fuse failure
- Suzie fatigue with age/articulation
- Worn/damaged connections
- Wrong end of ISO suzie coupled (See right ➡)
- Driver oversight/ lack of training





The Risks Of Operating Without ISO Power



*"Recent investigations into trailer fleets have revealed that invalid or faulty EBS connections occur more frequently than anticipated. In one detailed telematics study of a major fleet operator, **36.5 incidents per week** were recorded where trailers were found to have a missing or inconsistent EBS connection."*



- **Bridge Strikes:** High double-deck trailers relying on suspension control to maintain correct ride height may exceed bridge clearances, leading to dangerous and costly collisions followed by potential investigations.
- **Rollovers and Jack-Knifing:** Increased likelihood during manoeuvres or uneven loads.
- **PG9 Prohibition and Possible Driver Endorsements / Fines:** The ISO 7638 coupling is a legal requirement and is enforced by the DVSA.
- **Reduced Braking Performance:** Longer stopping distances and less control.
- **Aquaplaning:** Greater risk of losing traction in wet conditions.

EBS-Safe

Suspension-Safe

Leg-Safe



The Original Simple EBS-Safe Solution

- Requires active power from 24N and/or 24S to “arm” it.
- Valid power to the ECU disables it.
- Pros
 - Simple
 - Low cost
- Cons
 - Triggers the alarm (including 90dB siren) if side lights are on and ignition is off.





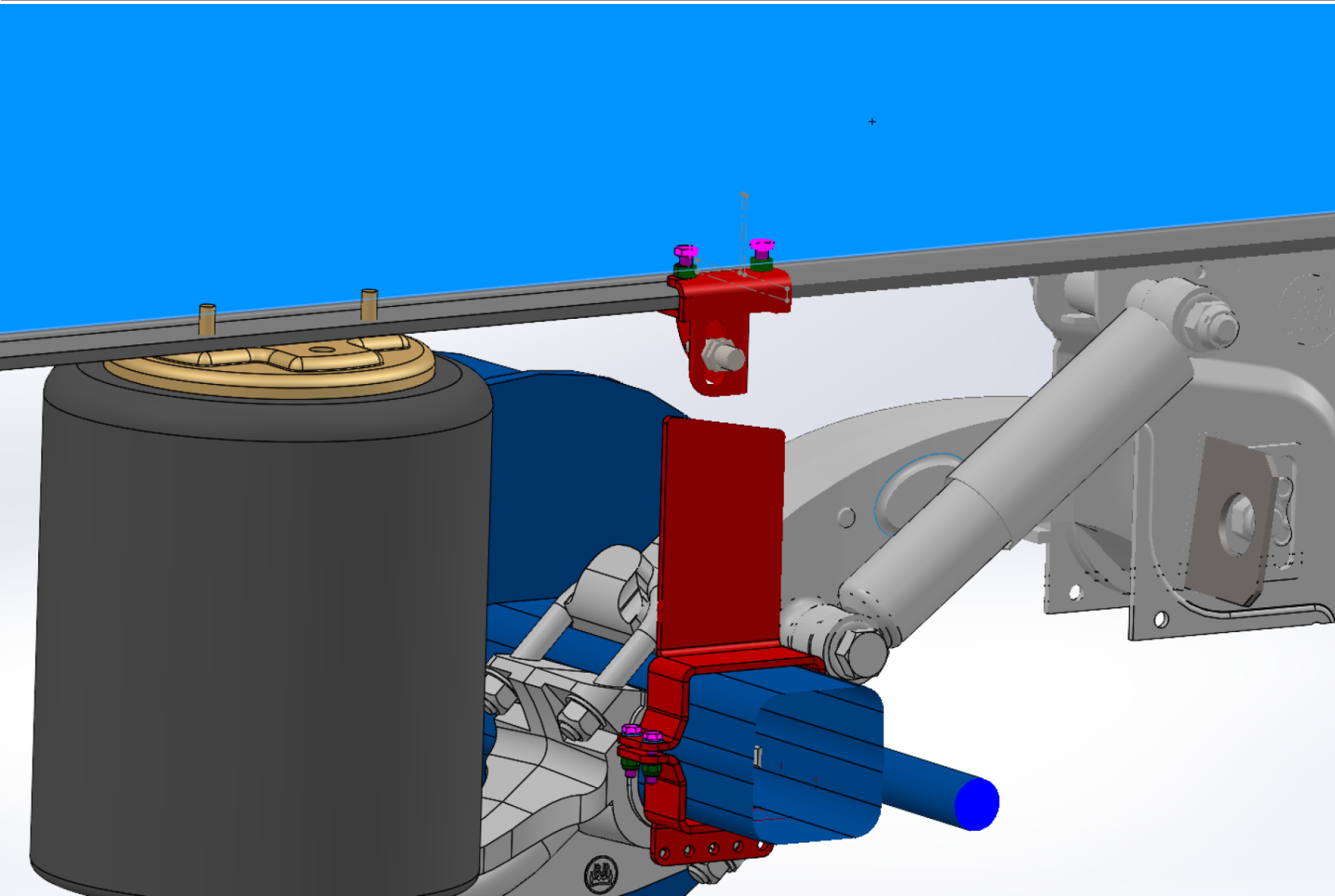
Innovation: EBS-Safe Braked



- The evolved design is armed when the red airline is coupled.
- Functionality can be extended to keep park brakes on until trailer EBS power is valid.

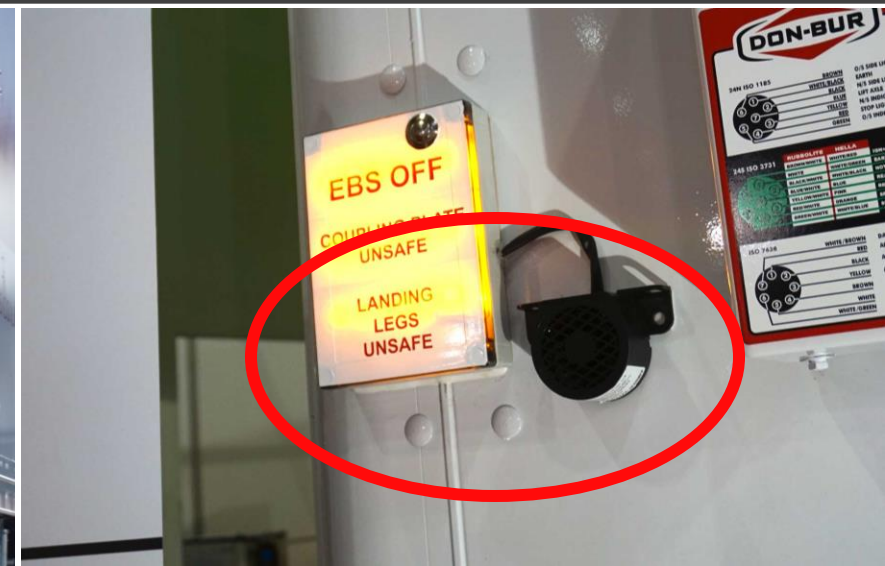


Innovation: Suspension-Safe





Innovation: 'Leg-Safe'



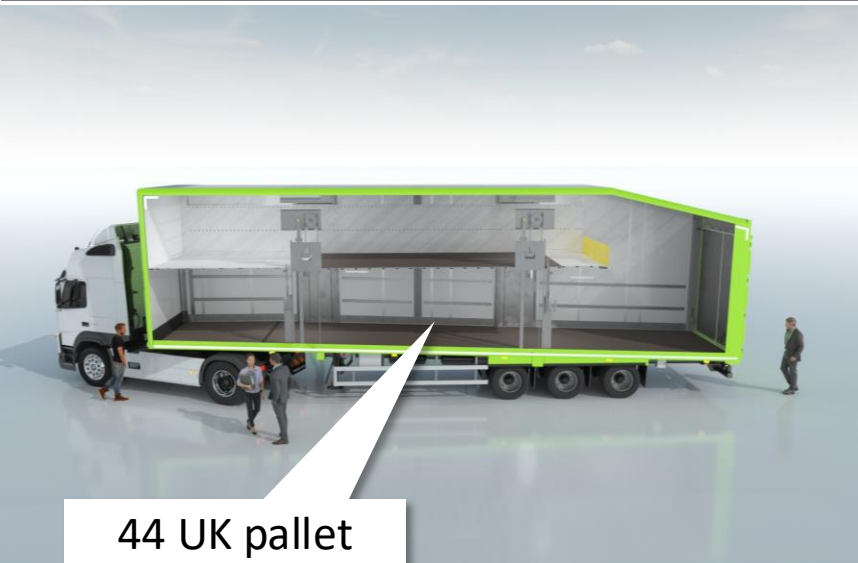
Prevent trailer 'Drops' when decoupling
Ensure legs are raised fully after coupling



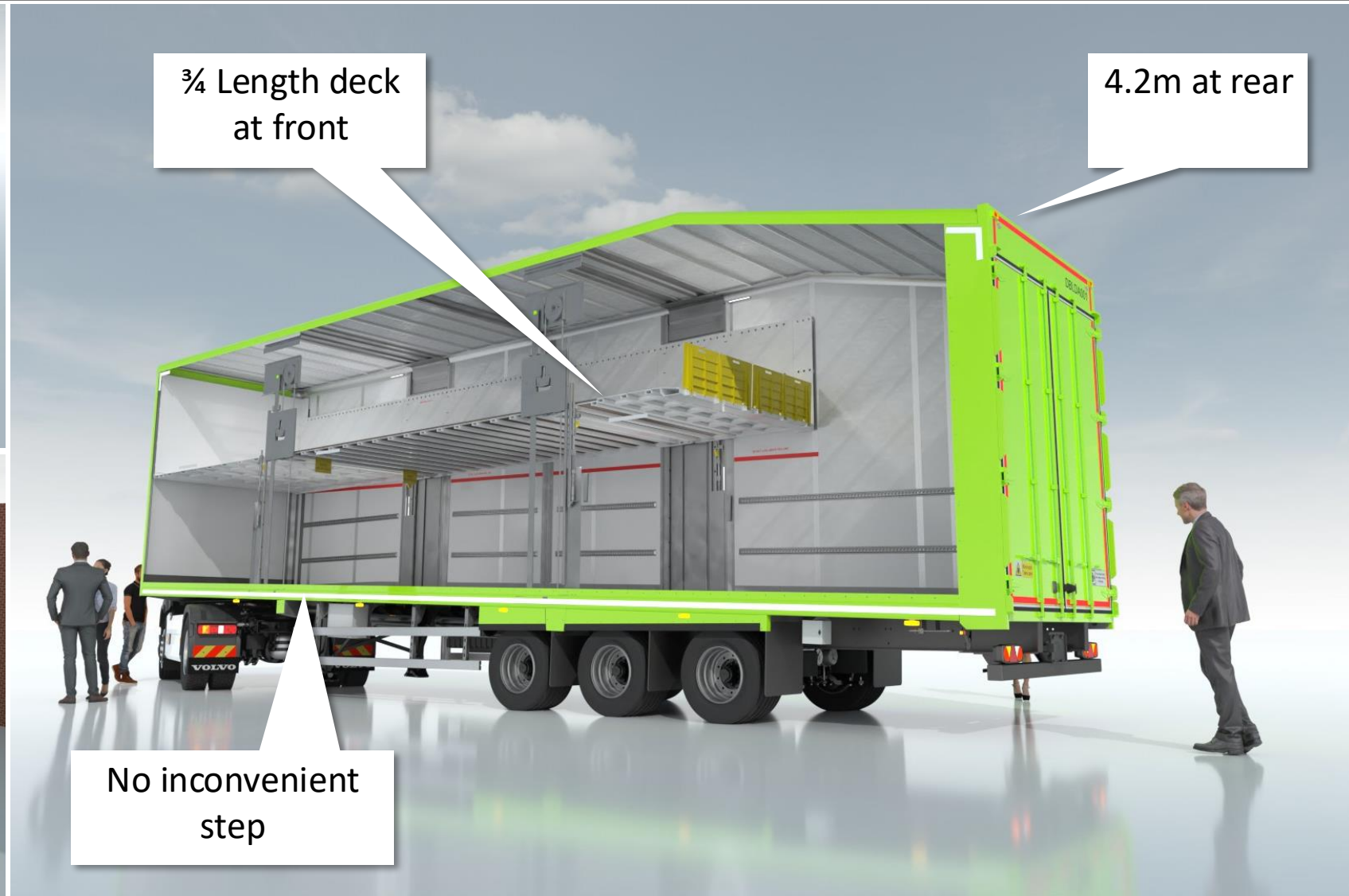
“DeckTalk”



Lifting Deck "Adapt"



44 UK pallet capacity



$\frac{3}{4}$ Length deck at front

4.2m at rear

No inconvenient step



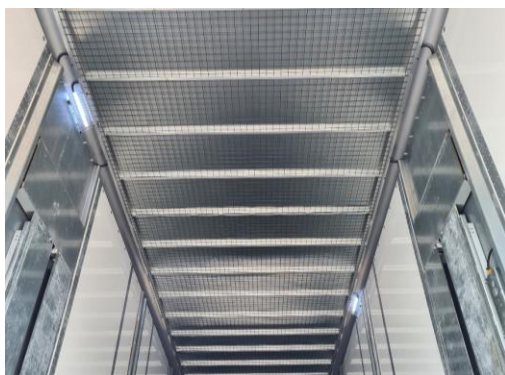
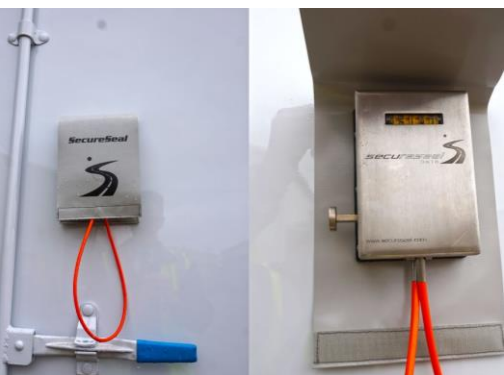
“Delta” Load Restraint System

Beefing up your

Security



Solutions





Be smart, stay safe

Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25

LOGISTICS UK



Coffee break

Vehicle Inspections Service Demonstrations

LOGISTICS UK

Experience our engineers in action!

Ever wondered what our vehicle inspections cover or what the most commonly found defects are? Make your way to the curtainside brewery truck kindly provided by **Bevan Group** during the breaks and one of our engineers will walk you through an inspection.

- Learn first-hand about the different types of inspection we offer.
- Discover the most common (and most surprising) defects we find.
- Test your knowledge as the engineers turn the questions back to you!

Find the team by the Bevan Group MAN / Carlsberg truck just outside the venue.





LOGISTICS UK

Fleet Engineer

Tuesday 03rd June 2025



LOGISTICS UK

Putting the brake on testing

Owen Jenkins

Engineering Manager
BPW



Use Sli.do for your questions
Join at: www.sli.do **#FE25**





LOGISTICS UK

Putting the Brakes on Testing

BPW Limited | Owen Jenkins | Engineering Manager
June 2025



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Overview

1 Where are we now

- Roller Brake Testing
- Brake Monitoring - Introduction of EBPMS

2 Where are we going

- Maintenance Prompts and Reminders
- More Intelligent Warnings
- Reduced Downtime, Improved Productivity, Safer Roads

3 What else

- eAxle / ePower / eTrailer

Putting the Brakes on Testing

Roller Brake Testing

RBT for 3-axle semi trailers:

Vehicle: May have passed on wheel locks
May have been only partly laden
May have been fully laden

- The trailer will have been tested on its own (without tractor unit).
- The test is a stationary test with low wheel speed
- The brakes may not be at the optimal temperature



EBPMS

What is it?

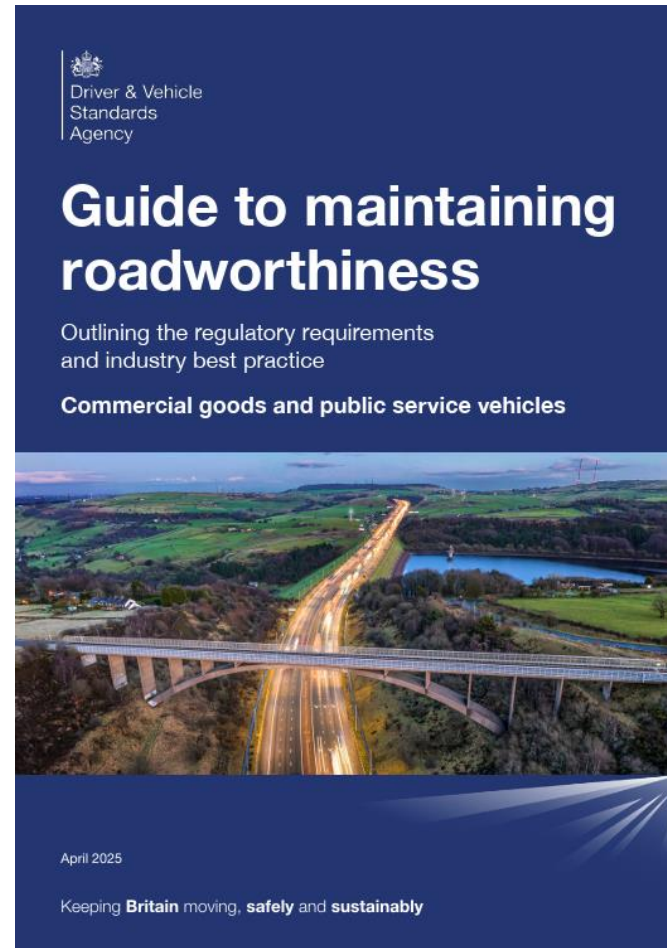
- EBPMS continuously monitors brake performance of a trailer in real time
- By using data from the Electronic Braking System (EBS) the telematics system produces brake performance figures for the tractor/trailer
- The performance figures are then presented in viewable reports
- The longer the system is used, the more accurate the data becomes



Putting the Brakes on Testing

EBPMS The Attraction

Vehicle operators and drivers have a legal obligation to ensure their vehicles are always roadworthy when operating on the public highways.



**Authorised
Testing Facility**

From April 2025:

To follow best practice and comply with legislation, there is an expectation that **every safety inspection** will include a brake performance assessment using either an RBT, a suitable electronic brake performance monitoring system (EBPMS) or a decelerometer with temperature readings.

Page 48 - Guide to Maintaining Roadworthiness

Putting the Brakes on Testing

EBPMS

System reporting (current)

1. Asset reports for individual trailers
2. Brake performance in real time, in operation
3. Fleet overview reports
4. EBS fault codes communicated
5. Performance warnings and overload alarms via email
6. Brake lining wear sensing
7. Alternative to RBT
8. Demonstrates compliance with GTMR
9. Reduces MoT failures and roadside check prohibitions



System reporting (future)

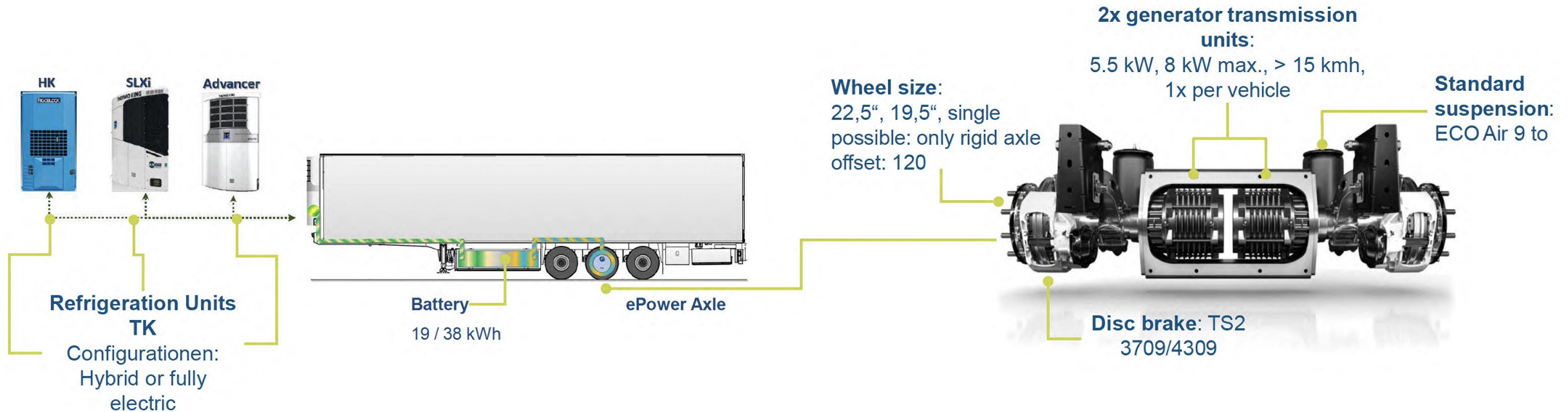
1. Individual wheel station
2. Predictive wear => proactive, targetted maintenance
3. Driver behaviour
4. More detailed / intelligent warnings
5. A basis for more detailed telematics
6. Software driven data interpretation
7. Fault detection and diagnosis
8. Parts and spares requirements across fleet



Putting the Brakes on Testing Electric Power

ePower – a generator axle

- Battery charging units offering emission-free savings on fuel and maintenance costs



Putting the Brakes on Testing

Contacts

BPW Limited

- Website – www.bpw.co.uk
- Technical Services – 0116 281 6100 Opt. 4
- Email – info@bpw.co.uk

Find us on social media

- LinkedIn – @BPWLimited
- Facebook – @BPWLimited
- YouTube – BPWUK
- Instagram – @wearebpwuk

Service and Maintenance training

- Website – www.bpw.co.uk/training
- Email – training@bpw.co.uk



Partnership

Solutions

Innovation

Support

Quality

Transparency

we think transport



Efficiency

Safety

Customer
orientation

LOGISTICS UK

Thank you for your attention

Are there any questions?

we think transport



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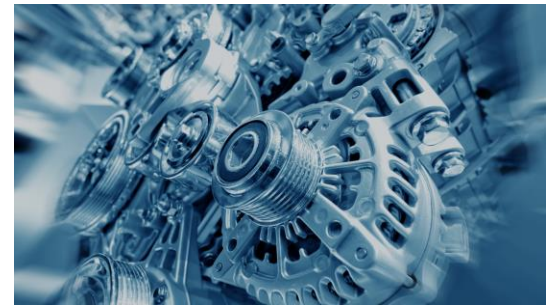


Beyond the Checklist – Smarter Inspections & Automated workflows

Ashley Connell

Commercial Director
R2C

Use Sli.do for your questions
Join at: www.sli.do **#FE25**





LOGISTICS UK

Beyond the Checklist

Smarter Inspections & Automated Workflows

Corpay[^]

AGENDA

1 Organisation Overview

2 The Evolving Landscape

3 Smarter Workflows

4 Automations



COMPANY OVERVIEW

Corpay is a global S&P500 corporate payments company that helps businesses and consumers pay expenses in a simple, controlled manner.

