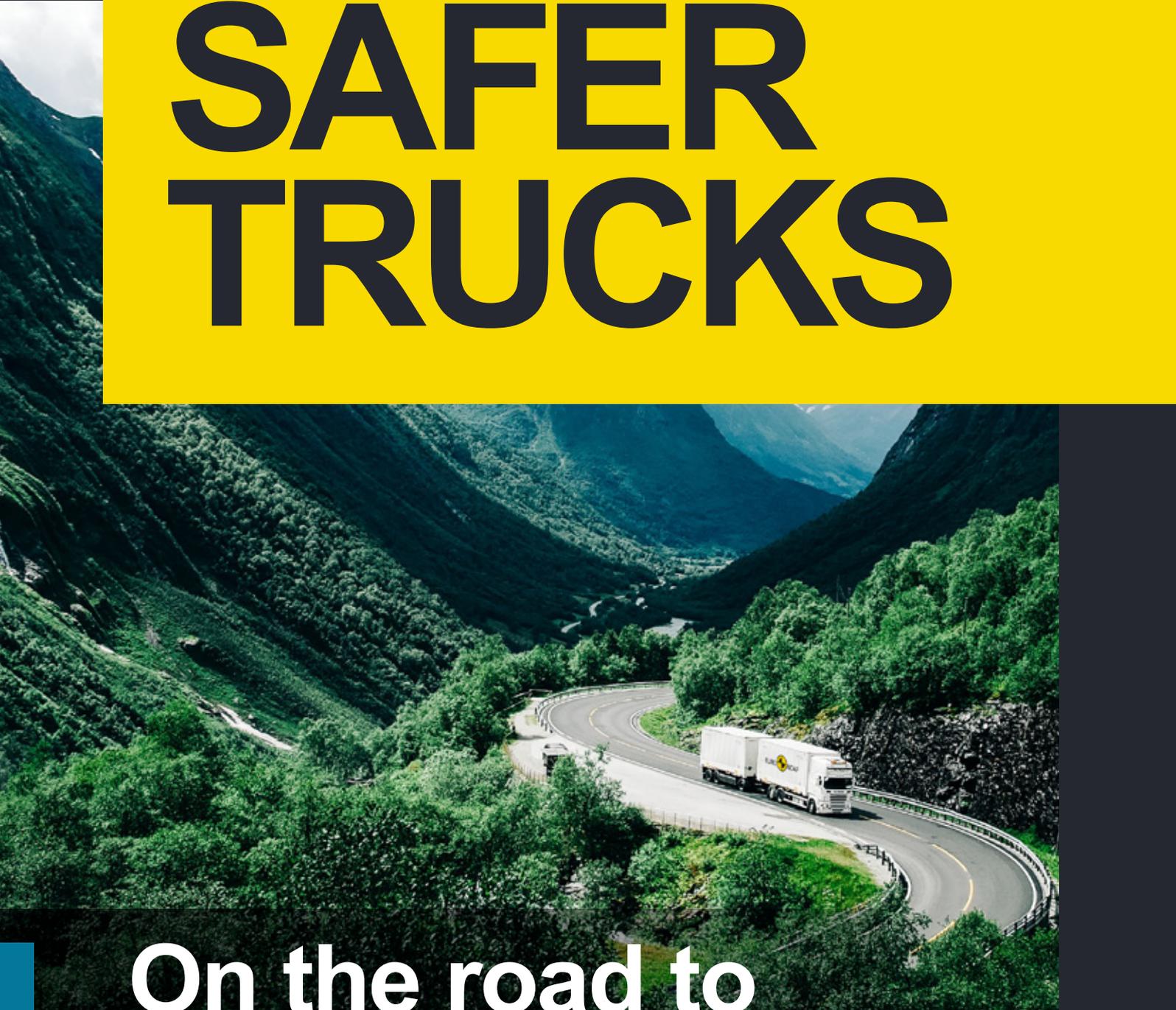




SAFER TRUCKS

A photograph of a white truck with a yellow logo on its side, driving on a winding asphalt road that curves through a lush, green mountain valley. The road is bordered by a metal guardrail. The background shows steep, forested hillsides under a clear sky.

**On the road to
Vision Zero**

2024 and beyond



“Vision Zero for road casualties will not be achieved without taking action to improve the safety of commercial vehicles. A truck safety rating will incentivise good performance, allow optimisation of operational safety and cost, and improve truck safety.”