VEHICLE AND MOBILITY PAYMENT SOLUTIONS

VEHICLE PAYMENTS



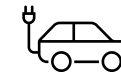
Fuel



Tolls



Maintenance



EV charging

TRAVEL PAYMENTS



Lodging

CORPORATE PAYMENTS



Payments automation



Multi-card



Expense management



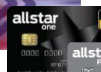












Cross-border

Corpay[^]

EUROPE FLEET OVERVIEW

Combines various businesses in many countries serving customers & vehicles through multiple products & brands, including expense cards and fleet management services.

	VEHICLE PAYMENTS		EV	FLEET MAINTENANCE	PARKING
BRANDS	Allstar Keyfuels The Fuelcard Company	Travelcard CCS Shell Lotos (Mol) FLEETCOR Europe	Plugsurfing	1link r2c Online Business Gateway	PayByPhone
PRODUCTS	 Fleet cards EV charging On the road cards Expense cards Driver home energy settlement ServicePoint    	  Fleet cards EV charging Telematics ServicePass AutoPay (Tolls) Expense app 	 Technology ecosystem for EV charging	  Fleet maintenance Truck maintenance Truck compliance Remarketing Rental 	 Parking payment
NETWORK SIZE	7,700 fuel sites 53,000 EV chargers	32,000 fuel sites	800,000 connectors	1link – 37,000 vehicle maintenance garages in Europe r2c – 2,000 workshops in the UK	Used in 1,300 cities 14,000 locations to park at in the UK
GEOGRAPHY	UK & Ireland	Europe	Europe	UK, Australia and Europe	UK, Europe, USA, Canada

r2c OVERVIEW

COMPANY OVERVIEW

A market-leading software platform for compliance, workshop and fleet management. r2c allows you to work together with your entire supply chain through one easy-to-use system.

CLIENTS



Established
2003

Fleets
79k+

Workshops
2k+

Jobs Processed
16 Million+

Driver Checks
23 Million+

Defects Raised
54 Million+

THE R2C PRODUCT SUITE

DRIVER
Daily pre-use checks to help
drive 100% compliance



CORE
One connected
workshop & fleet
management platform



INSPECT
Touchscreen or voice
data capture

VANTAGE POINT
Visual Business
Intelligence



WORKSHOP LOADING
Smooth workshop
optimisation

issue2invoice
Digital SMR Authorisation
& Invoicing



STOCK MANAGEMENT
Smart stock control &
parts allocation tools

THE EVOLVING LANDSCAPE



LEGISLATION & COMPLIANCE CHALLENGES



ADAPTING WITH SMART WORKFLOWS



**Bespoke Driver
Checklist**



**Defect auto
alerted to Fleet
Manager**



**Jobsheet auto
created for
workshop**



**Work can be
auto-
authorised**

ADAPTABLE WORKFLOWS

VC 10 - Maintenance Inspection - Motor Vehicles

TASKS (0/5)	SECTIONS (1/2)	REF	QUESTIONS (9 / 9)	STATUS	JUDGEMENT
VC 10 - Maintenance Inspection - Motor Vehicles	Brake Performance	[0]	Tested By	123	Satisfactory
Tyre Check	Brake Temperatures	[0]	Test Method	Tapley Test	Requires Attention
Brake Check		[0]	Load Condition	Unladen	Monitored
Limiter Check		[0]	Performance Format	Percentage	Not Applicable
Tacho Check		[71]	Service Performance	12% Unlocked	
		[72]	Secondary Performance	12% Unlocked	
		[73]	Parking Performance	123% Unlocked	
		[0]	Do you need to log Brake Temperatures?	Yes	

R2C.Inspect v25.2.9 (Revision 0). © R2C Online Limited 2025

VC 10 - Maintenance Inspection - Motor Vehicles

TASKS (0/5)	SECTIONS (1/2)	REF	QUESTIONS (14 / 16)	STATUS	JUDGEMENT
VC 10 - Maintenance Inspection - Motor Vehicles	Brake Performance		Brake Temperature - Offside Axle 1 - Before	12.345	Satisfactory
Tyre Check	Brake Temperatures		Brake Temperature - Nearside Axle 1 - Before	55	Requires Attention
Brake Check			Brake Temperature - Offside Axle 2 - Before	0.11	Monitored
Limiter Check			Brake Temperature - Nearside Axle 2 - Before	33.66	Not Applicable
Tacho Check			Brake Temperature - Offside Axle 3 - Before	N/A	
			Brake Temperature - Nearside Axle 3 - Before	N/A	
			Brake Temperature - Offside Axle 4 - Before	N/A	
			Brake Temperature - Nearside Axle 4 - Before	N/A	

APIs – AUTOMATING EVERYDAY TASKS



AUTOMATION VIA API & CONNECTED VEHICLES



WHY IT MATTERS



BENEFITS TO FLEETS & WORKSHOPS



An aerial night view of a city skyline, featuring several prominent skyscrapers and a dense network of roads. Overlaid on the city are numerous glowing yellow arcs that connect various points across the landscape, suggesting a global or interconnected network. The sky is dark with some clouds, and the city lights are visible in the background.

THANK YOU!

An aerial night view of a city skyline, featuring several prominent skyscrapers and a dense network of roads. Overlaid on the city are numerous glowing yellow arcs and dots, representing a global network or data flow. The sky is dark with some clouds, and the city lights are visible in the background.

Q&A

Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25

LOGISTICS UK



AI Development – What it will mean for maintenance

Neil Unadkat

CTO

Intangles

Use Sli.do for your questions

Join at: www.sli.do **#FE25**





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AI Development : What does it mean for maintenance

Neil Unadkat

Co-Founder and CTO

www.intangles.ai



18

Countries - Customers
Onboarded

14+

OEM & Enterprise Partners

25,000+

Fleet Operators

300,000+

Vehicles on the Platform

350+

Employees

11*

Patents

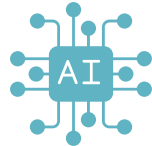
Deep Expertise in Predictive Analytics



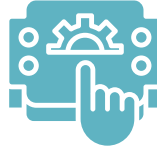
AI/ML & Statistical
Inferencing



Hybrid
Compute
Platform



AI-on-
Chip

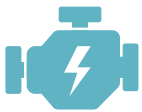


Human-
Machine
Interface

Trusted by World Leading Enterprise Partners

- **Global Presence:** Staff in 8 Countries
- **Vehicle Compatibility:** Gasoline, Diesel, EV, Hybrid, CNG, LNG, Propane, E85
- **Vehicle and Equipment Agnostic**
- **300,000+ Vehicles on the Platform**

AI-Powered Comprehensive Vehicle Prognostics



Engine



Electrical
System



Air
Intake
System



Diesel
Particulate
Filter



Fuel
Supply
System



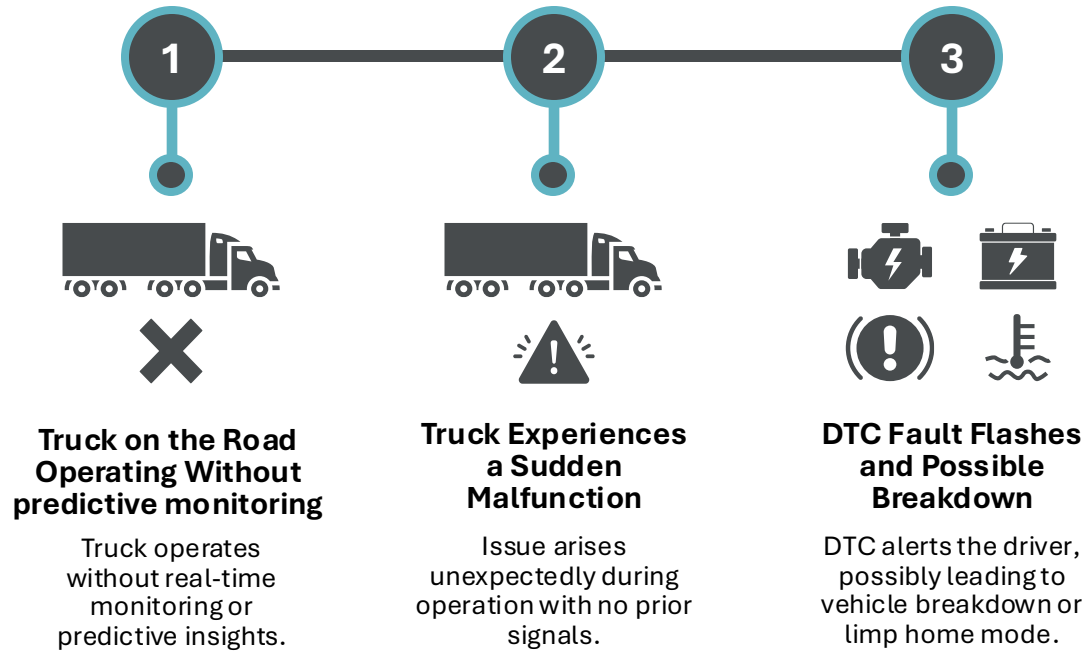
EV
Analytics

Increasing Presence Across Multiple Geographies



*4 Patents Submitted & 7 in Pipeline

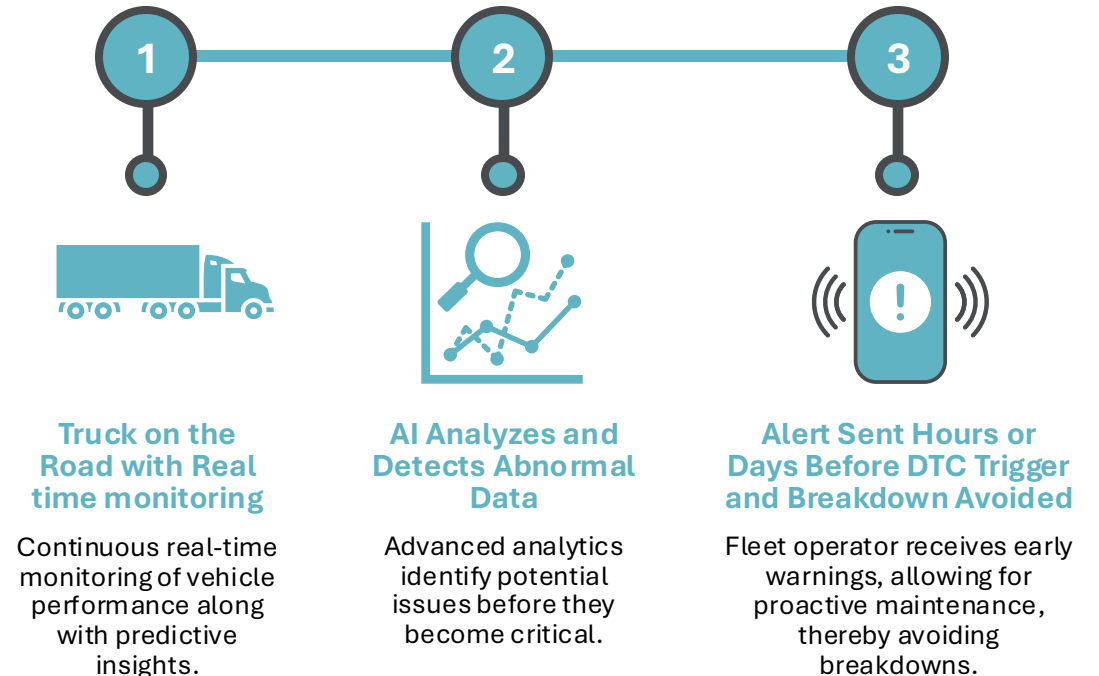
Reactive Approach



Key Issues with Reactive Approach:

- Unplanned Downtime
- Increased Maintenance Costs
- Reduced Operational Efficiency
- Potential Safety Hazards

Predictive Approach



Benefits of Predictive Approach:

- Minimizes Unplanned Downtime
- Reduces Maintenance Costs
- Enhances Operational Efficiency
- Improves Safety and Reliability



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75%
Reduction in
Breakdown Events

20%-30%
Improvement
Driving Behaviour

10%-30%
Increase in Asset
Availability

5%-10%
Reduction in
Maintenance Costs



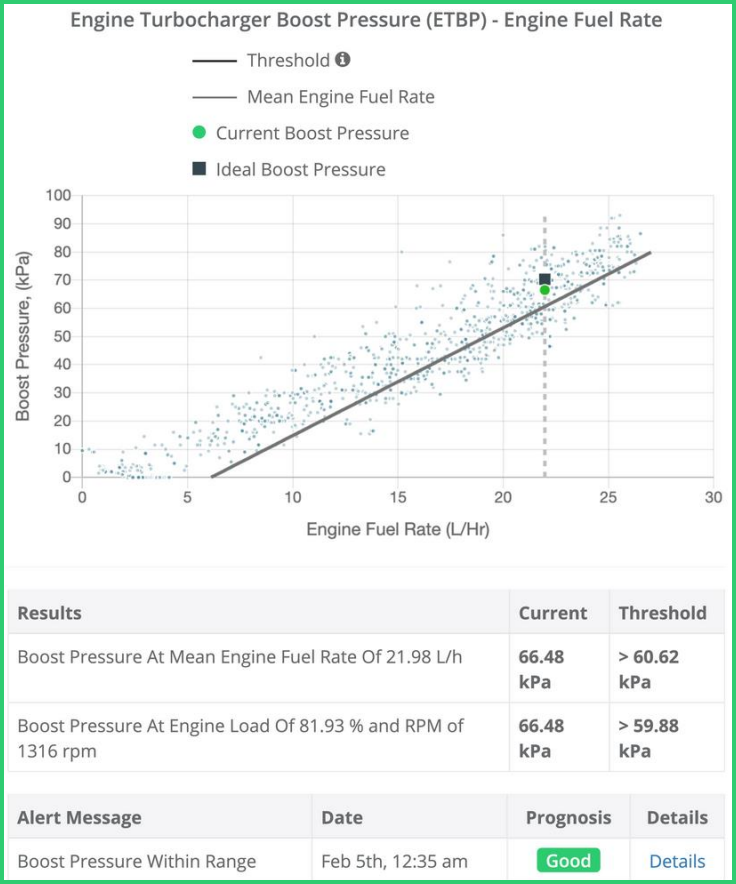
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**How does AI in predictive
work?**

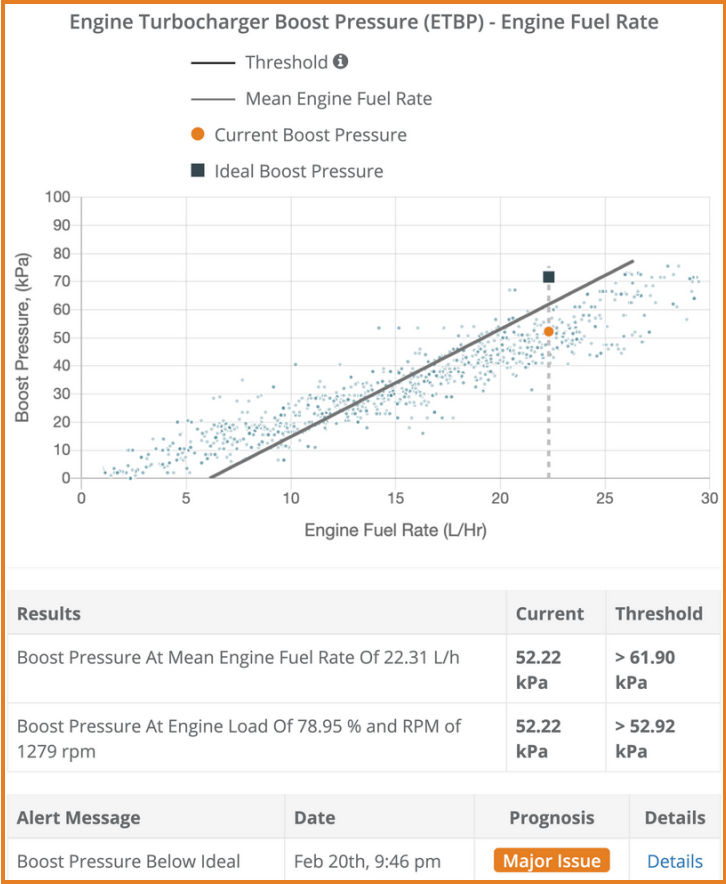
www.intangles.ai



Air Intake Diagnostics



GOOD STATE



MAJOR ISSUE

Fault Codes ☒ Between Feb 24th 2023, 4:05:18 pm To Feb 24th 2023, 5:56:40 pm

Active Codes				
Code	Issue	Alert	Set On	Details
P2003	Dpf Damaged	Major	Feb 11th 2023, 7:56:55 pm	Details
P0299	Turbocharger Under Boost	Critical	Feb 24th 2023, 4:45:00 pm	Details

Vehicle State:
Good
5th Feb, 2023
12:35 A.M.

Predictive Alert:
Major
20th Feb, 2023
09:46 P.M.

ECU DTC:
Critical
24th Feb, 2024
04:45 P.M.

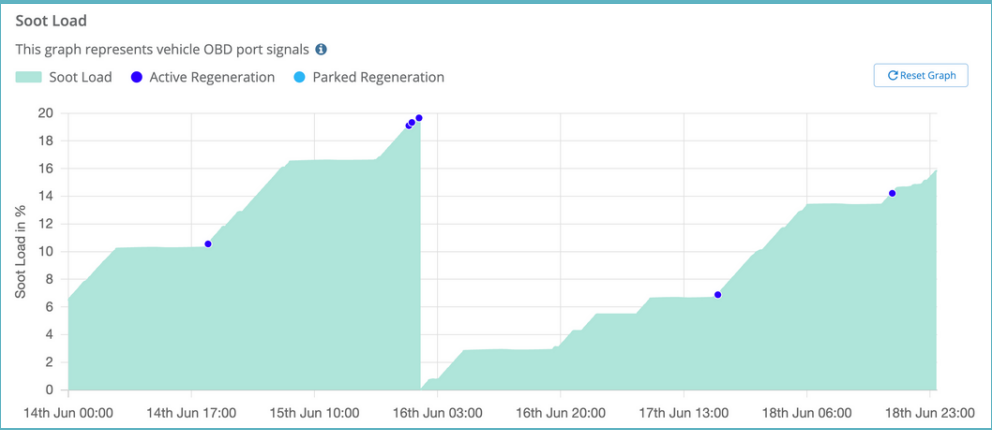
Predictive Algorithm:

- The system monitors suboptimal boost pressure characteristics in the calculated engine load and speed plane.
- Utilizes a robust regression model to learn ideal boost pressure from a pool of data, including boost, engine speed, and load means for similar powertrains.

Key Observations:

- Driver reports sluggish pick-up performance.
- The vehicle's OBD interface shows delayed malfunction alerts.
- Reveals multiple small leakages in the intercooler circuit, confirming the predictive alerts.

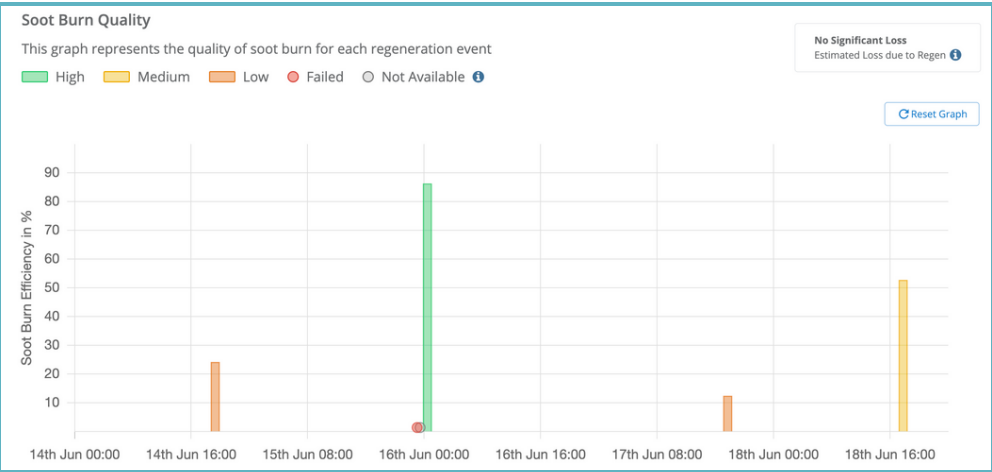
Diesel Particulate Filter (DPF) Monitoring



Step 1: Soot Load Detection

Start Date	Duration	Soot Burn Quality	Evidence	Soot Burn Efficiency	Fuel Consumed During Regen
18th Jun, 05:48 PM	5 min	Medium	Active Regen Duration Insufficient, Speed Insufficient	53%	Excess
17th Jun, 05:42 PM	5 min	Low	Active Regen Duration Insufficient, Speed Insufficient	13%	Excess
16th Jun, 12:26 AM	14 min	High	Active Regen Successful	87%	Expected
15th Jun, 11:02 PM	3 min	Failed	Active Regen Duration Insufficient, Speed Insufficient	-	Excess
14th Jun, 07:18 PM	5 min	Low	Active Regen Duration Insufficient, Speed Insufficient	25%	Excess

Step 3: Soot Burn Quality Evidence



Step 2: Soot Burn Quality Estimation

Health Status

Alert Message	Date	Prognosis	Details
Active Regen Duration insufficient, Speed Insufficient	Jun 18th, 5:48 pm	Minor issue	Details

DPF Regeneration Threshold: ● 53 %

0 % 160 %

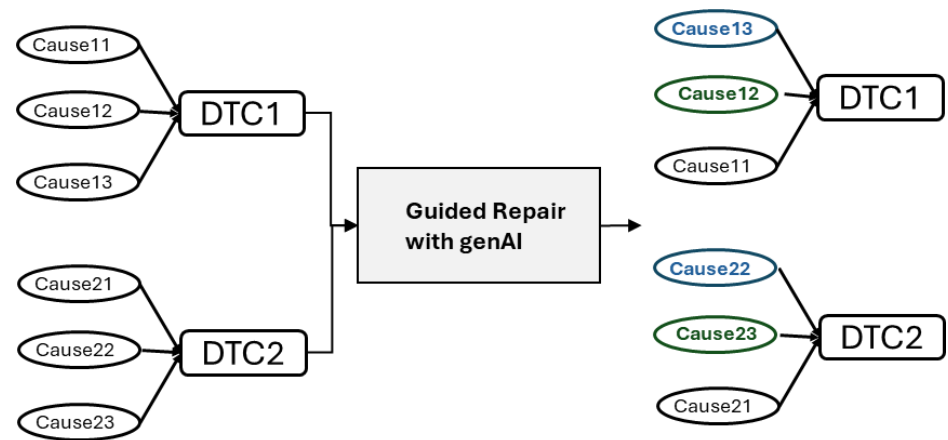
Last Updated: 4 hr 13 min ago

Recommendation

Overall DPF health is optimal but currently regeneration is required.

Action: We recommend you drive your vehicle at 40+ mph for more than 1 hr in a highway setting to assist DPF regeneration.

Step 4: Active Recommendation



Guided Repair with genAI

Extract “component” and subsystem behind causes using LLMs

Matches components across DTCs

Reorders likely causes



Fault Codes

History

Active Codes

Code	Issue	Alert	Set On	Set At	Details
2659	Egr Mass Flow Rate: Too High Value	Major	Oct 8th, 12:49 pm	11412 hr 472,418 mi	
3061	Engine Cold Start Emission Reduction Strategy System Monitor: Incorrect Data	Minor	Oct 8th, 12:49 pm	11412 hr 472,418 mi	
F50B02	Engine Cold Start Emission Reduction Strategy System Monitor: Incorrect Data	Minor	Oct 8th, 2:21 am	11404 hr 472,058 mi	
630A00	Egr Flow Target Error Diagnostic - High Flow	Minor	Oct 8th, 2:21 am	11404 hr 472,058 mi	

2659

System : Powertrain Subsystem : Auxiliary Emissions Control FMI : 0 IS SID : No MID : 1 (Engine #1 Controller)

Description:

Egr Mass Flow Rate: Too High Value

Guided Repairs Beta

Possible Causes

☐ Faulty EGR system
Also a potential cause for the recent active fault codes
630A00

☐ Clogged EGR cooler
Also a potential cause for the recent active fault codes
630A00

☐ Intake pipe in the EGR system partly constricted by deposits
Also a potential cause for the recent active fault codes
630A00

☐ Faulty harness or connector

☐ High exhaust back pressure

☐ Oil leak from turbocharger

Symptoms

☐ Malfunction indicator lamp illuminated

☐ Excessive smoke from vehicle exhaust

☐ Diminished engine performance

☐ Increased fuel consumption

Comments*

Enter comment here

Submit

☐ Mark as Resolved

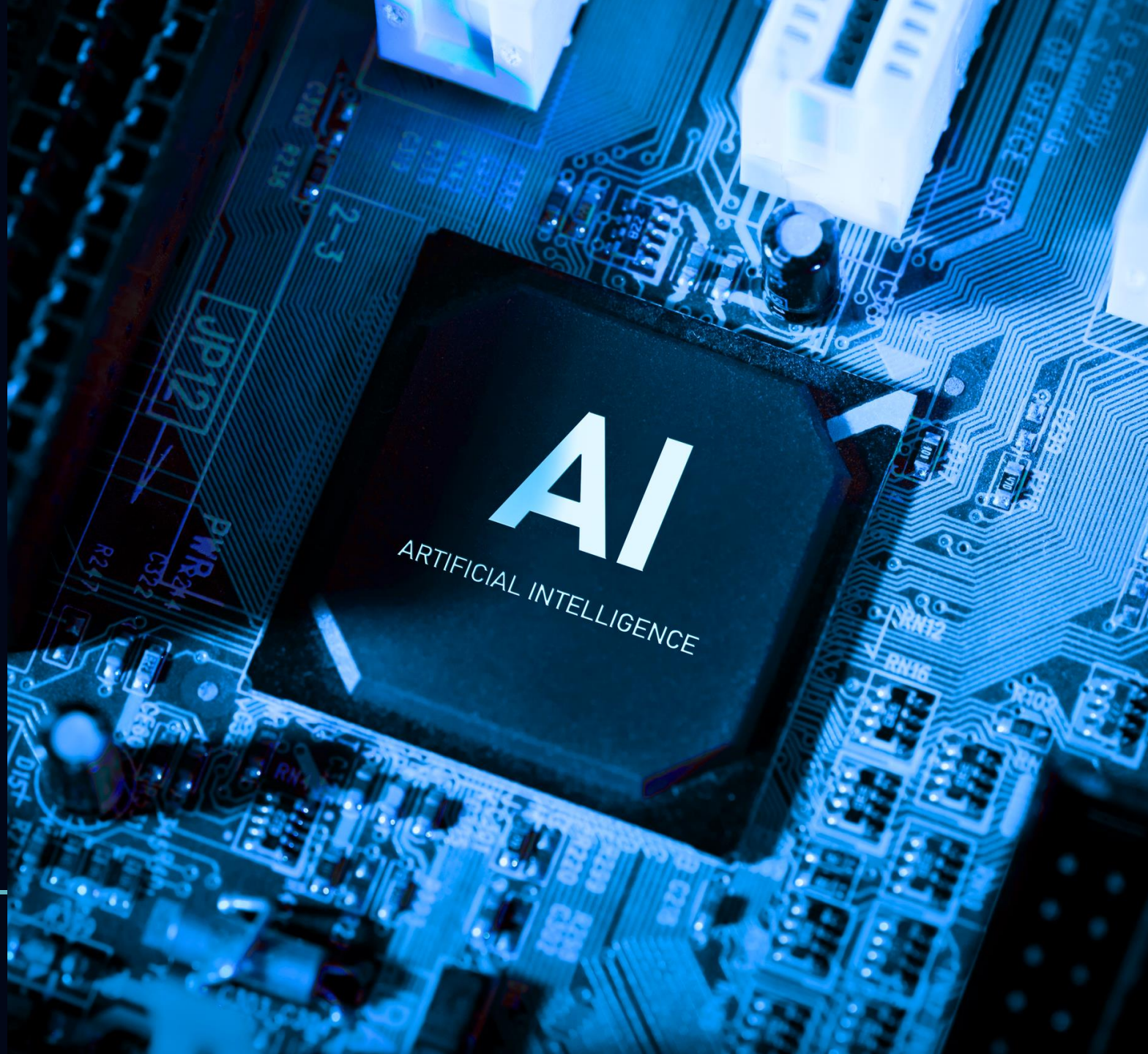
1
7
4



GenAI for Predictive Maintenance

**GenAI on the Edge delivers
state-of-the-art predictive
insights for real-world
conditions**

www.intangles.ai





Key Features



Pillar-to-Pillar Cutting-Edge Design



Complementary Satellite Unit



Theming Technology



Enhanced Instrument Clusters



Comprehensive Infotainment Suite



Generative AI-Powered Cockpit Customization & Predictive Analytics

Comprehensive AI-Powered Predictive Analytics



Engine Coolant Temperature

- Radiator Clogging
- Coolant Leakage
- Coolant Pump Deterioration



Battery & Alternator

- Battery Run Down
- Alternator Charging Failure
- Serpentine Belt Wear



Air Intake Diagnostics

- Clogged Filter
- Intercooler Leaks
- Turbo Failure



Diesel Particulate Filter (DPF)

- Regen Monitoring
- Soot Load
- Burn Efficiency



Injector Clogging

- Clogged Fuel Injectors Alerts
- Tracks Excess Fuel Enrichment
- Mileage Loss Alerts



EV Range Prediction

- Battery Run Down
- Ambient Cognitive Range Estimates



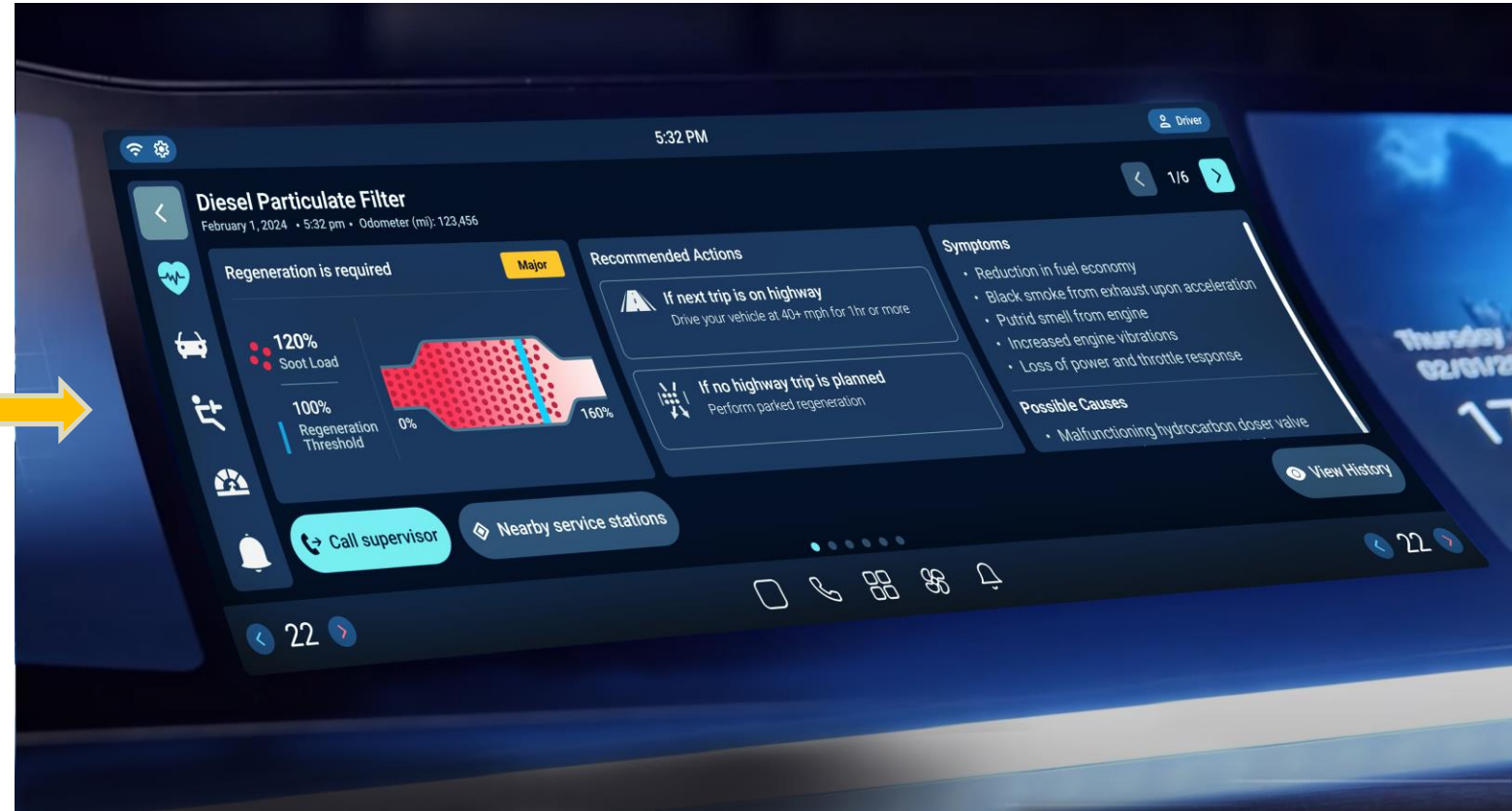
Battery State of Health (SOH)

- Battery Degradation
- Charge Cycle Tracking



Fuel Rail Pressure

- Predict High/Low Fuel Pressure
- Engine Deration and Throttle Response





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A DIGITAL TWIN COMPANY

We would love to hear from you!



Intangles UK & Europe



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Q&A

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#FE25



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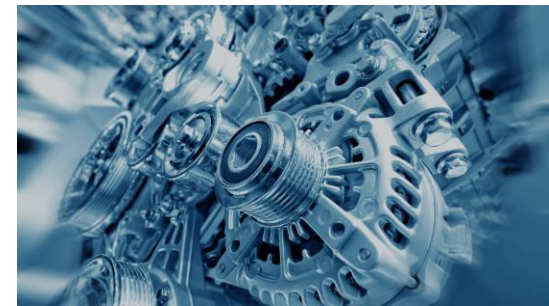
MPRS

Nick Elliot

IRTE

Specialist Transport Consultant and Chairman

Use Sli.do for your questions
Join at: www.sli.do #FE25





MPRS

Maintenance Provision
Rating Scheme

A deep dive into MPRS

Maintenance Provision Rating Scheme

Nick Elliott MIRTE MSOE MiCLT

Chair, Institute of Road Transport Engineers
(IRTE)



About MPRS

An industry-supported single rating scheme for workshops and maintenance facilities aimed at raising standards in facilities and skills across the industry.

Steered by the **Institute of Road Transport Engineers (IRTE)**, the scheme is brought to the industry by:

- Logistics UK
- SMMT
- RHA
- CPT
- DVSA
- DfT
- Office of the Traffic Commissioner
- BVRLA
- NFDA

Daimler Truck UK was the first of the major manufacturers to take part in the MPRS pilot.



Why?

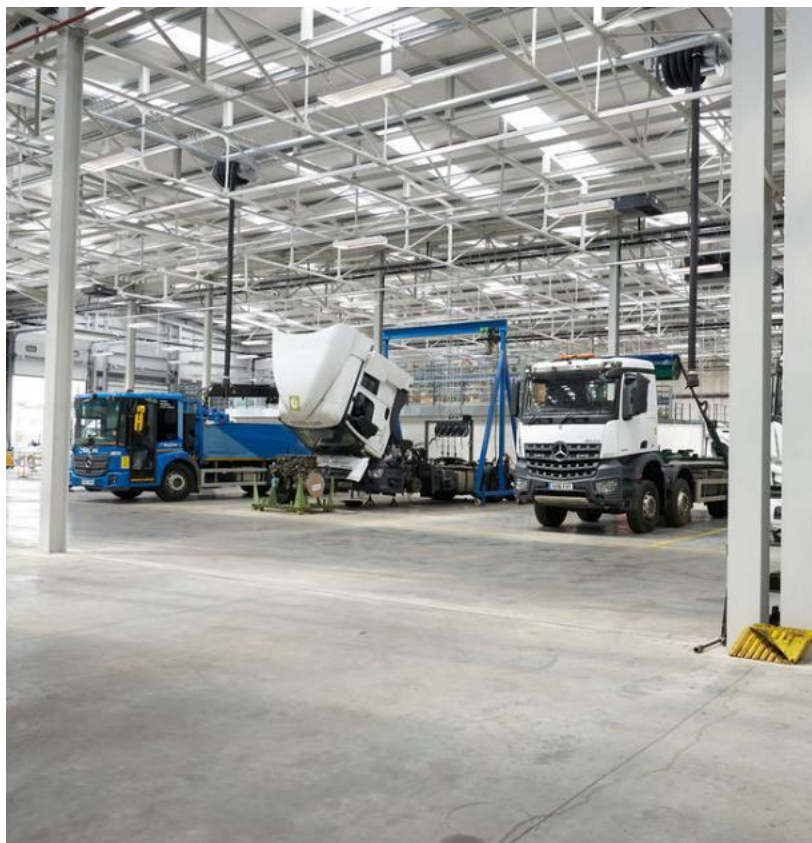
Regulation

Safety

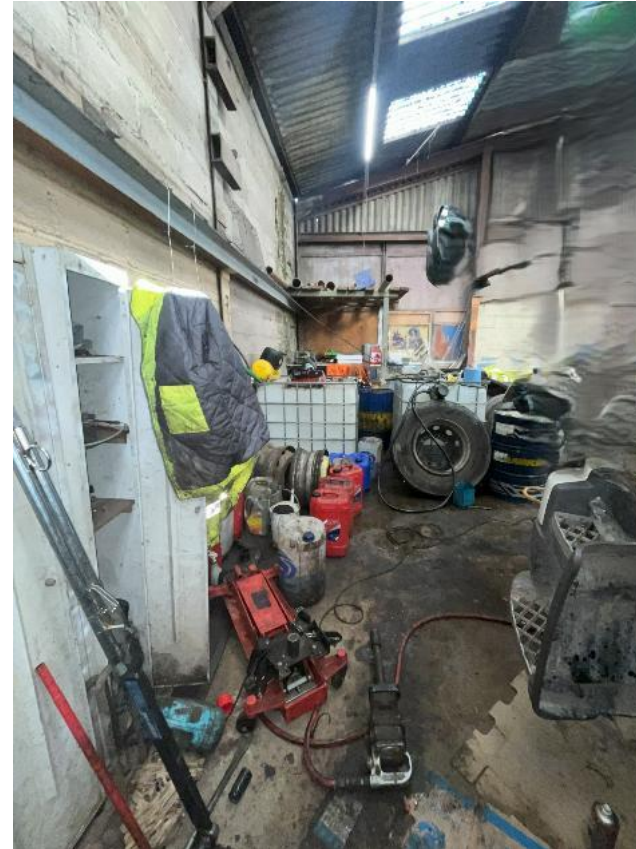


MPRS
Maintenance Provision
Rating Scheme

Workshop Examples



Workshop Examples



“Ignorance is
bliss”