Dr Michiel van Ratingen

Secretary General, Euro NCAP

Foreword

Euro NCAP has played a leading role in encouraging the widespread use of active safety technology that's delivering real-world benefits and reduced collisions in the passenger car segment. But ADAS (Advanced Driver Assistance Systems) technology on heavy trucks is not as effective and fitment is not as widespread as it could be.

While recognising there are many similarities between the heavy truck and passenger car markets in terms of safety considerations and solutions, Euro NCAP has also acknowledged and embraced the specific challenges inherent in the development of a robust heavy truck safety rating.

Euro NCAP believes collaboration is key. It hopes the freight industry, transport authorities and the automotive industry across Europe will adopt and support the development of its Truck Safe rating model, to ensure the heavy trucks on European roads improve safety and contribute to lowering road casualty numbers.

We are seeking new members that can invest resources and their knowledge to help us make this scheme the success that society needs it to be.

If your organisation has a mission to make freight in your region safe, we want to hear from you. Publication of our first results is not the end. It marks the beginning of a new, challenging, and exciting journey for Euro NCAP and our existing members as well as those who wish to join us in the future.

As a provider of consumer information regarding vehicle safety, Euro NCAP has historically focused on safety testing and ratings in the passenger car market.

But having introduced a new Commercial Van Safety Rating in 2020, Euro NCAP is expanding its scope even further in 2024, to provide detailed safety information for heavy trucks. This is another important step towards Euro NCAP ensuring the safety of all road vehicles.

By examining safety levels within the heavy truck category, Euro NCAP aims to help many countries across Europe achieve their 'Vision Zero' target and end traffic-related fatalities. In this report, safety data for heavy trucks is examined, illustrating why ratings are needed for this vehicle category, and a range of current safety features are discussed.

Together with consideration of restrictions relating to the introduction of additional safety devices on heavy trucks, recommendations are made about how the safety of these large vehicles could be enhanced further, and how safety testing performance has been translated into formal ratings.

Dr Michiel van Ratingen
Secretary General, Euro NCAP

01

Why trucks?

Goods transport is an essential fact of all modern societies, providing everything we need (food and medicines, for example) and much of what we desire also. Most of the freight within Europe is transported by road.

Population growth and increases in the standard of living increase freight demand. The net effect is a prediction that global freight demand will treble between 2015 and 2050 (ITF, 2019). Heavy trucks are likely to become more and not less important. Heavy trucks represent almost 1.5% of vehicles on Europe's roads¹ but are involved in almost 15% of all EU road fatalities². Vision Zero cannot be reached without tackling the challenges presented by trucks on our roads.

In the UK, similar statistics show that heavy trucks represent 1.3% of licensed vehicles, 5.8% of all traffic (billion vehicle km) 3.6% of casualties and 14.3% of fatalities. They are not involved in collisions more frequently than other vehicle types

but when they are involved, a fatality is more likely. Size and weight are obvious factors in higher crash severity, but different usage may be an important reason why the size issues do not increase crash frequency.

Heavy trucks are more likely to be used on safer roads such as highways and motorways. They are also more likely to be designed specifically for individual uses, with some cars tailored specifically for city usage and others specifically for longer distances. Crash patterns also differ in these environments with vulnerable road users a key priority for cities, car occupants the key priority in highway crashes.

The combination of society's continuing reliance on road freight transport and the over involvement of road freight transport in fatalities means that Vision Zero will not be achievable without substantial action to improve heavy truck safety.

¹ Based on data extracted from Eurostat

² ERSO, 2017



“In all European countries, crashes involving heavy commercial vehicles stand out due to their serious consequences, often to occupants in other smaller vehicles and vulnerable road users.”

Stefanie Ritter, Accident Research, DEKRA Automobil

02

Why a different approach is needed?

Extent of market influence

The commercial use of heavy trucks is likely to demand a different approach to safety campaigns compared with passenger cars. The consumers of cars are a mix of individuals, lease companies and fleets. However, even within the fleet market, the individual end user often has significant influence on the vehicle choice, and safety for themselves and their family will often be an important parameter. Providing the consumer with clear and simple safety measures has proven to be a very effective way of stimulating customer demands for safety and vehicle manufacturers are agile in responding to customer demand.