Ownership

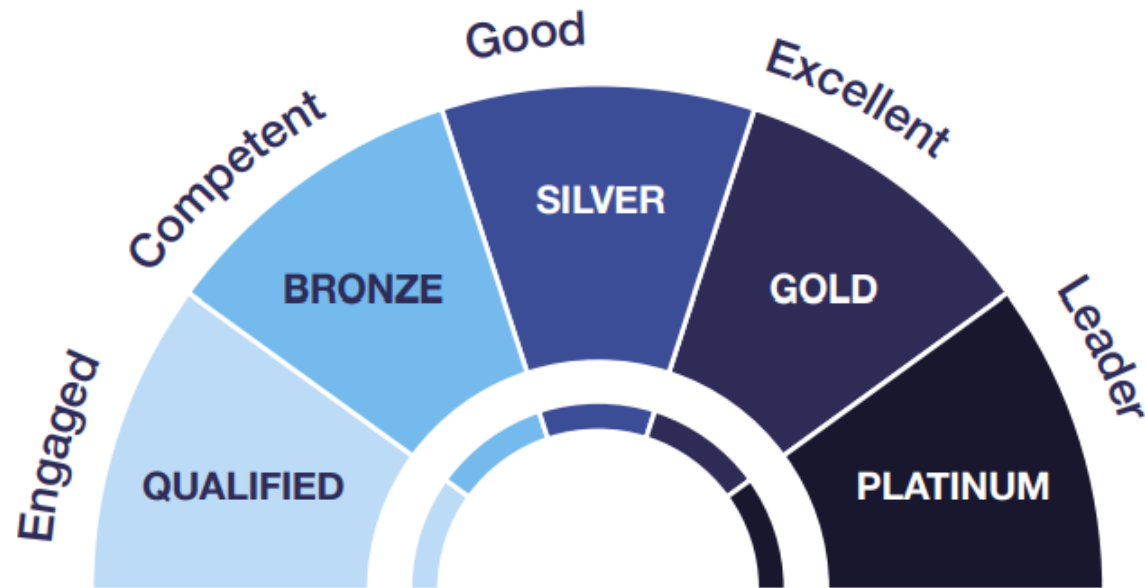


Responsibility

Accountability

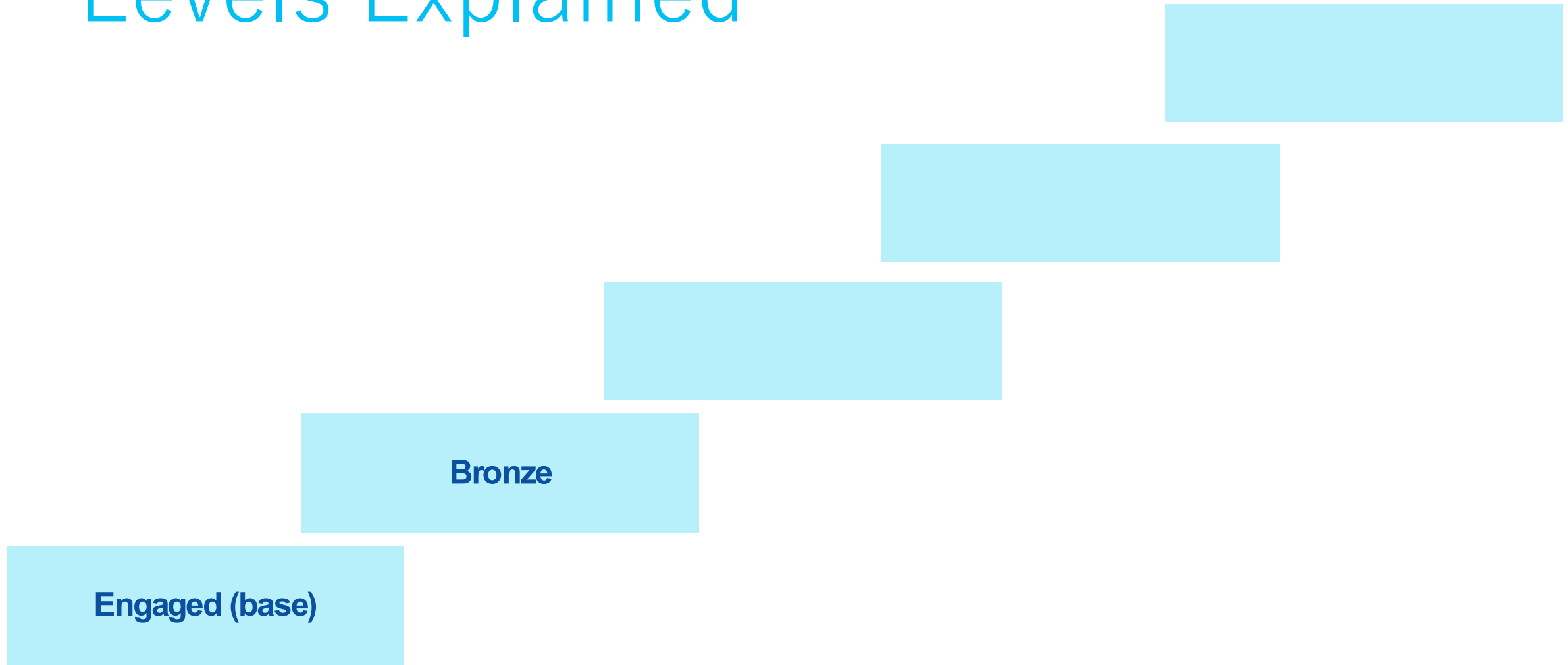
Help and guidance

Maintenance Provision Rating Scheme (MPRS)



Visibility

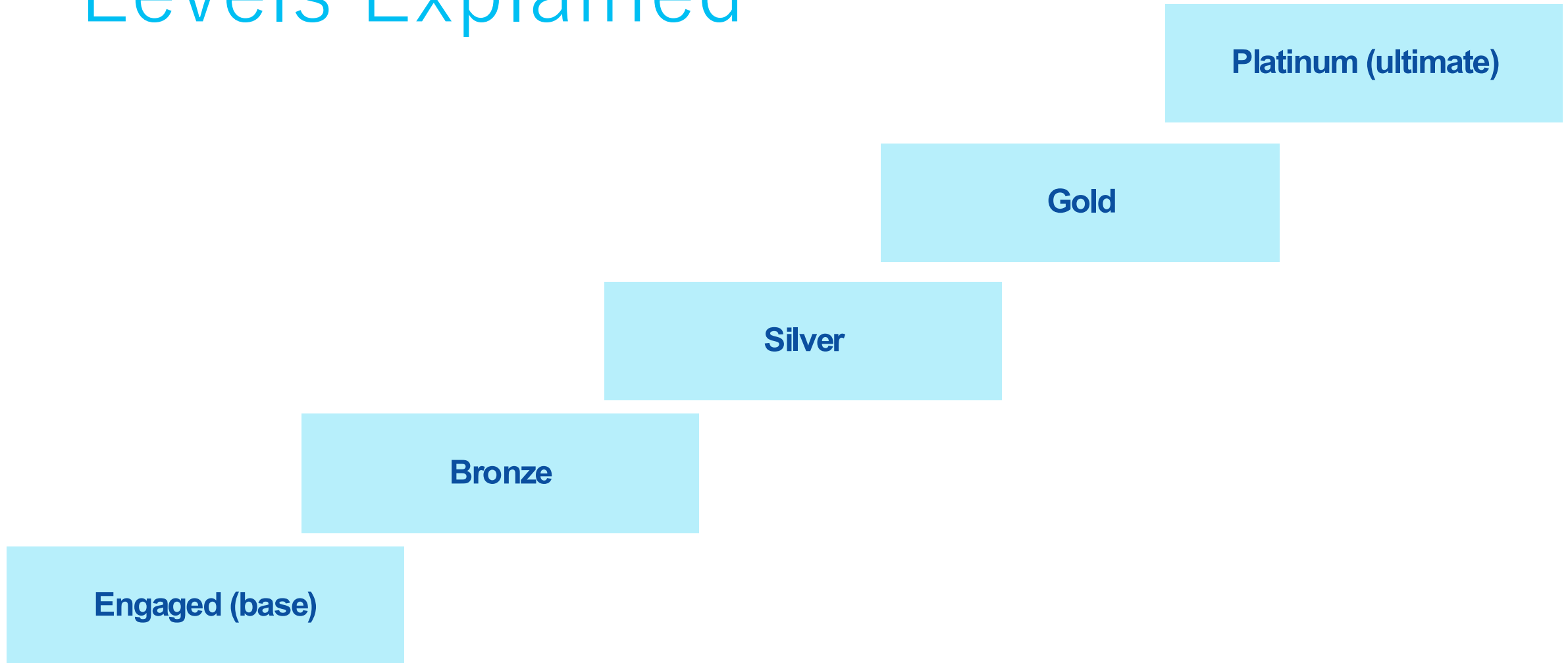
Levels Explained



Levels Explained



Levels Explained





MPRS

A rating scheme developed by our industry for our benefit

Let's discuss.

Meet team IRTE at stand CX4

Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25



LOGISTICS UK

Lunch

Vehicle Inspections Service Demonstrations

LOGISTICS UK

Experience our engineers in action!

Ever wondered what our vehicle inspections cover or what the most commonly found defects are? Make your way to the curtainside brewery truck kindly provided by **Bevan Group** during the breaks and one of our engineers will walk you through an inspection.

- Learn first-hand about the different types of inspection we offer.
- Discover the most common (and most surprising) defects we find.
- Test your knowledge as the engineers turn the questions back to you!

Find the team by the Bevan Group MAN / Carlsberg truck just outside the venue.





LOGISTICS UK

Fleet Engineer

Tuesday 03rd June 2025



LOGISTICS UK



Welcome back

Phil Lloyd

Head of Engineering Policy
Logistics UK

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Join at: www.sli.do **#FE25**



LOGISTICS UK

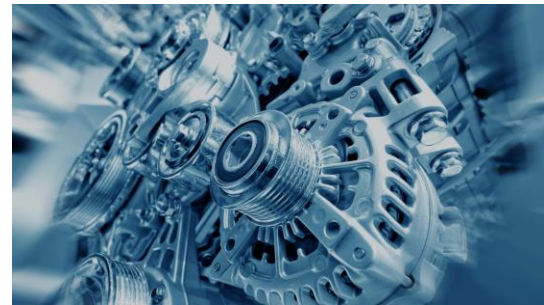


Training for tomorrow's world

Steve Scofield

Head of business development
IMI

Use Sli.do for your questions
Join at: www.sli.do **#FE25**





INSTITUTE OF THE
MOTOR INDUSTRY



TechSafe[®]

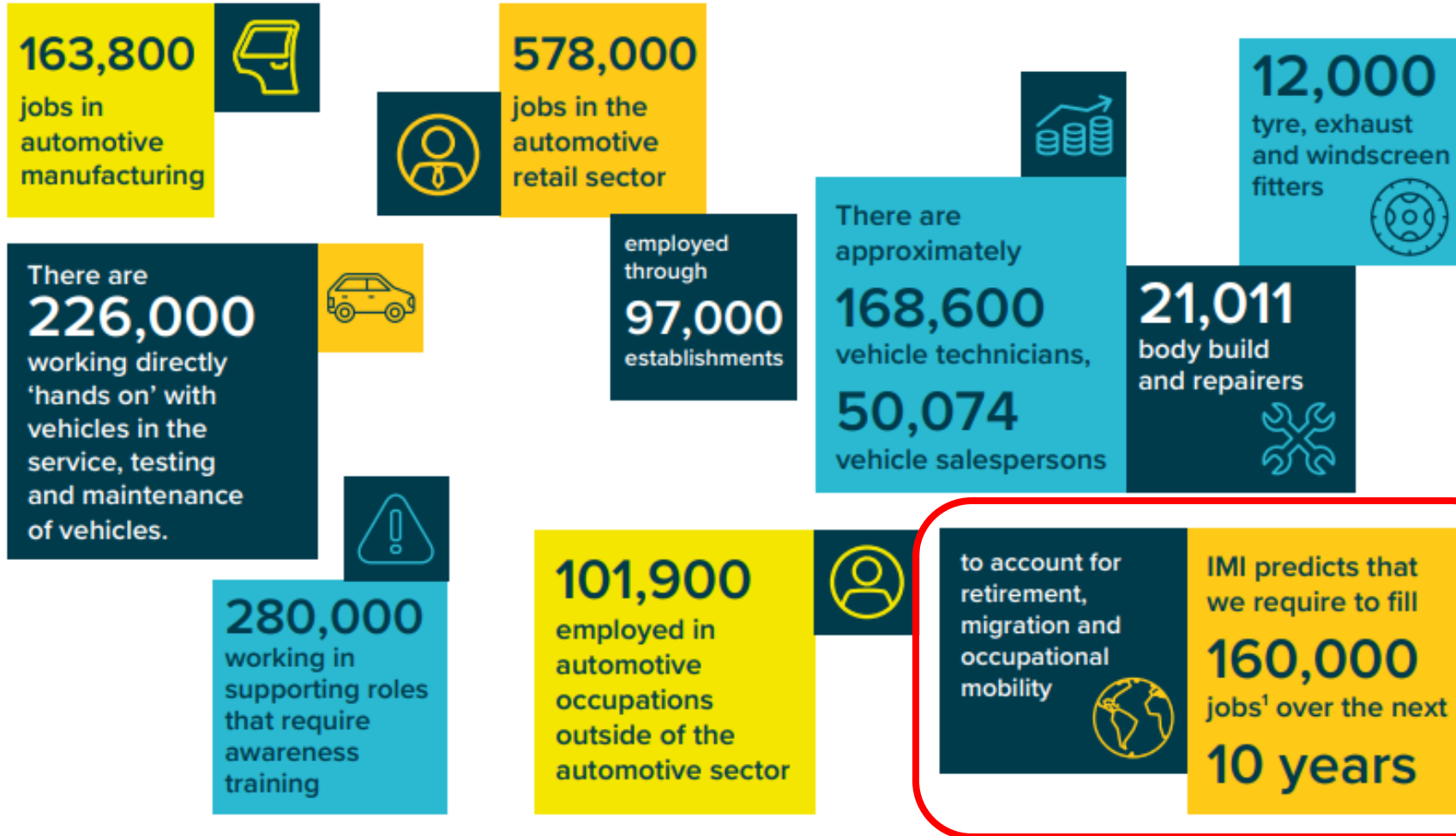
Training for Tomorrow

Steve Scofield FIMI FCIM CAE

www.theimi.org.uk



The UK Sector



Vacancy Rates UK



INSTITUTE OF THE
MOTOR INDUSTRY

Motor Trades

2.5

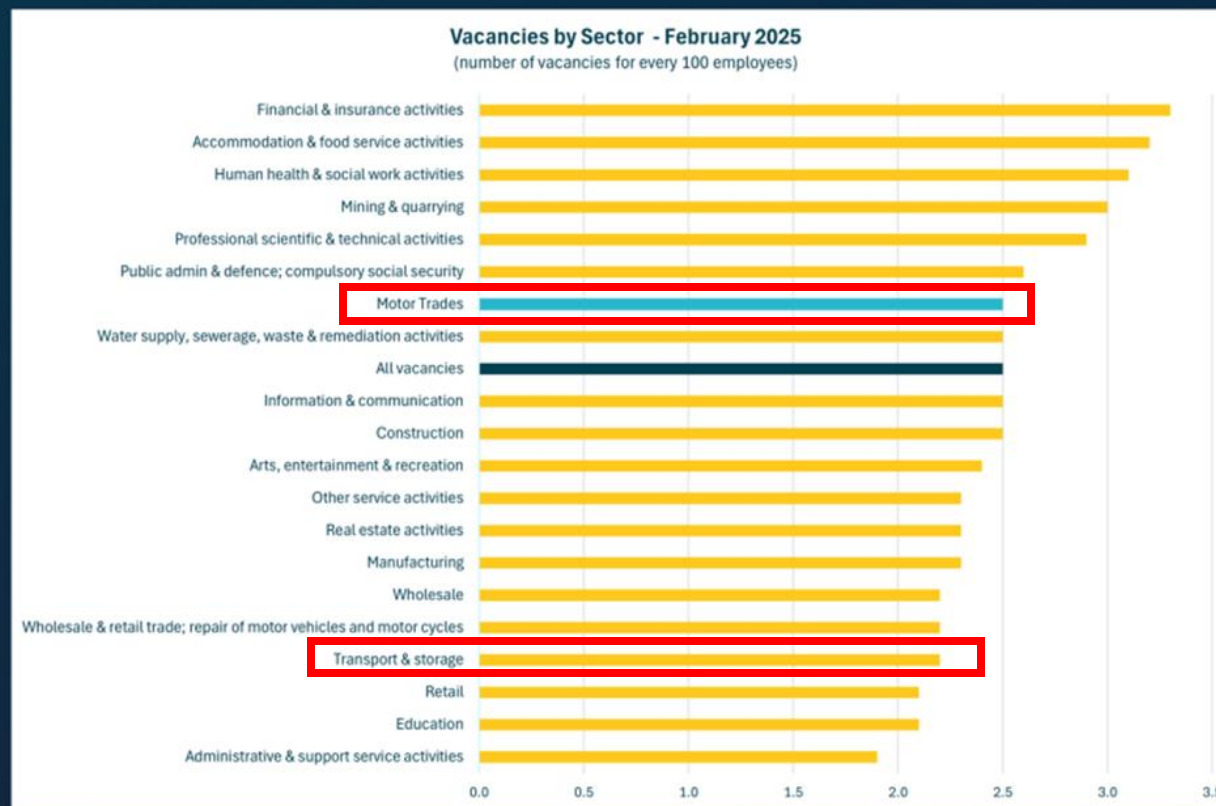
Vacancy Rate

14,000

Vacancies

Note: Motor Trades, representing the automotive aftermarket (repair sector), is a sub-section of the Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles category in the ONS data.

Vacancy Rate Tracker



Data Source: Office for National Statistics (ONS) Dataset VACS02 'Vacancies by industry' | Released 20 March 2025



INSTITUTE OF THE
MOTOR INDUSTRY

Vocational Qualification Certificates

Automotive qualifications

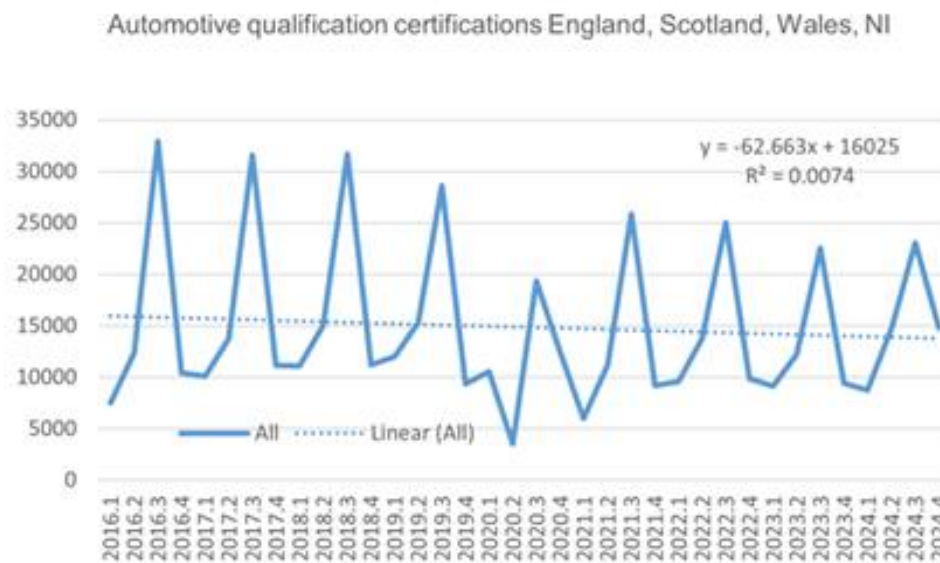
Automotive qualification
certificates issued:

9,028

2024 Q4

In Q4 2024, the automotive sector issued 9,028 certificates, a 61% drop from the last quarter and 4% fewer than the same period last year. This reflects a seasonal trend, as Q3 is typically the peak period for certifications.

At the same time, general vocational qualification certifications rose by 6% compared to the same period last year. Automotive qualifications increased by 11 this quarter, though the overall trend still shows an average quarterly drop of 15.

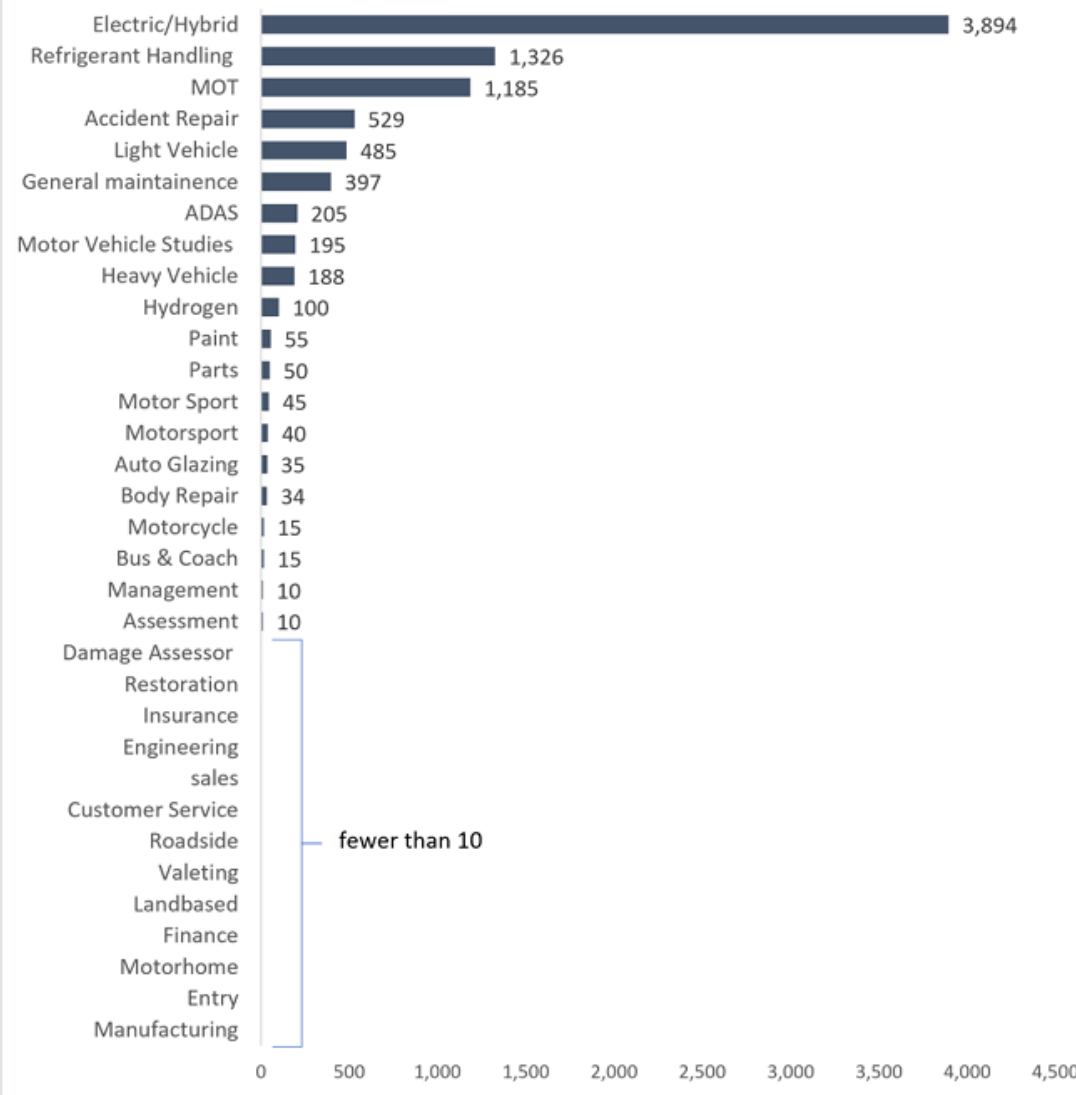


Top 10 Automotive Qualifications - All AOs

Qualification title	No.	Level	Pathway
IMI Level 3 Award in Electric/Hybrid Vehicle System Repair and Replacement	1,462	3	Electric/Hybrid
IMI Level 3 Award in Automotive Refrigerant Handling (EC842-2006) (VRQ)	1,326	3	Refrigerant Handling
IMI Level 2 Award in Electric/Hybrid Vehicle Routine Maintenance Activities	692	2	Electric/Hybrid
IMI Level 2 Award in MOT Testing (Classes 4 and 7)	535	2	MOT
IMI Level 1 Award in Electric/Hybrid Vehicle Awareness	515	1	Electric/Hybrid
IMI Level 4 Award in the Diagnosis, Testing and Repair of Electric/Hybrid Vehicles and Components	363	4	Electric/Hybrid
IMI Level 3 Award in Heavy Electric/Hybrid Vehicle System Repair and Replacement	295	3	Electric/Hybrid
IMI Level 3 Award in MOT Test Centre Management	245	3	MOT
SEG Awards ABC Level 3 Award In MOT Test Centre Management (VRQ)	195	3	MOT
SEG Awards Level 1 Award in Motor Vehicle Studies	185	1	Motor Vehicle Studies

In Q4 2024, the IMI Level 3 Award in Electric/Hybrid Vehicle System Repair and Replacement was the most issued qualification, with 1,462 certificates. This made up 17% of all automotive certifications that quarter. The top ten qualifications accounted for 66% of all automotive certificates, a 17% increase on the previous quarter.