This is not the case for trucks. Truck drivers typically have little control over the choice of vehicle. A competitive freight industry with narrow margins will prioritise operational needs. In isolation, a bad safety rating may not be enough to outweigh a best-in-class payload capacity or energy efficiency. Maintenance costs, vehicle capital costs, fuel costs and insurance costs are all important considerations for fleet buyers.

Uncertainty over whether an innovative safety feature will be reliable or easily maintained can cause a conservative approach of sticking with a known quantity. Stimulating customer demand for safer vehicles within the freight industry may therefore require more than just the provision of safety information. But how can this be achieved?

Key will be creating a market where the safest choice of vehicle is also known to be the most profitable one. One way of achieving this may be for Euro NCAP to work with stakeholders already trying to achieve this through national, regional or local initiatives such as safety clauses in public sector contracting, cash subsidies to encourage fitment of specific safety technologies and freight best practice schemes. These can strongly influence operator behaviour in local areas but are not harmonised in any way and often rely on expensive retrofit technology with much less evidence of effectiveness. The use of a harmonised technical standard for these schemes would reduce complexity for operators, increase buying power and improve the safety market for vehicle manufacturers. One common recognised standard for all will boost adoption.

And what of regulation?

Regulation has been very important in the freight market and the optional selection of safety features tends to be low until mandatory regulation is introduced. Regulation is powerful. It is the only instrument that can guarantee that all new vehicles are equipped with a feature.

However, regulation has its weaknesses. Mandatory requirements usually apply to all vehicles. Trucks may be used in a wide variety of applications and the base chassis are highly customisable to suit a huge range of body types, often added by different suppliers to the chassis. Some trucks may be used on dedicated routes, such as overnight freight on major roads between depots – the same job every night. What is important for safety in this sector may be unimportant in another or worse, actively conflict with the operational needs of another. This makes developing proportionate regulation more difficult and has tended to keep the minimum standards of regulations at the level of the lowest common denominator achievable by all.

In Europe, the revised GSR (General Safety Regulation) requires the phased introduction of a range of technologies that most truck manufacturers did not even offer as an option, when the regulations were conceived. This approach achieves higher standards but is not without complications, in terms of preventing unintended effects on operational capabilities.

Although the GSR2 places many new and stringent demands on new vehicles, gaps remain both in terms of both the crash types addressed (strong short-term focus on proximity manoeuvring crashes) and the different categories of protection (a focus on warning systems and not active intervention) that is known to be more effective in the real world. And there are no passive safety crash protection or post-crash safety measures included at all. Measures that are commonplace with passenger cars.



Requirements of existing and new type approval regulations for heavy trucks

Regulation	Crash stages			
	Safe driving	Crash avoidance	Crash protection	Post-crash safety
Existing regulation	<ul style="list-style-type: none"> > Seat belt reminders > Spray suppression > Tyres, brakes, etc. 	<ul style="list-style-type: none"> > ABS (Anti-lock Braking Systems) > ESC (Electronic Stability Control) (Roll & Yaw) > AEB (front-to-rear) > LDW 	<ul style="list-style-type: none"> > Front, rear and side underrun protection > Seat belts > Cab strength 	
GSR 2022/24	<ul style="list-style-type: none"> > ISA > TPMS (Tyre Pressure Monitoring System) > Driver monitoring system (indirect) > Alcolock interface 	<ul style="list-style-type: none"> > Moving off information system (MOIS) > Blind spot information system (BSIS) > Reversing detection > Emergency stop signal 		
GSR 2024 / 2026		<ul style="list-style-type: none"> > Driver monitoring system (direct) 		
GSR 2026 / 2029		<ul style="list-style-type: none"> > Direct vision 		

“We see head-on crashes, and especially with heavy trucks, as one of our biggest challenges to develop a safe road transport system. We believe that additional front-end compatibility improvements will be necessary to supplement the benefits of collision avoidance technologies.”

Rikard Fredriksson, Vehicle Safety Advisor,
Swedish Transport Administration (Trafikverket)

This new model changes the direction of our membership towards city authorities, highway authorities, fleet insurers, and freight shippers and operators.



03 A new business model for safer trucks

Euro NCAP believes creating a market where the safest choice of vehicle is the most profitable choice of vehicle will be critical to success. One way of achieving this is for Euro NCAP to link with national, regional and local initiatives such as local access restrictions, freight best practice schemes, public procurement contracting and insurers to create incentives.

If combined with a more robust and harmonised framework of technical standards this will create the buying power necessary to generate the demand for safe vehicles that manufacturers need if they are to combine innovation and commercial success.

Euro NCAP's membership is currently national governments, consumer, and motoring organisations. But this new model changes the direction of our membership towards city authorities, highway authorities and fleet insurers. And we invite potential stakeholders to actively get in touch to support the programme.



04

Safer Truck Ratings and ‘City Safe’

Euro NCAP is introducing a 5-star rating system for trucks at the end of 2024. This system will be based on the ‘Stages of a Crash’. In effect, this is a timeline that describes the hours and minutes that can lead up to a crash, the milliseconds in the crash to protect the occupants

and that ‘golden hour’ described by paramedics as being vital to the safety outcomes of crash victims.

This 5-star rating will cover both active and passive safety (although passive safety requirements will not be introduced until 2030). The four stages of crash require different technologies to address specific situations that create danger and examples are summarised as:

Crash stages			
Safe driving	Crash avoidance	Crash protection	Post crash
Vision	AEB	Front underrun	Rescue information
Driver monitoring	VRU protection	Airbags	Labelling
Seat belt reminders	Lane support systems	Intelligent restraints	EV power isolation

A good rating will require a balance of all 4 stages to promote comprehensive safety and cannot be achieved by high functionality in one area compensating for poor performance in the other three. It is hoped that this strategy will encourage manufacturers to look at safety holistically. And it’s equally important that the balance between elements allows all sectors of trucks from City Distribution to Long Haul to achieve a 5-star rating.

In addition to this overall 5-star rating, a specific ‘City Safe’ rating will also be awarded. It is intended to promote technologies and functions that increase safety in our European Cities, focussing on the protection of pedestrians and cyclists. Achieving ‘City Safe’ will require a minimum 3 star rating and good performance in vision and vulnerable road user protection systems.

It is fundamental to Euro NCAP’s rating scheme that the vehicle manufacturer is able to address the collision situation in any way they see fit. For example, a manufacturer may have only moderate vision but can compensate by very high levels of collision avoidance. Naturally, the very best performers will have high performance in both.

With this City Safe award authorities will be able to identify the best vehicles for their roads and incentivise adoption, while companies and fleet managers will be able to easily identify the vehicle specifications they need to buy to comply with their own standards or customer or road authority incentive schemes. Shippers and hauliers can be assured that their vehicles meet safety standards as well as minimising adverse brand impact and vehicle/driver downtime. This will keep their drivers safe, minimise environmental footprint and, most importantly, create a market for safe technology developed within a clear framework for safety grounded in Euro NCAP principles.

Many European Cities are aiming to tackle vehicle emissions along with safety issues and since Euro NCAP has an existing Green NCAP rating for passenger cars, this process may be added to the Euro NCAP Truck Safe rating programme in due course.



05 Application of the rating

With this new rating, Euro NCAP sees 'win-win' partnerships as the ideal approach, so it is intended to keep implementation simple by rating only the chassis cab as it leaves the first stage manufacturer. Euro NCAP will assess rigids and tractor units, but these will be tested complete with their trailers or body work in place.

Certain safety performance aspects will initially be excluded from scope, for example, side and rear underrun protection and trailer stability systems. In contrast, Euro NCAP will tackle the challenges of the high numbers of variants and component modularity. Euro NCAP considers the ability to extend the rating to an individual vehicle level as ultimately essential, as key stakeholders may wish to offer discounts to incentivise safe entry based on a Euro NCAP rating.

Euro NCAP will tackle the challenges of the high numbers of variants and component modularity.

Initially however Euro NCAP aims to test each primary or secondary safety feature identified in the roadmap for at least one high sales volume variant from each manufacturer, in each of the basic freight applications:

- > City and Distribution
- > Fleet and Long Haul
- > Construction
- > Utility

This will provide the opportunity for a high-level brand and sector comparison of safety availability. For each aspect of the ratings 3 yearly cycles of updating will occur and will include all new aspects that new technologies may allow. These will be developed with industry input and will include new aspects such as trailer design and cab passive safety.



06 Casualty priorities

Crashes involving two vehicles or fewer and involving a range of different types of vehicles were studied, occurring in five countries with Euro NCAP membership (DE, FR, GB, IT and SE). In total, this data provided information on 28,452 fatalities from all types of collisions and 3,340 fatalities from collisions involving heavy trucks over the combined three-year period.