Automotive qualification certifications – pathways/subject area





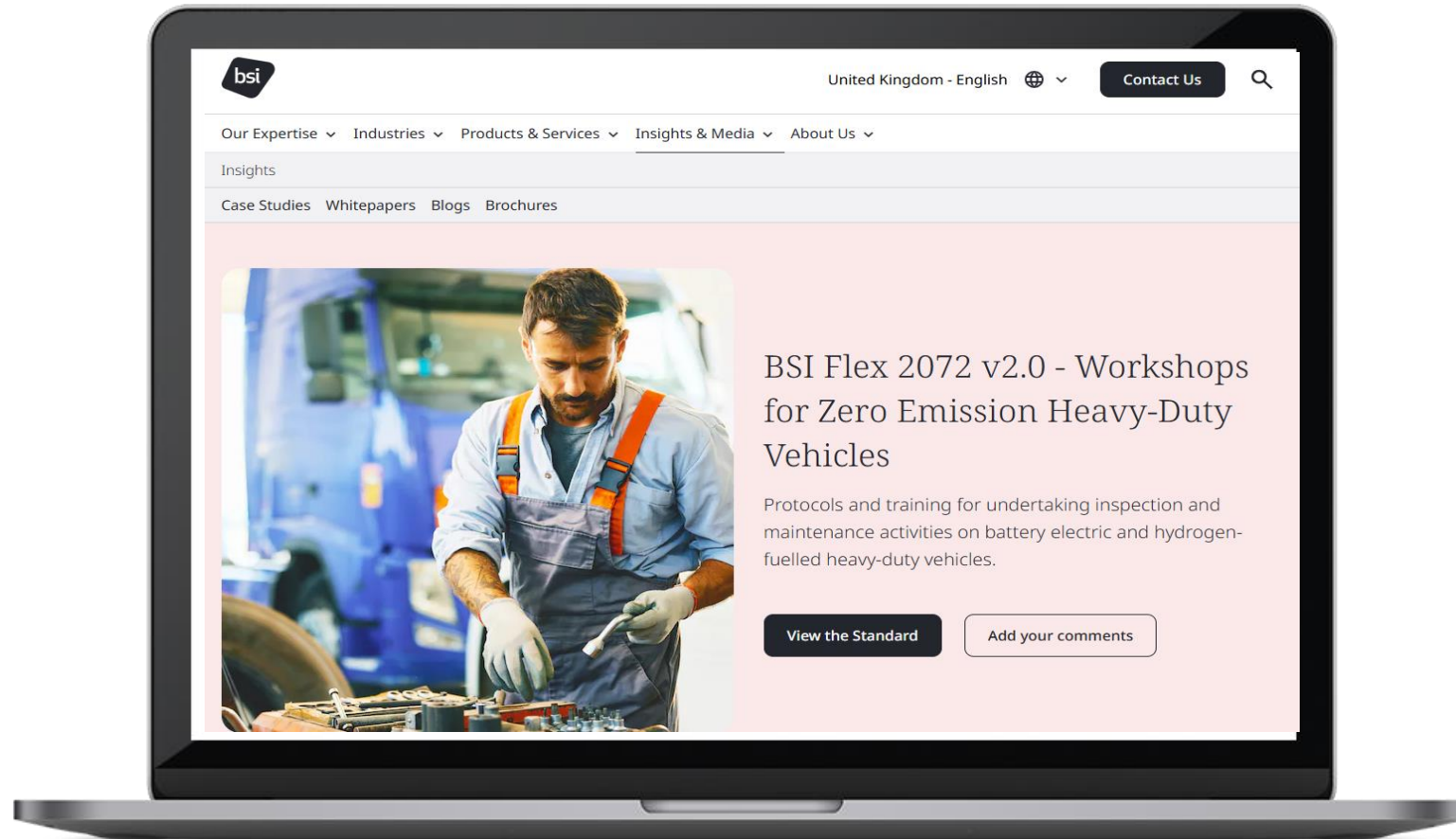
Industry Drivers



OEM Product



BSI Flex 2072



BSI Flex 2072 Overview – A look into the future

Purpose:

To facilitate the transition to zero-emission heavy-duty vehicles by providing practical guidance for workshops involved in their maintenance and inspection.

Scope:

Covers various aspects of workshop operation, including planning, personnel, risk management, layout, and systems.

Complex Standard covering

- HDVs Battery Electric
- HDVs Hydrogen-fuelled (ICE)
- HDV Hydrogen fuel cell





About the Scheme

The Maintenance Provision Rating Scheme (MPRS) is an independent recognition created by the industry for the industry with support from industry bodies, DVSA and the Office of Traffic Commissioners. Aimed at workshops and maintenance facilities of all sizes, MPRS is a single rating scheme that gauges performance of current facilities and workforce quality through comprehensive audits and collective evidence.

MPRS puts the spotlight on improving current standards across workshops and maintenance facilities across the nation, highlighting non-compliant and unsafe practices that compromise safety and standards within the commercial industry.

Endorsed by the sector, an MPRS rating reflects the competency of a workshop's facilities and technical expertise. The higher the rating, the greater the confidence operators should have in the competences.



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IMI/IRTE **Solutions for any** **standard**



EV Qualification Solutions

IMI Accredited Assessment

Accreditation

IMI Accreditation Electric Vehicle Technician - Full Route

IMIA-ATA...

Find your nearest Provider



IMI Qualifications

Qualification

L1 Award in Electric/Hybrid Vehicle Awareness

Level 1

603/1465/5

Find your nearest Provider

Qualification

L2 Award in Electric/Hybrid Vehicle Hazard Management for Emergen...

Level 2

603/1467/9

Find your nearest Provider

Qualification

Level 2 Award in Preparing Heavy Electric/Hybrid Vehicles for Rep...

15 Hours Level 2

603/4181/6

Find your nearest Provider

Qualification

Level 3 Award in Heavy Electric/Hybrid Vehicle System Repair and ...

35 Hours Level 3

603/4182/8

Find your nearest Provider

Qualification

IMI Level 4 Award in the Diagnosis, Testing and Repair of Electri...

Level 4

610/0975/1

Find your nearest Provider



Hydrogen Solutions

IMI Qualifications

Qualification

IMI Level 1 Award in Hydrogen Vehicle Awareness

🕒 4 Hours 🏆 Level 1

📄 610/1543/X

Find your nearest Provider

Qualification

IMI Level 2 Award in Hydrogen Vehicle Routine Maintenance Activit...

🕒 14 Hours 🏆 Level 2

📄 610/3281/5

Find your nearest Provider


Qualification

IMI Level 3 Award in Hydrogen Fuel Cell Electric Vehicle System R...

🕒 34 Hours 🏆 Level 3

📄 610/3283/9

Find your nearest Provider



IMI TechSafe[®]

ESTD 1920

SOE/IRTE Irtec Large Electric Vehicle

Irtec Accreditations

<p>Accreditation</p> <p>LEV Isolation & Reinstatement</p> <p>🏆 0 Hours 🏆 Level 0</p> <p>📄 IMI-IRTEC...</p> <p>Find your nearest Provider</p>	<p>Accreditation</p> <p>LEV Isolation & Reinstatement Technician</p> <p>🏆 0 Hours 🏆 Level 0</p> <p>📄 IMI-IRTEC...</p> <p>Find your nearest Provider</p>
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Training Provision needs partners...



Providers need the business case as much as you

Training provision for new technologies especially in HDV is expensive and set up takes time

Shortage of great technicians also means a shortage of trainers and assessors

Upskilling of trainers and assessors in new technologies will be needed and ongoing

Current Position

Number of IMI Approved & Assessment Centres

LV EV/hybrid Qualifications	L1 - 184	L2 - 210	L3 - 218	L4 - 90
HV EV/hybrid Qualifications	L1 – 0*	L2 - 29	L3 - 34	L4 – 0*
Hydrogen Qualifications	L1 - 52	L2 - 1	L3 -1	L4 - 0
ADAS Qualifications	L1 - 30	L2 -25	L3 - 17	L4
Irtec LEV modules	No level - 5			





CALL TO ACTION

Consider your
skills transition
business case
now

Understand the skills need to be
Compliant, efficient, profitable,
sustainable & importantly an
employer of choice

Look to Flex 2027
and MPRS to
support the
journey

Explore your route to
training and certification
(partner/s, OEM or own
academy)



The slide features a white background with four decorative corner elements. Each corner has a small cluster of three squares: a light blue square, a dark blue square, and a yellow square, arranged in a diagonal pattern. The text "Thank you" and "Q&A" is centered in a dark blue, sans-serif font.

Thank you
Q&A

Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25

LOGISTICS UK

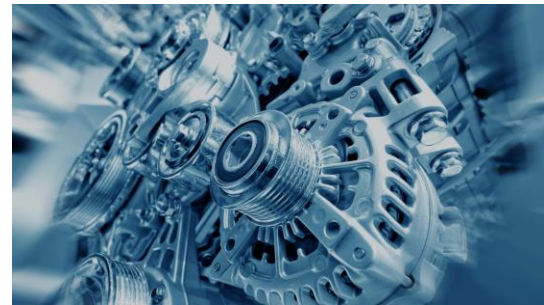


Approving new systems and
vehicles

Nick Sanderson

Approval Engineer
VCA

Use Sli.do for your questions
Join at: www.sli.do **#FE25**



GB Type Approval from January 2021

- ▶ Provisional GB Type Approval replaced EU Type Approval 1st January 2021 for Car, Truck and Bus (later dates apply for Trailers, Ag Tractors, Motorcycles, Multi Stage Build).
- ▶ Full scheme replaces Provisional scheme from 1st February 2024 with some derogations applying up to 2026.
- ▶ Only changes to requirements applying in 2021 are those required to aid the scheme implementation such as allowing but not mandating changes to international regulations.
- ▶ Consultation started in November 2024 on incorporating changes to international regulations with outcomes published 27th May 2025.
<https://www.gov.uk/government/consultations/incorporating-international-rules-into-gb-type-approval-for-road-vehicles>



Advanced Driver Assistance System (ADAS) Automated Driving System (ADS)



SAE J3016™ LEVELS OF DRIVING AUTOMATION

	SAE LEVEL 0	SAE LEVEL 1	SAE LEVEL 2	SAE LEVEL 3	SAE LEVEL 4	SAE LEVEL 5
What does the human in the driver's seat have to do?	You are driving whenever these driver support features are engaged – even if your feet are off the pedals and you are not steering You must constantly supervise these support features; you must steer, brake or accelerate as needed to maintain safety			You are not driving when these automated driving features are engaged – even if you are seated in “the driver’s seat” When the feature requests, you must drive		
	These are driver support features			These are automated driving features		
What do these features do?	These features are limited to providing warnings and momentary assistance	These features provide steering OR brake/acceleration support to the driver	These features provide steering AND brake/acceleration support to the driver	These features can drive the vehicle under limited conditions and will not operate unless all required conditions are met	This feature can drive the vehicle under all conditions	
Example Features	• automatic emergency braking • blind spot warning • lane departure warning	• lane centering OR • adaptive cruise control	• lane centering AND • adaptive cruise control at the same time	• traffic jam chauffeur	• local driverless taxi • pedals/steering wheel may or may not be installed	• same as level 4, but feature can drive everywhere in all conditions

For a more complete description, please download a free copy of SAE J3016: https://www.sae.org/standards/content/j3016_201806/

► ADAS

- SAE 0 – DDAW, AEBS, CSF/ELKS
- SAE 1 – ACSF B1, ACC
- SAE 2 – ACSF B1 + ACC
Auto Park, RMF
R171 DCAS

► ADS

- SAE 3 – R157 ALKS
- SAE 4/5 – EU ADS 2022/1426
Proposed ECE ADS



Changes to International Regulations

- ▶ EU Introduces Second General Safety Regulation (GSR2) with implementation dates ranging from July 2022 to July 2026 mandating various new requirements relating to ADAS such as:
 - ▶ Cyber Security (UN-ECE R155) and Software Updating (UN-ECE R156).
 - ▶ Intelligent Speed Assist (ISA), Driver Drowsiness and Attention Warning (DDAW), Advanced Driver Distraction Warning (ADDW) (EU Regulations).
 - ▶ AEBs for light vehicles (UN-ECE R152).
 - ▶ Emergency Lane Keeping System (ELKS) for light vehicles (EU Regulations).
- ▶ R131.02 AEBS for M2/M3/N2/N3
 - ▶ Adds Warning and Activation Test with a Pedestrian Target with application from September 2025.



Changes to International Regulations

- ▶ UN-ECE R171 Driver Control Assistance Systems (DCAS) entered into force 22 September 2024.
 - ▶ Initial phase only covers minor changes from systems currently covered by existing Regulations such as R79.
 - ▶ Phase 2 expected to enter into force September 2025 will cover greater system functionality such as:
 - Eyes On rather than Hands On driver engagement monitoring for some functionality.
 - System Initiated Manoeuvres (e.g. system prompt to change lanes with driver confirmation).
 - ▶ This is still an SAE Level 2 ADAS system rather than Level >3 ADS.
 - ▶ System Initiated Manoeuvres will have to aim to meet traffic rules.
- ▶ UN-ECE Automated Driving System Regulation is being developed. Whilst the current version of this is seen as being near final version, there are still important aspects under discussion such as whether a modified model of mutual recognition is required.



UK Automated Vehicle Act 2024

- ▶ Whilst it has been possible to enter a vehicle into service with a Level 3 Automated Lane Keeping System (ALKS UN-ECE R157) since January 2021 there were no provisions altering the legal status of the vehicle driver.
- ▶ Automated Vehicle Act 2024 received royal assent on 20 May 2024.
- ▶ Introduces concepts such as Authorisation and Authorised Self-Driving Entities.
- ▶ This is primary legislation and secondary legislation is currently being progressed.

Q&A

To ask your question please use the link:

<https://www.sli.do/>

#FE25

LOGISTICS UK



Euro NCAP

Matthew Avery

Director of strategic development
Euro NCAP

Use Sli.do for your questions
Join at: www.sli.do **#FE25**





Commercial Vehicle **SAFETY**

Initial Ratings and Future Developments



Matthew Avery

June 2025

About Euro NCAP

- Celebrating 28 years
- Encourage manufacturers to exceed the legal safety requirements
- Promote standard fit across the European market
- Focus on passenger cars, vans and now HGV's



What is the CV Problem?

Safety in CV segment lags significantly behind the passenger car segment – in fitment and performance

2019 Nissan Juke



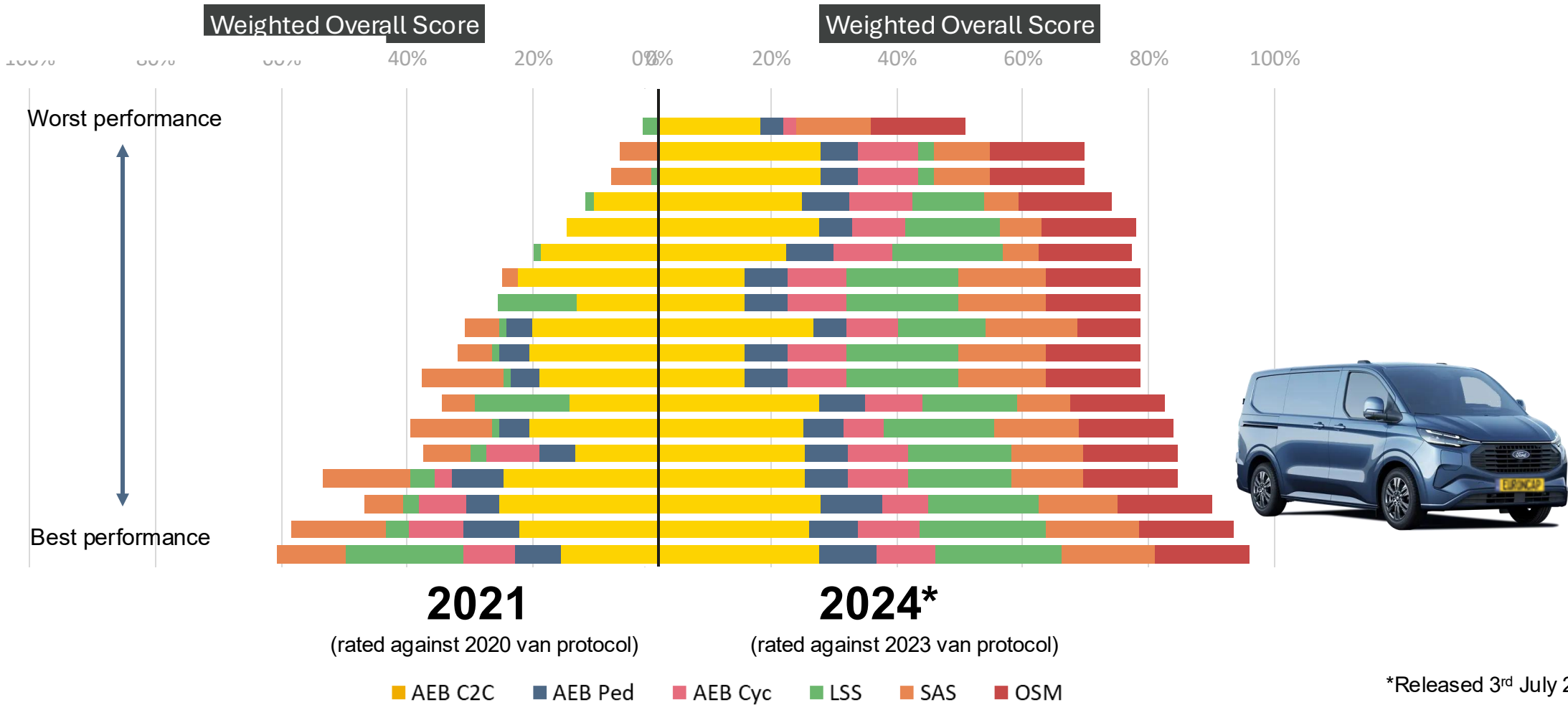
2019 NV400



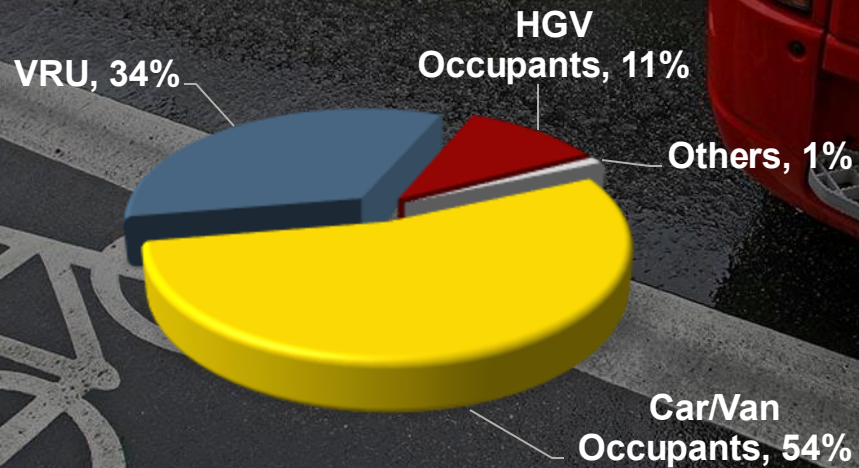
Safety Equipment		
●	AEB City	●
●	AEB Interurban	●
●	AEB Pedestrian	●
●	AEB Cyclist	●
●	Blind Spot Detection	●
●	Lane Departure Warning	●
●	Lane Keep Assist	●
●	Speed Assistance	●
●	Seat belt reminder (all seats)	●
●	Driver Airbag	●
●	Passenger Airbag	●
●	Curtain Airbag	●

● Standard across EU/UK ● Optional ● Not available

Fleet Improvements



Why HGVs?



**90% OF CASUALTIES
ARE NOT HGV
OCCUPANTS**

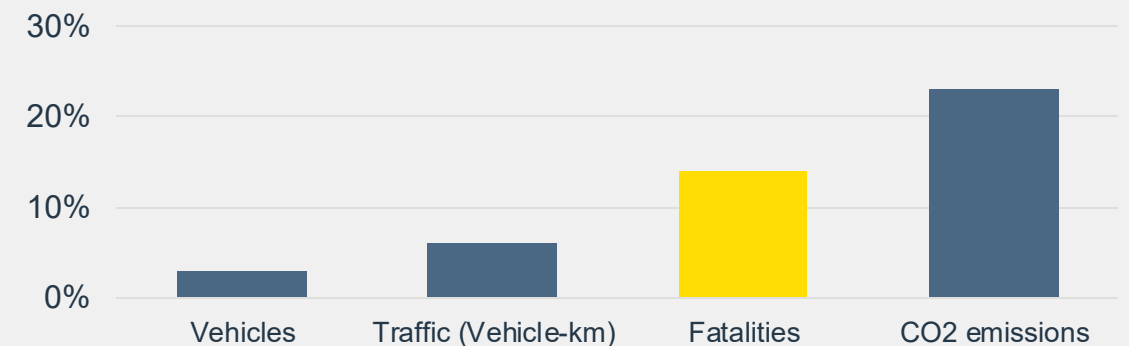
HGVs essential to EU economy

■ Freight traffic strongly linked to GDP

Overinvolved in fatalities cf. cars

■ <3% of fleet but 15% of fatalities












Scope for improvements beyond regulation (GSR2)



Source: ERSO EU fatalities, Eurostat EU vehicles, DfT UK traffic. HGVs>3.5t

Crashes Involving CVs

Total number of road users killed on all road types in accidents with two parties involved and solo accidents in 2017-2019 listed by collision opponent



	... in accidents with ...												
Fatalities	Solo accidents	Pedestrian	Bicycle	Moped	Motorbike	Car	Bus	CV (< 3.5t)	CV (> 3.5t)	Semi-truck	Tractor	Tram	Overall
Pedestrians	1	0	31	30	208	3770	182	493	315	176	23	93	5322
	0%	0%	26%	55%	46%	31%	41%	31%	18%	13%	8%	54%	
Cyclists	627	10	48	9	56	1250	48	174	220	114	25	24	2605
	6%	23%	40%	16%	12%	10%	11%	11%	13%	8%	9%	14%	
Moped rider	260	2	4	7	15	384	5	41	32	11	14	1	776
	3%	5%	3%	13%	3%	3%	1%	3%	2%	1%	5%	1%	
Motorbike rider	2034	16	25	7	132	2652	52	304	170	91	130	4	5617
	20%	36%	21%	13%	29%	22%	12%	19%	10%	7%	47%	2%	
Car occupants	6425	11	9	2	45	3951	148	474	835	725	73	38	12736
	64%	25%	8%	4%	10%	32%	33%	30%	48%	54%	27%	22%	
Bus occupants	42	0	2	0	0	16	1	3	22	9	0	6	101
	0%	0%	2%	0%	0%	0%	0%	0%	1%	1%	0%	3%	
CV occupants (< 3.5t)	334	1	0	0	1	111	8	85	103	142	8	6	799
	3%	2%	0%	0%	0%	1%	2%	5%	6%	11%	3%	3%	
CV occupants (> 3.5t)	118	1	0	0	0	16	1	10	35	29	0	0	210
	1%	2%	0%	0%	0%	0%	0%	1%	2%	2%	0%	0%	
Semi-trailer occupants	81	0	0	0	0	16	1	7	4	51	0	0	160
	1%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	
Tractor occupants	95	0	0	0	0	16	0	2	3	2	1	1	120
	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	
Tram occupants	1	3	1	0	0	1	0	0	0	0	0	0	6
	0%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Overall	10018	44	120	55	457	12183	446	1593	1739	1350	274	173	28452
	35%	0%	0%	0%	2%	43%	2%	6%	6%	5%	1%	1%	

Road Environment

Strong differences in distribution of collision types

- VRU crashes dominate in city environments
- Car occupant protection highest priority on highways

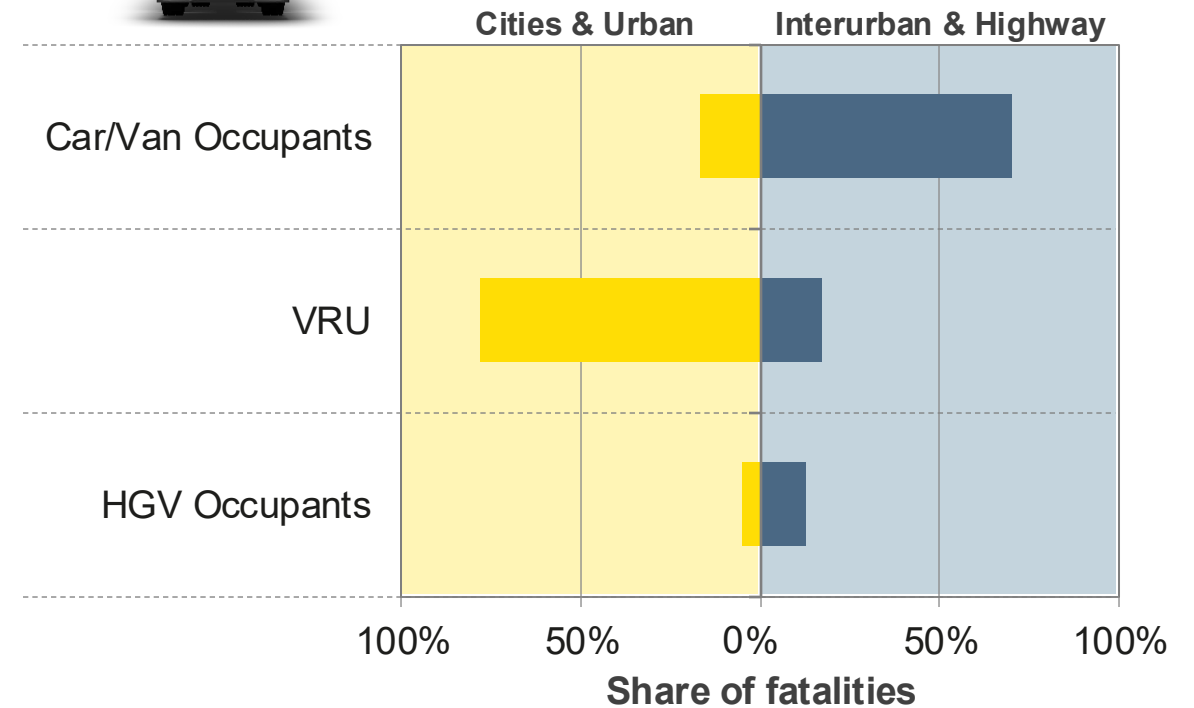
Safety ratings must reflect specific vehicle use

- Many fleet trucks travel in both – City/Interurban and Highways



HGV Safety Priorities

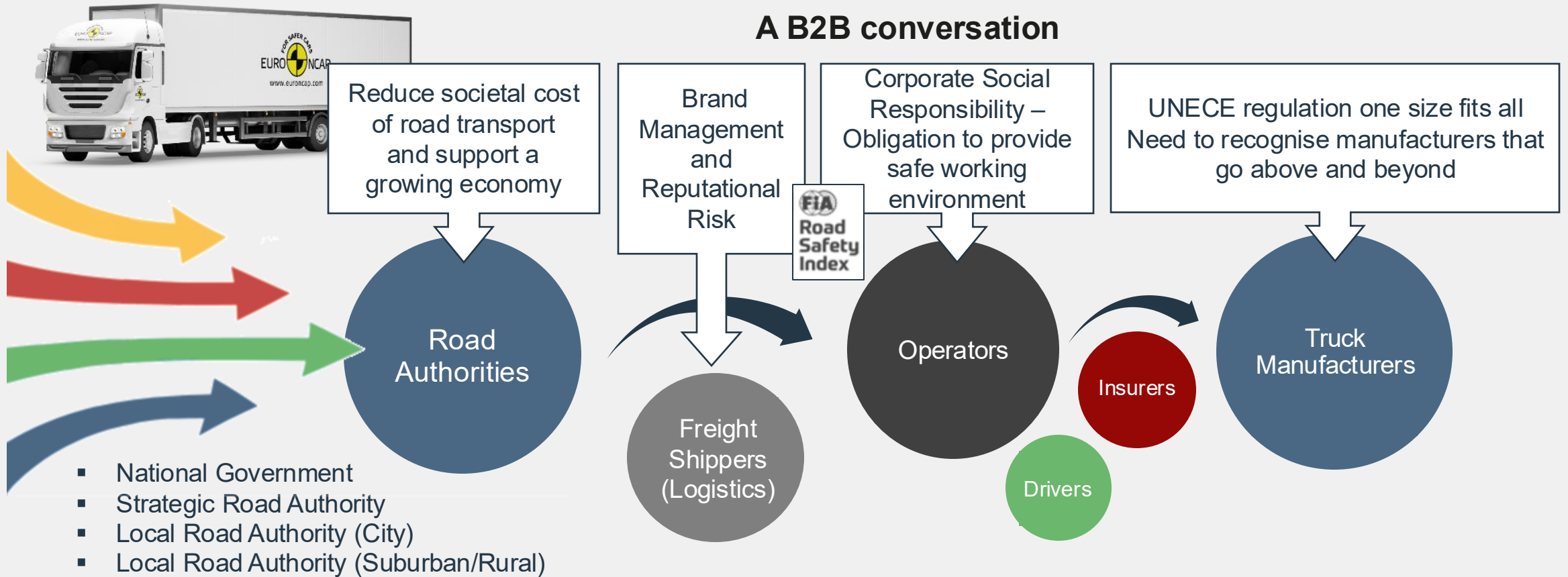
Distribution of collision types



Safety Ecosystem

International & Harmonised Best Practice Safety Ratings

A B2B conversation



Test Procedures Overview

AEB Truck to Pedestrian

Addressing pedestrian crossing and inline crashes

AEB Cyclist incl. junctions

Addressing cyclist crossing, inline and nearside turn crashes

Direct Vision

Addressing close proximity manoeuvring collisions with VRUs

Indirect Vision

Addressing VRU and vehicle collisions outside of direct vision

Rescue Information

Access to occupants within the Golden Hour



AEB Truck to Car

Addressing front-to-rear collisions with other vehicles

Lane Support

Addressing highway and rural road lane departure

Emergency Lane Keeping

Addressing lane change crashes involving overtaking vehicles

Driver Monitoring

Addressing seatbelt wearing and driver attentiveness

Speed Assistance

Addressing HGV speeding

Rating Approach

Delivering straightforward and accessible safety information

- Consistent with cars, vans
- Rating at model level

Prioritise crash prevention but plan for passive measures

Overall rating with supplementary information to emphasise suitability

- e.g. City Safe and EV

Three year update cycle

“

City Safe

Safety features effective for urban and city crash types, schemes implemented by city authorities

”

“

EVs

Recognition of manufacturers offering Zero Emission variants

”



Truck to Car AEB

AEB Static 60kmh



Source: MIRA



Car and VRU AEB



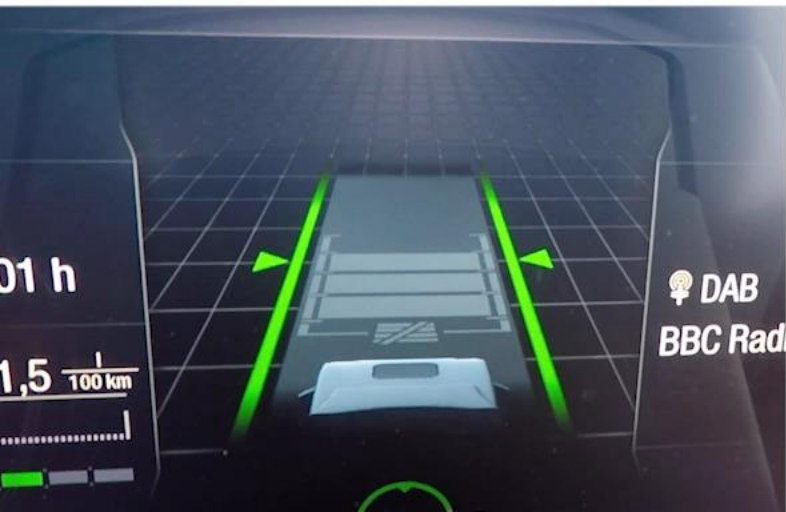
Nearside Turn AEB



Lane Support



Emergency Lane Keep



Source: MIRA

Other Assessments

Direct Vision

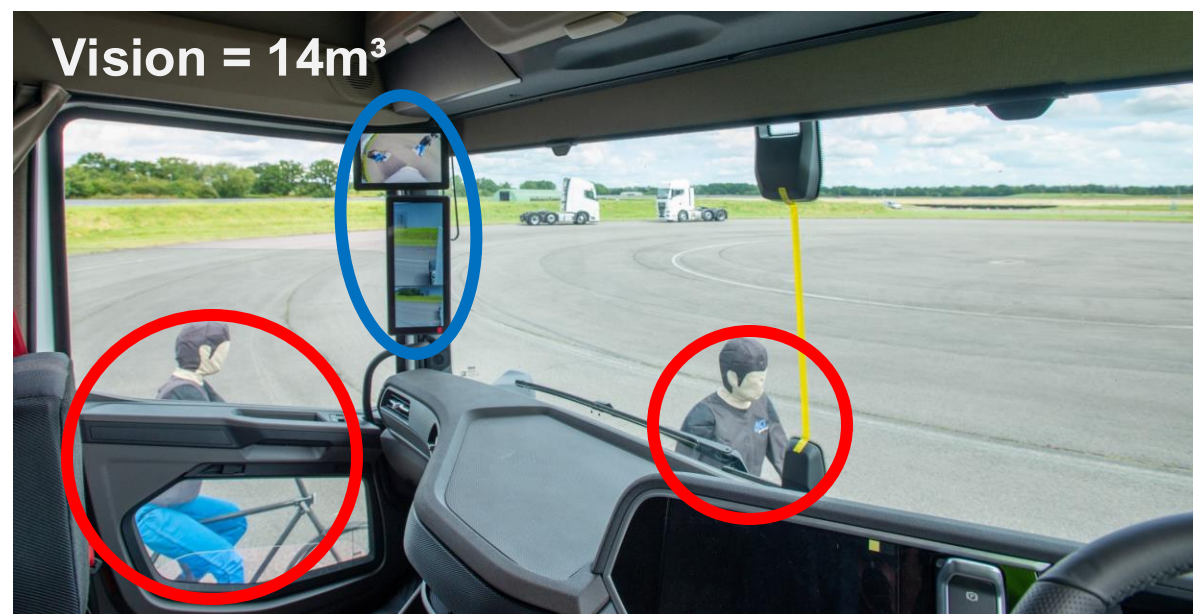
Indirect Vision – eMirrors (CMS)

Intelligent Speed Adaption

Driver Monitoring

Seat Belt Reminders

Rescue information for 1st Responders



HGV Rating Scheme



Release 2024 (Crash Protection: 2031 onwards)

Safe Driving	Crash Avoidance	Crash Protection	Post-Crash
Occupant Monitoring Seatbelt usage	Frontal Collisions Car Pedestrian & Cyclist	Frontal Impact Offset	Rescue Information Rescue Sheets Rescue Guide External Labelling
Driver Engagement Driver Monitoring	Lane Departure Collisions Lane Departure Car	VRU Impact Head impact Pelvis & Leg impact	Post-Crash Intervention Advanced eCall
Vision Direct Vision Indirect Vision	Low Speed Collisions Cyclist Nearside Turn Pedestrian Moving Off Reversing		Vehicle Extrication Energy Management Occupant Extrication
Vehicle Assistance Speed Assistance ACC Performance			

Based on Haddon matrix

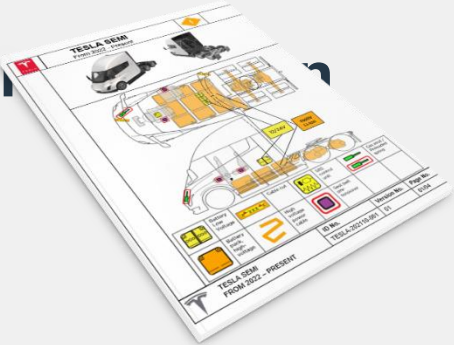
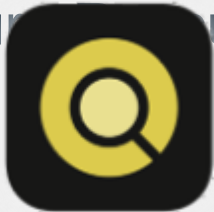
- Aligned with van and car schemes
- 3 year update cadence (2028/31 proposed)
- Threshold for “City Safe” set to reward those vehicles with technologies or design that can address typical VRU crashes

Including vision requirements

- Direct and indirect

Promoting Rescue in

- European app



2024 HGV Rating Scheme – City Safe

Safe Driving		Crash Avoidance		Crash Protection		Post-Crash	
Occupant Monitoring	15	Frontal Collisions	60	Frontal Impact	0	Rescue Information	90
Seatbelt usage	15	Car	35	Offset	0	Rescue Sheets	40
		Pedestrian & Cyclist	25			Rescue Guide	40
Driver Engagement	10	Lane Departure Collisions	25	VRU Impact	0	External Labelling	10
Driver Monitoring	10	Lane Departure	15	Head impact	0		
		Car	10	Pelvis & Leg impact	0	Post-Crash Intervention	5
Vision	50	Low Speed Collisions	15			Advanced eCall	5
Direct Vision	35	Cyclist Nearside Turn	15			Vehicle Extrication	5
Indirect Vision	15	Pedestrian Moving Off	0			Energy Management	5
Vehicle Assistance	25	Reversing	0				
Speed Assistance	35						
ACC Performance	15						
	100		100		0		100

- **CitySafe** 50% of points available from Vision, Frontal Pedestrian & Cyclist, & Cyclist nearside turn

Vehicle Selection – By Sector

Long Haul



Fleet Tractor



Fleet Rigid

Distribution



Urban (18t)



City (12t)

Construction



On Road



Off Road (Cat G)

Utility



Refuse



Fire Engine



The first release – Fleet trucks

November 2024



DAF XF (2025 MY)



Iveco S-WAY (2022 MY)



MAN TGX (2025 MY)



Mercedes-Benz Actros L (2024 MY)



Renault Trucks T (2025 MY)



Scania R-series (2025 MY)



Scania G-series (2025 MY)



Volvo FH Aero (2025 MY)



Volvo FM (2025 MY)



2024 Fleet long-haul summary

Make	Model	Rating	CitySafe	EV Version
DAF	XF (2025 MY)	★★★★☆		✓
Iveco	S-WAY (2024 MY)	★★★☆☆		✓
MAN	TGX (2025 MY)	★★★★☆		✓
Mercedes-Benz	Actros L (2024 MY)	★★★★☆		✓
Renault Trucks	T (2025 MY)	★★★★☆		✓
Scania	R-series (2025 MY)	★★★★☆		✓
Scania	G-series (2025 MY)	★★★★☆		✓
Volvo	FH Aero (2025 MY)	★★★★★		✓
Volvo	FM (2025 MY)	★★★★★		✓

HGV Programmes 2025



- **Fleet Rigid**
- Reassessment of 2024 Fleet Tractors
- 6x2 - No Trailers
- Summer 2025 Release



- **Urban Distribution (16-19t)**
- New Tests Category
- 4x2 Rigid
- Winter 2025/6 Release

Release 1– Fleet Rigids (6x2)

Sept 30 2025



DAF XF (2025 MY) 



Iveco S-WAY (2025 MY) 



MAN TGX (2025 MY) 



Mercedes-Benz Actros L (2025 MY) 



Renault Trucks T (2025 MY) 



Scania R-series (2025 MY) 



Volvo FH (aero)? (2025 MY) 

Release 2– Urban Distribution N3 16-19t 4x2

Feb 2026*



DAF XD (2026 MY)



Iveco S-Way (2026 MY)



MAN TGM (2026 MY)



Mercedes-Benz Actros (2026 MY)



Renault D (2026 MY)



Scania P-series (2026 MY)



Volvo FM (2026 MY)



Matching Crash Types with Technologies

3 Yearly Cadence of Technology and Protocol updates – aligning with cars and vans
Next step to begin 2028

Common crash types involving HGVs and other road users	Available (2024)								Emerging (2028)				Long-term (2031)				
	Speed Assistance	Indirect OSM	AEB Vehicle front to rear	Lane Support	AEB VRU	Vision	AEB Nearside turn	Rescue info, ...	Direct OSM	Motion Inhibit	AEB PTW front to rear	AEB Reverse	AEB TAP	AEB Head On	Passive Ped Protection	Crash Compatibility	Occupant protection
VRU crossing																	
Stationary or walking VRU																	
VRU in collision with low-speed manoeuvring truck																	
VRU in collision with reversing HGV																	
PTW rider in collision with HGV																	
Car occupant in collision with HGV																	
HGV occupant in collision																	

Roadmap 2031 Passive Safety



Roadmap 2031



Future Developments

- Standard Fit for ADAS?
- Focus on Passive Safety Protection
- Front Underrun
 - Trafikverket Research
 - 20% of car occupant KSI occur in head-on collisions
 - Utilising new Aero dimensions allowing elongated cabs (96/53 EC-article 9a)
- Passive Pedestrian Protection
 - 11% of KSI related to VRU crashes
 - Head
 - Upper Lower Leg
 - Wiper Bosses/Grab Handles

HGV Passive Safety Opportunity



Elongated cabs (96/53 EC—article 9a)

Future Developments

Van testing adds passive safety and standard fit

Integrate Van and Trucks into a dedicated Commercial Vehicle Rating for fleet users

Add trailers and body builders

Once principles established, expand to PSV market

City Buses and Inter-Urban Coaches



THANK YOU



About Euro NCAP

Euro NCAP provides consumers with an Independent assessment of the safety level of the most popular cars sold in Europe.

Euro NCAP is a catalyst for encouraging significant safety improvements to new car design. We hope that when buying a new car Euro NCAP will help you choose for safety.