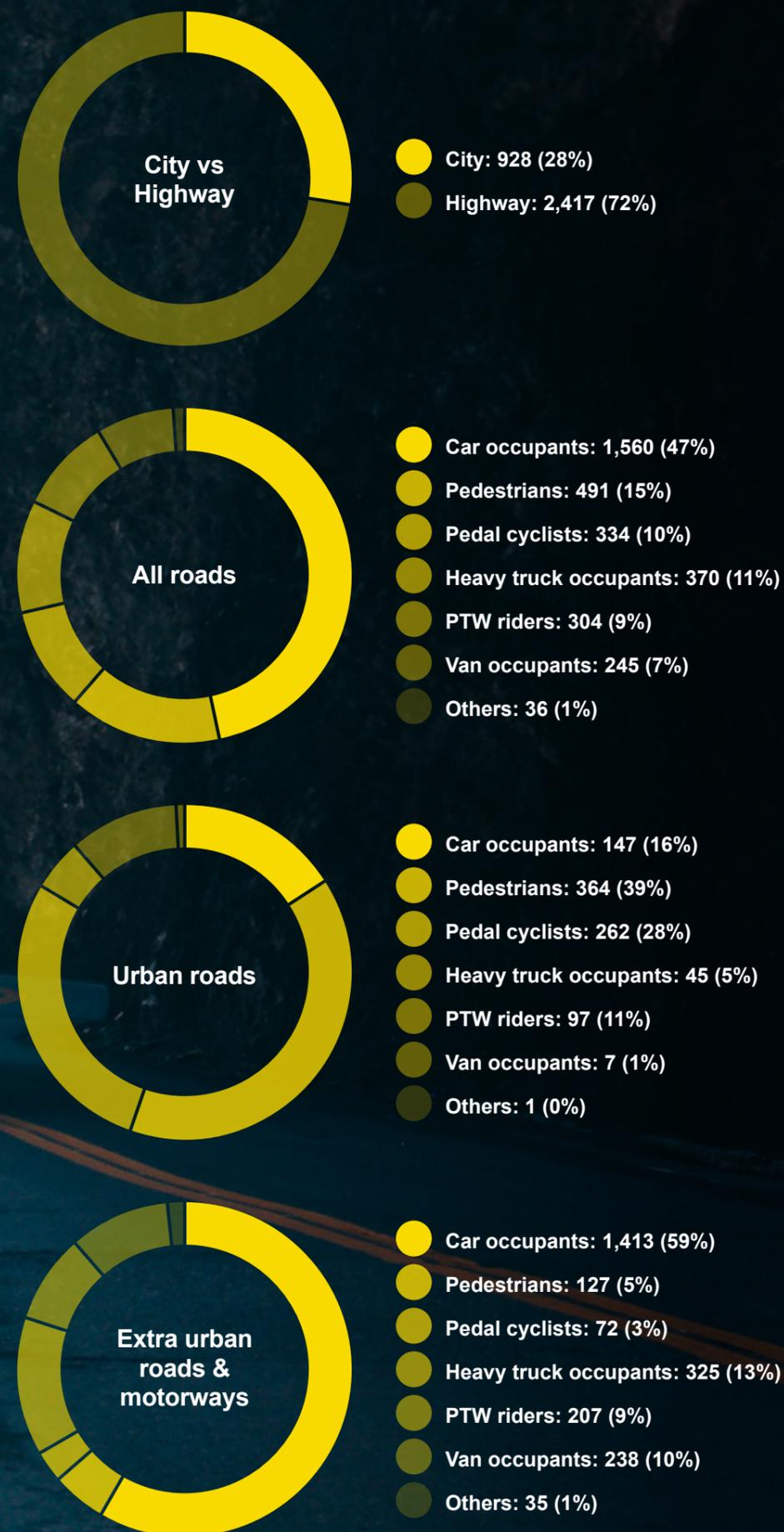
Heavy trucks suffer significantly different collision patterns from passenger cars. More than 60% of those killed in collisions involving cars are the car occupants themselves. For heavy trucks, only 11% of those killed are the occupants – most of the fatalities are people outside the vehicle. Across all areas and casualty types, around 56% of fatalities involve rigid trucks and 44% tractor semitrailer articulated combinations. This becomes 70% rigid and 30% articulated in urban areas, and 50% rigid to 50% articulated outside urban areas (35% rigid, 65% articulated on motorways).