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Q&A

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#FE25

LOGISTICS UK

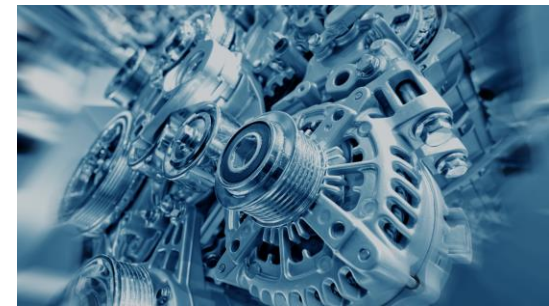
Enforcement and recalls

David Wood

Head of autonomous Vehicle Policy
DVSA



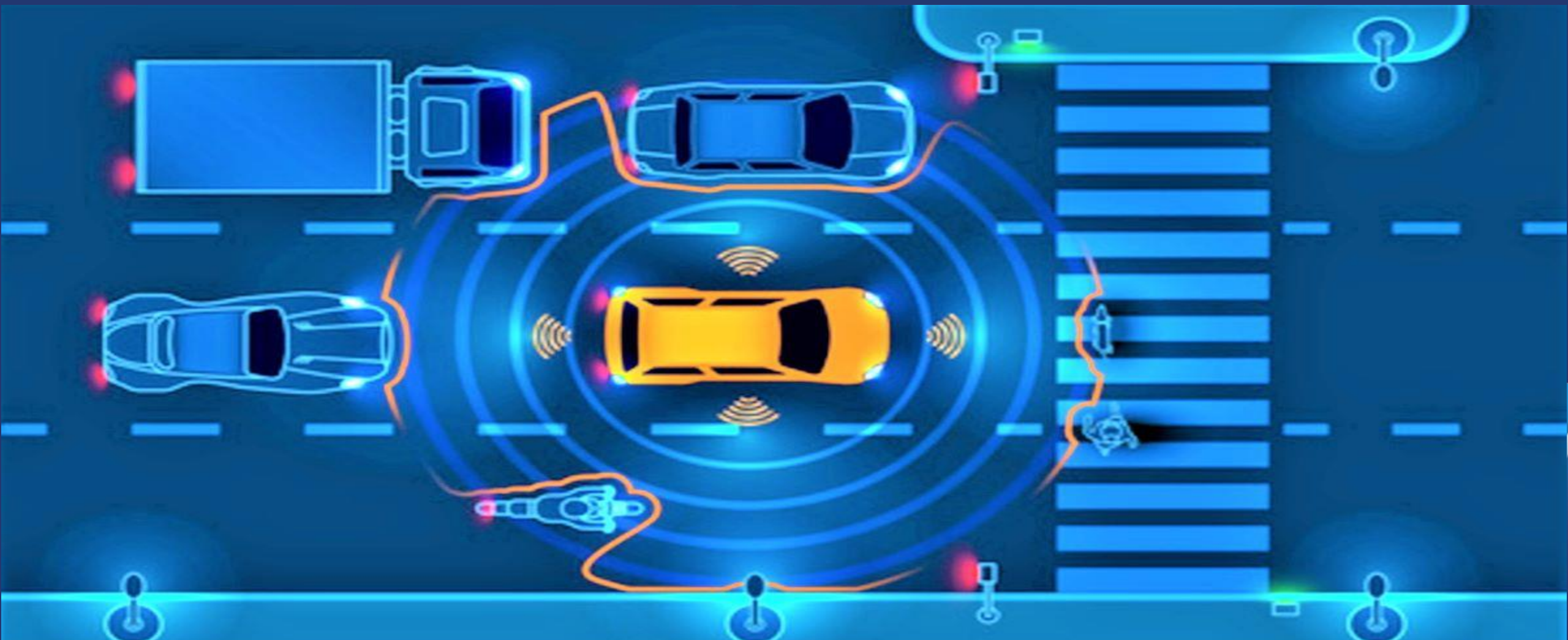
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Driver & Vehicle
Standards
Agency

Connected and Automated Mobility Services



Connected Data - Regulating roadworthiness



What's on the horizon?

Dave Wood - DVSA

Head of Automated Vehicle Policy

The Evolution of Fleet Vehicle Maintenance

Past

- Planned
- Reactive
- Physical inspections

Present

- Planned
- Reactive
- Physical inspections
- OBDII
- Unified Diagnostic Services (UDS)
- Telematics

Future

- Integrated OEM data
- Sensor fusion
- Remote system monitoring
- AI using data to predict
- Reduced physical inspection



Our challenge



How can we use connected data to improve our services?



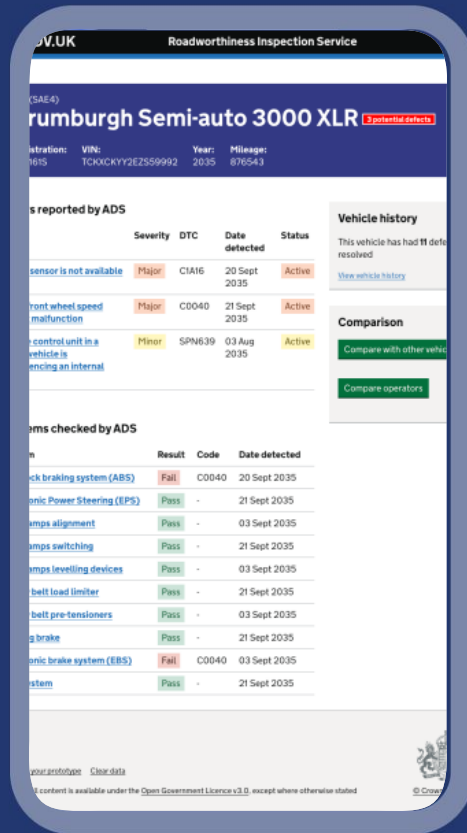
Can we use data rather than physical checks?



What happens when we don't have a driver in the loop?

Connected Data Project – 3 Proof of Concepts

Connected MOT



CAV trial data



OEM - API



Driving and Roadworthiness Log - Proof of Concept

GOV.UK

Roadworthiness Inspection Service

[< Back](#)

Bus (SAE4)

Brumburgh Semi-auto 3000 XLR

3 potential defects

Registration: 530161S

VIN: TCKXCKYY2EZS59992

Year: 2035

Mileage: 876543

Errors reported by ADS

Alert	Severity	DTC	Date detected	Status
LiDAR sensor is not available	Major	C1A16	20 Sept 2035	Active
Right front wheel speed circuit malfunction	Major	C0040	21 Sept 2035	Active
Engine control unit in a heavy vehicle is experiencing an internal fault	Minor	SPN639	03 Aug 2035	Active

Vehicle history

This vehicle has had 11 defects resolved

[View vehicle history](#)

Comparison

Compare with other vehicles

Compare operators

Systems checked by ADS

System	Result	Code	Date detected
Anti-lock braking system (ABS)	Fail	C0040	20 Sept 2035
Electronic Power Steering (EPS)	Pass	-	21 Sept 2035
Headlamps alignment	Pass	-	03 Sept 2035
Headlamps switching	Pass	-	21 Sept 2035
Headlamps levelling devices	Pass	-	03 Sept 2035



GOV.UK

Roadworthiness Inspection Service

[< Back](#)

Driving and roadworthiness log of 530161S 21 Oct 2024 15:28

Below information was recorded by the vehicle's ADS.

Filter by

select

Time	Event	Value	Lat	Long
15:28:35	Engine start	OK	52.3871476	-2.23983
15:28:36	ECU protocol: 6) ISO 15765-4 CAN (11 bit ID, 500 kbaud)	Engine control unit #1 OK	52.3871476	-2.23983
15:28:36	Boot software identification	4A!85	52.3871476	-2.23983
15:28:36	Application software identification	149P_D030_J113	52.3871476	-2.23983
15:28:50	Driving started	Manual mode	52.3871476	-2.23983
15:47:31	DTC	C0040	52.3877602	-2.2392295
15:47:31	Driving transition request	Request self driving	52.3877602	-2.2392295
15:47:40	Driving transition request	Rejected by ADS	52.3877602	-2.2392295
15:37:40	Mimal risk manoeuvre	Manual mode	52.3877602	-2.2392295
18:21:59	Engine off	Park mode	52.3852455	-2.2507903


View detailed log

Manage your prototype

Clear data

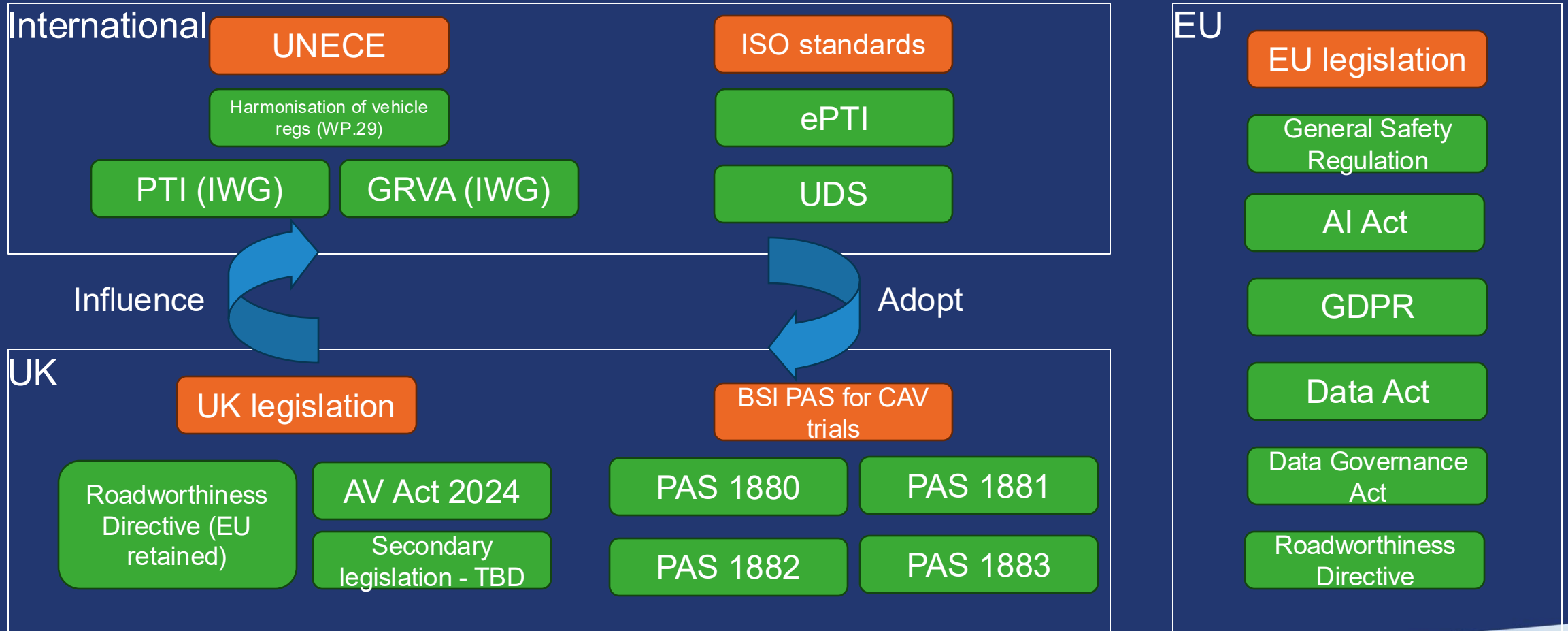
OCL

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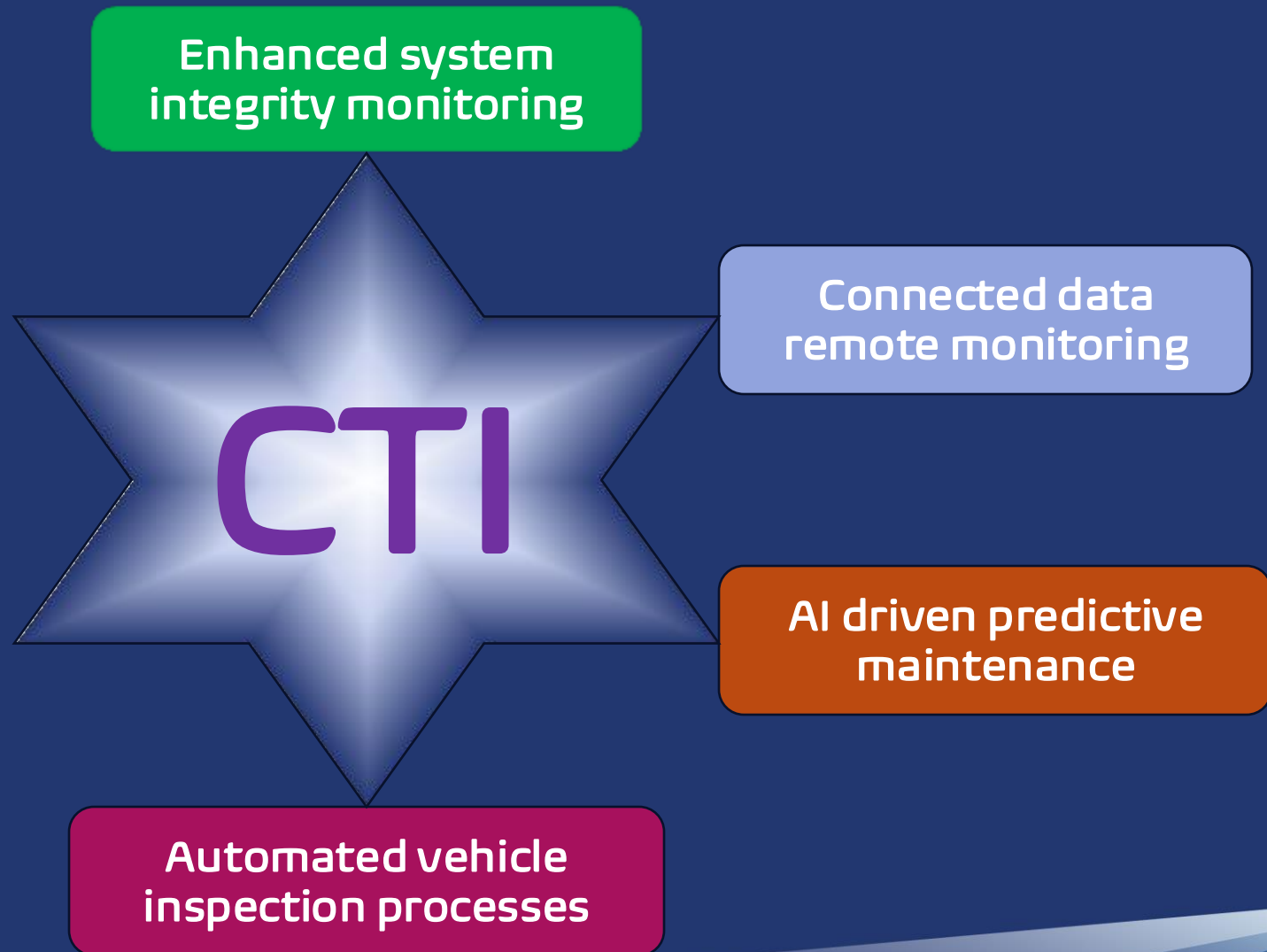


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Basic view of key legislative and standards landscape



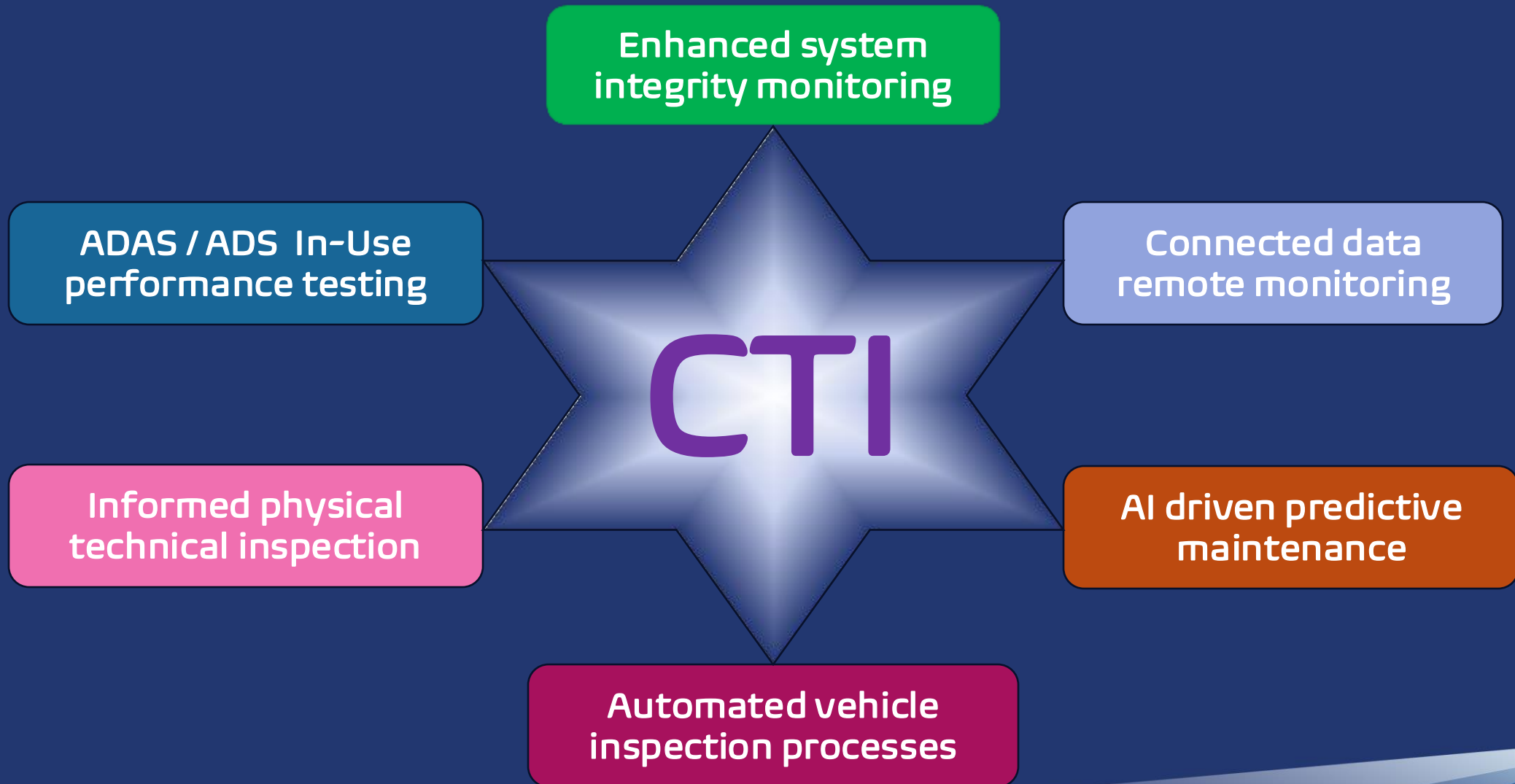
Continuous Technical Inspection Concept







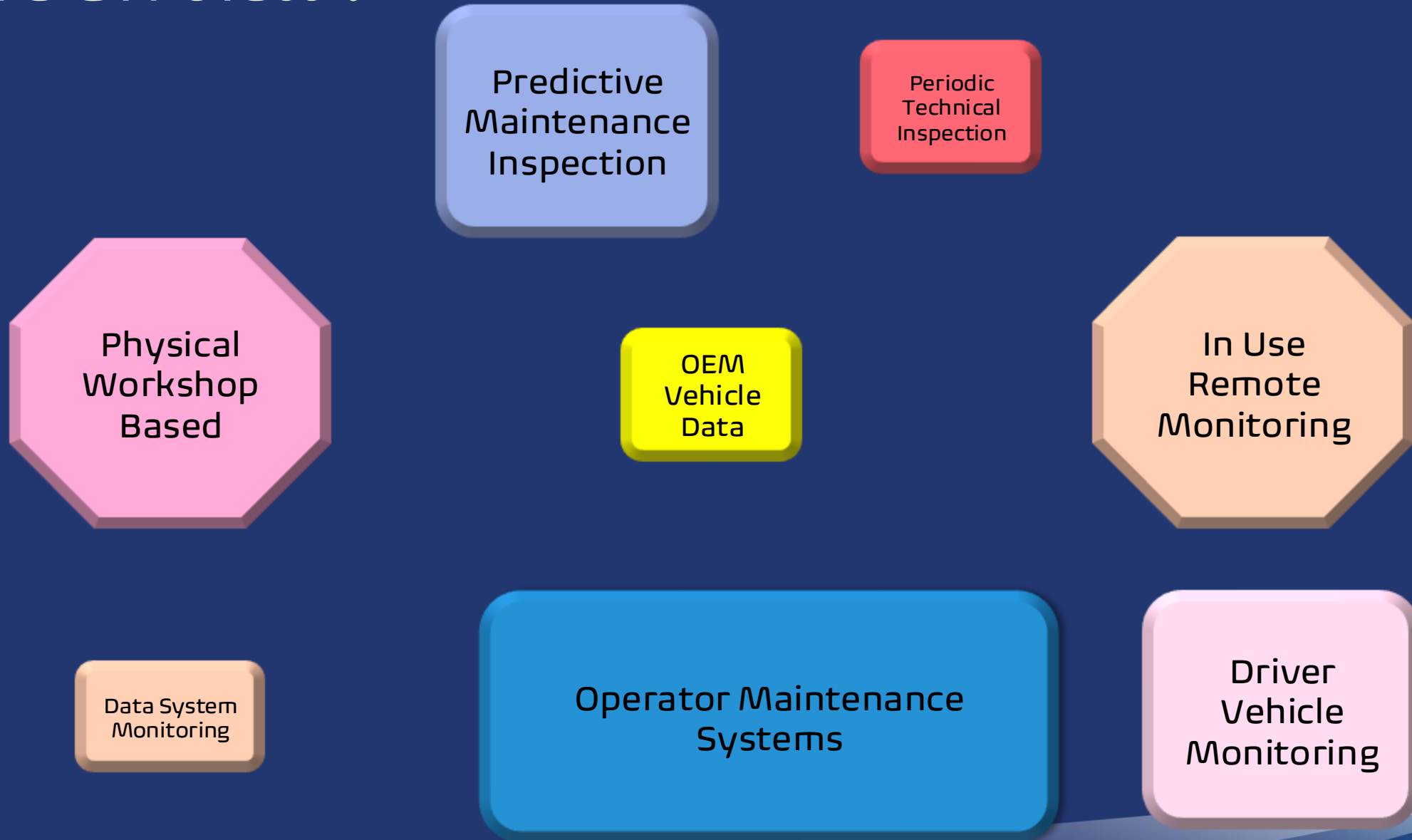
Continuous Technical Inspection Concept





Ensuring ADAS functionality during periodic technical inspection (PTI)

Future CTI View ?



And Finally – AVs Not Far Away



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Cams.enquiries@dvsa.gov.uk

Thank You

LOGISTICS UK

Enforcement and recalls

Neil Barlow

Head of MOT policy
DVSA



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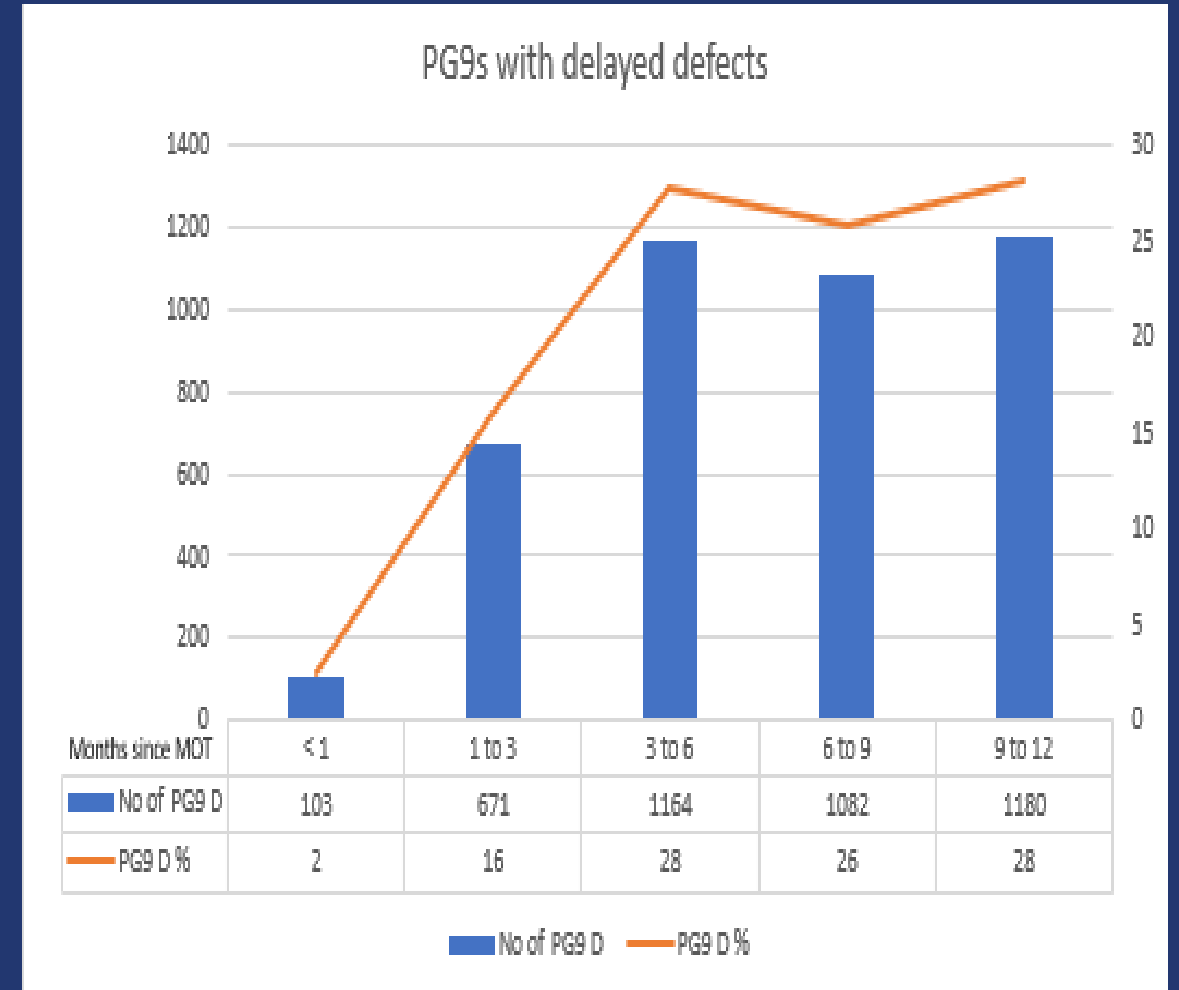
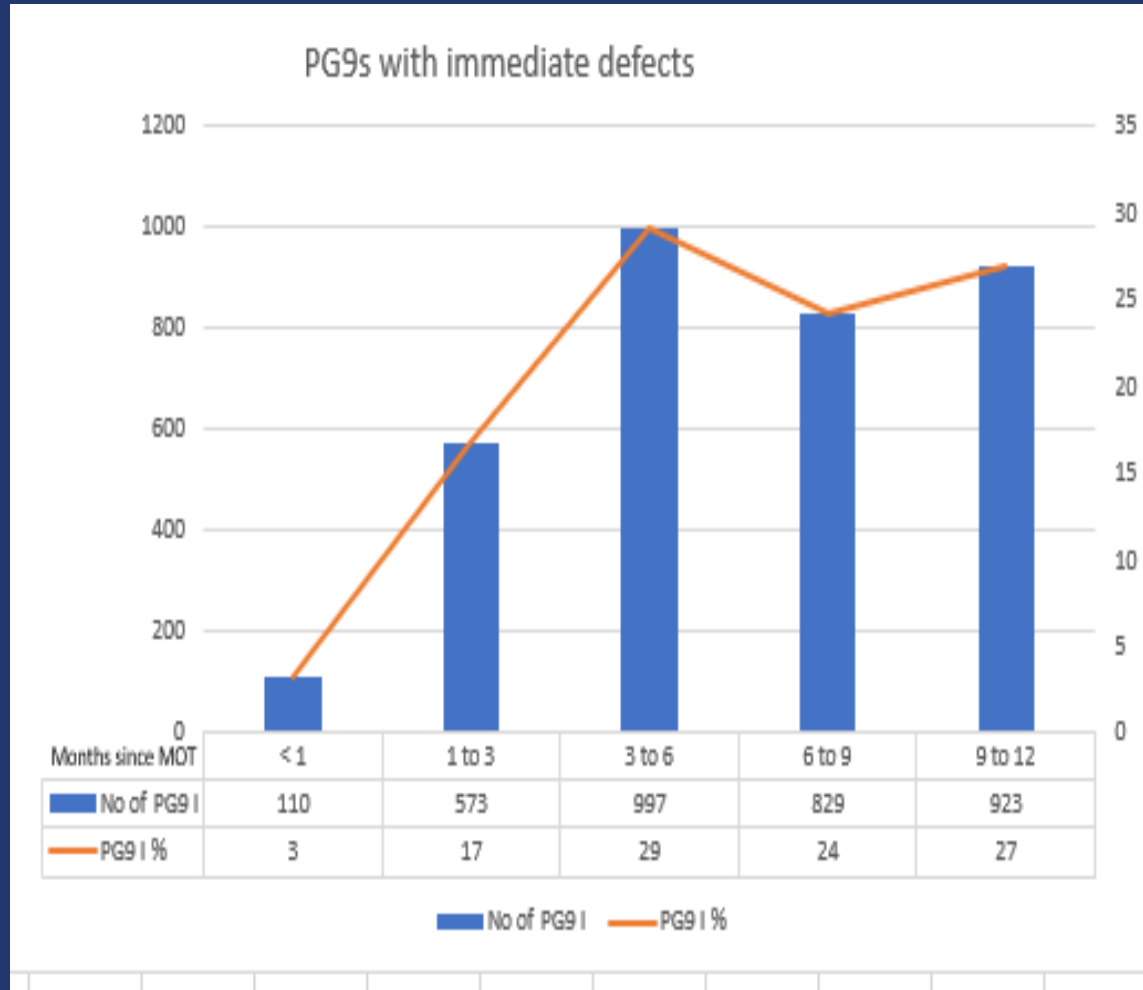
DVSA – a view on safety & compliance

Neil Barlow

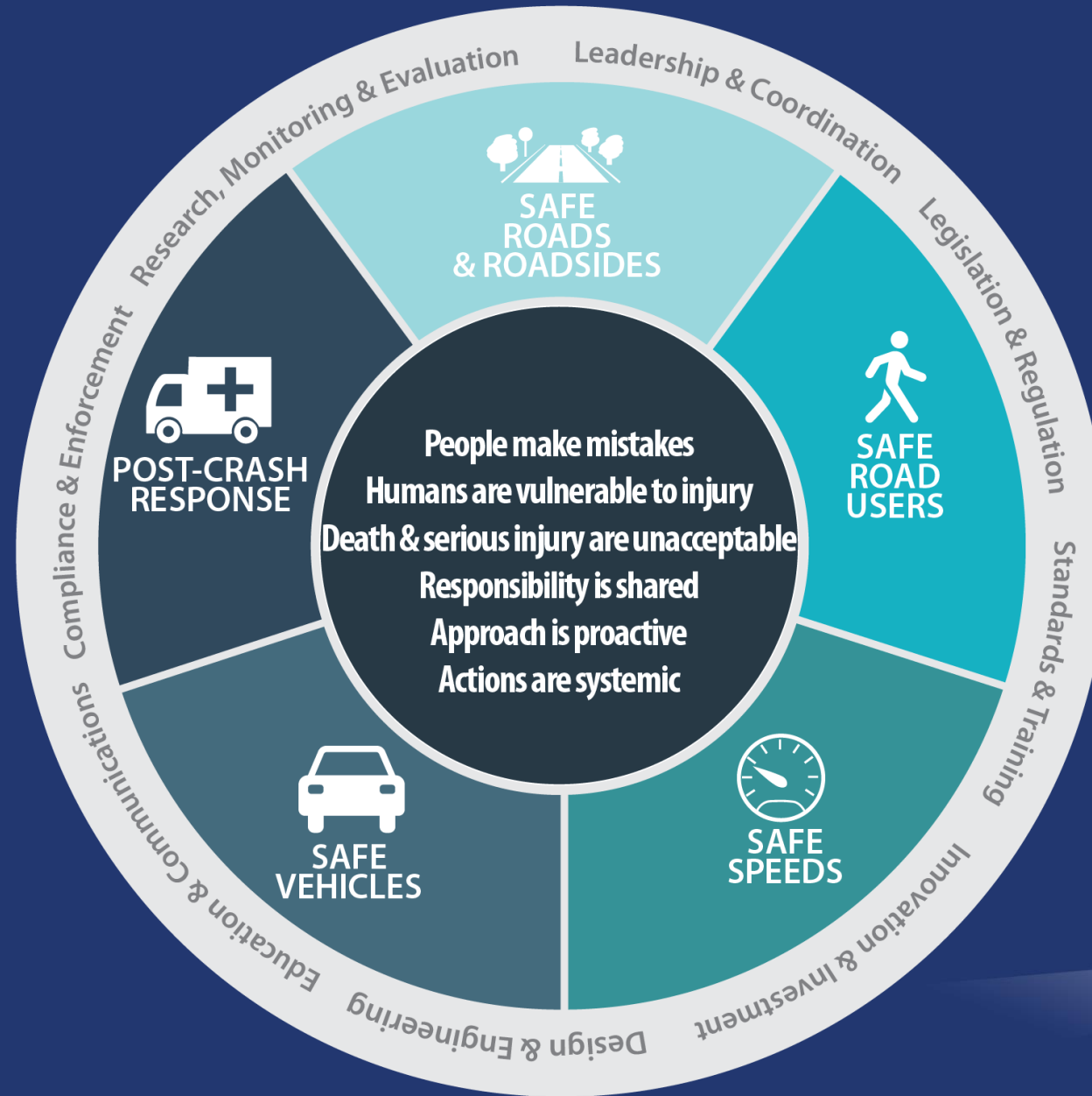
Head of Vehicle Policy & Engineering

Keeping **Britain** moving, **safely** and **sustainably**

HGV prohibitions immediate & delayed defects



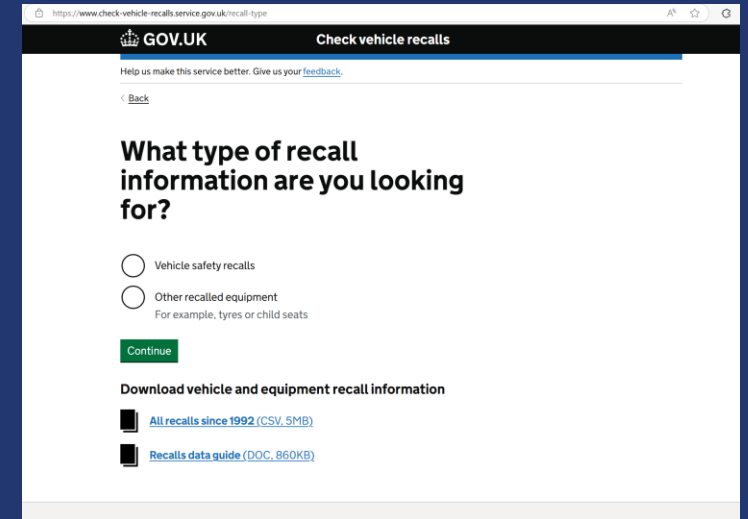
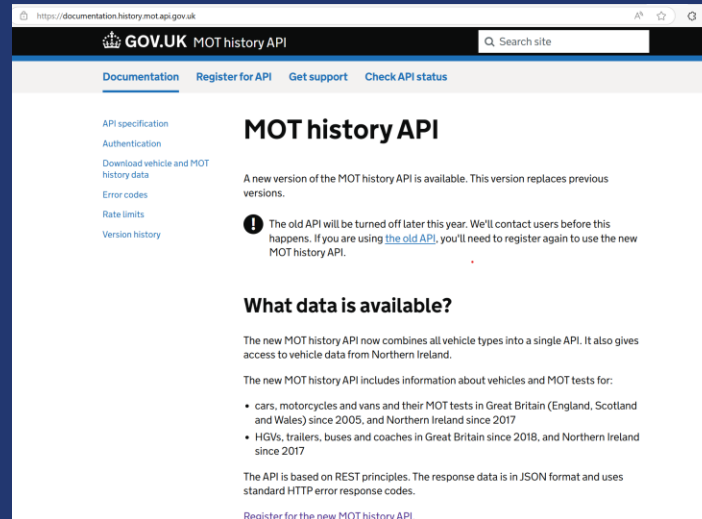
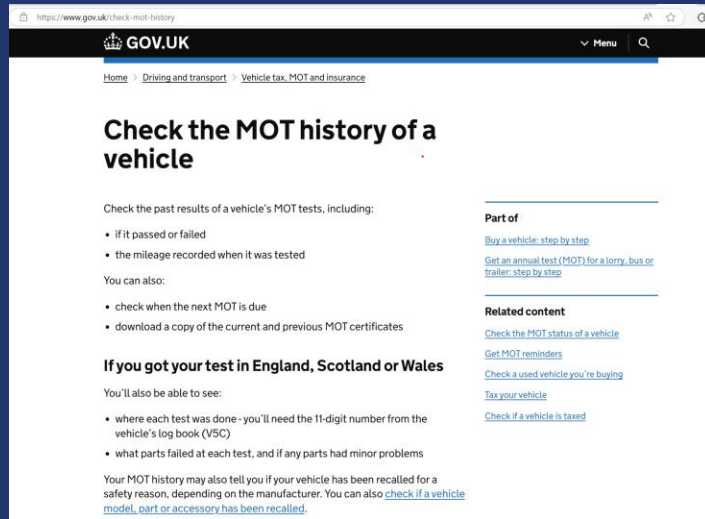
Safe Systems – thinking the ‘whole picture’



.... part of the system



Recalls – 3 key sources



+  fall-back (advice)

Areas of Interest





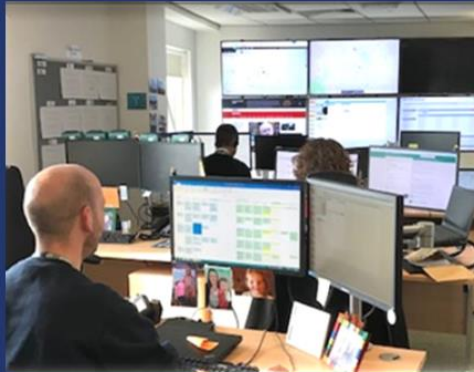
Remote & new Enforcement Approaches



Remote targeted enforcement

- Recent pilot work identifying vehicles with no MOT remotely and taking action from the record proved remote interventions can improve road safety in an efficient way
- Using ANPR to remotely identify:
 - speed limiter interruption and fraud cases
 - offences in driving time
 - offences leading to civil penalties

Count of Hit	Day							
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
00	6	9	9	4	15	18	7	68
01	4	6	8	3	4	5	3	33
02	7	7	8	11	9	9	2	53
03	6	11	18	12	13	6	4	70
04	17	17	17	23	11	14	1	100
05	46	40	56	56	40	11	1	250
06	126	131	107	110	98	21	24	617
07	162	139	140	137	125	26	18	747
08	152	182	170	182	144	36	17	883
09	231	234	195	217	205	41	23	1146
10	219	215	188	194	184	35	20	1055
11	185	186	173	163	154	38	27	926
12	177	175	167	174	155	32	21	901
13	182	169	168	211	123	34	25	912
14	183	208	188	201	174	29	39	1022
15	214	175	185	179	131	24	28	936
16	146	143	139	159	78	16	25	706
17	92	90	97	77	59	8	25	448
18	57	64	74	51	33	12	23	314
19	31	26	22	31	15	9	7	141
20	28	18	26	23	13	4	19	126
21	20	19	15	13	10	5	17	99
22	23	8	13	17	12	8	14	95
23	8	15	12	20	11	11	9	86
Grand Total	2322	2282	2195	2268	1816	452	399	11734



15 mins



26,213 ANPR searches completed during 2024/25

A look ahead ...

Short-term

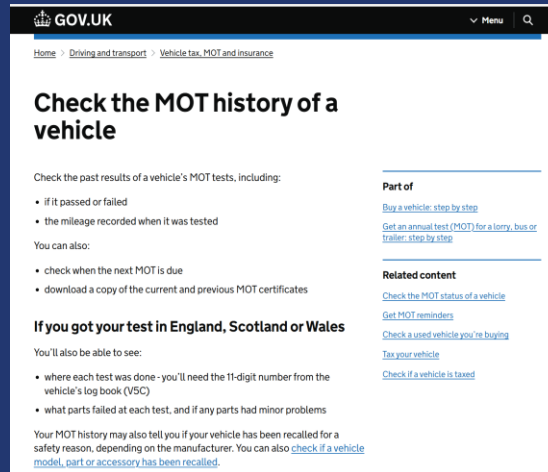
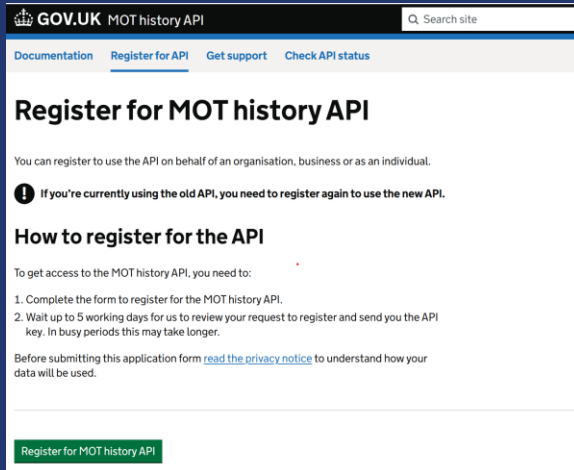
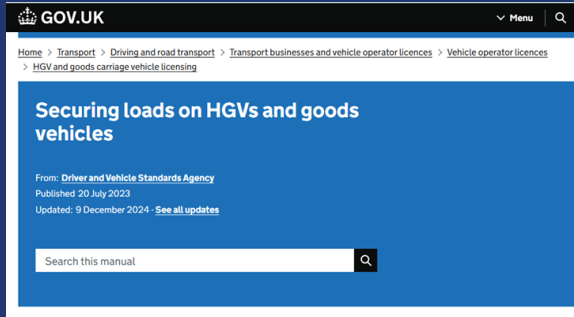
- Emissions testing (PN)
- ADAS, alternative fuels and using vehicle data.
- EV Vans – tidying rules

Longer -term

- Automated vehicles.....
- e-PTI???



Is there more we can do?



- MOT History Service (incl API)
- MOT Reminders
- OCRS and other reports
- Earned Recognition
- Gov.uk guidance – guide to maintaining roadworthiness, load security etc..
- Is there more data we can share? Driver data?
- Is more guidance needed? Could the manual be better?

Summarising....

- Make sure we think whole 'safe system'
- Think safety – not just compliance
- Make safety part of all our choices
- Remember our people are at the heart of our safe system
- Tell us what more we can do....



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