When truck occupants are killed, 52% are involved in a single-vehicle collision, 38% collide with another heavy truck, and 7% collide with a car. Fewer than 10% of truck occupants are killed in urban areas, and almost two-thirds of those in single-vehicle collisions. Note that there is significant variation in data between countries.

For example, in Great Britain, pedestrians represent a bigger proportion of the total than cyclists, whereas in Germany cyclists represent a bigger proportion.

These figures may not yet reflect the full benefit of past regulatory interventions such as the introduction of AEB (Autonomous Emergency Braking) or LDW (Lane Departure Warning), and priorities may change slightly due to the forthcoming GSR2 measures. There are however clear gaps in those new measures, such as a lack of any new features specifically targeting car occupant protection or VRU (Vulnerable Road User) protection outside a low-speed manoeuvring context.

Heavy trucks suffer significantly different collision patterns from passenger cars. More than 60% of those killed in collisions involving cars are the car occupants themselves. Truck occupant fatalities represent only 11% of all those killed in collisions with trucks.



07 Safety technologies

Despite the limitations, a range of safety features are available on the market for heavy trucks, but are not yet uniform, or standard fitment. However, they do have significant potential for fatality reduction and for implementation in 2024. Euro NCAP has studied the available evidence about safety features for heavy trucks and assessed their potential based on:

- > The type of casualties they are intended to prevent (target population)
- > System effectiveness (where evidence is available)
- > Current and future availability in the commercial vehicle market
- > Opportunity to accelerate or exceed existing and forthcoming regulatory standards

Blind spot information systems for detecting vulnerable road users will be mandatory in 2024.

Highlights are:



01 AEB for vulnerable road users

A large subset of pedestrian fatalities plus a significant number of cyclists are addressed, with the crossing collisions mainly occurring in urban areas, the longitudinal ones more often outside of towns. The effectiveness is proven in cars, but currently only one heavy truck manufacturer offers the system. A forthcoming regulation will set minimum standards but will not make fitment mandatory, we consider we can encourage more fitment and higher performance standards.



02 Lane support systems

These address a range of fatalities from different road user groups that occur when a heavy truck unintentionally leaves its lane, including the occupants themselves particularly when they run off road, pedestrians, and other vehicle occupants when the heavy truck drifts onto a hard shoulder on motorways and collides with broken down vehicles, or other vehicle occupants when they collide with overtaking or oncoming vehicles when drifting out of lane. Effectiveness is proven in passenger cars. There is only a regulatory requirement for simple warning systems in heavy trucks, and several manufacturers offer more advanced systems as options.



03 Vision

This targets a sub-set of pedestrian and cyclist fatalities that occur during low-speed manoeuvres such as nearside turns (right in EU, left in UK) and moving off from rest, where blind spots are a contributory factor. These collisions occur almost exclusively in urban areas with the majority in major cities. A regulation will enforce minimum standards of Direct Vision through the windows from 2029, but has been controversial because operational requirements are a very significant factor in vision performance. All levels of Direct Vision from bad to excellent already exist in the market, so Euro NCAP will encourage operators to buy the best variant available for the job their vehicle needs to do. Where direct vision cannot help (e.g. to the rear of the cab, where operational needs mean tall cabs) camera monitor systems designed to replace mirrors in accordance with Regulation 46 can offer significant advantages over traditional mirrors, including larger field of view, reduced distortion, more intuitive orientation of images and monitor locations as well as dynamic views that adapt according to the manoeuvre the vehicle is undertaking (e.g. allowing sight of the rear of a trailer during a tight turn).



04 AEB nearside turn across cyclist path

This addresses the part of those low-speed manoeuvring crashes considered by direct vision that involve a heavy truck turning to the nearside across the path of a cyclist. However, it will address a greater proportion of those crashes than direct vision because in many cases, the cyclist approaches from behind the heavy truck and, at the critical moment, is positioned behind the cab where direct vision can't help. It also can be more effective than human intervention because of a potentially reduced reaction time. This is a brand new system unique to the heavy truck market and currently only offered by one manufacturer. It has strong potential to solve a high-profile collision problem, and there is clear scope for Euro NCAP to demand it performs well and increase its fitment.



05 **Motion inhibit**

This addresses the part of those low-speed manoeuvring crashes considered by direct vision that involve a heavy truck moving off from rest. It works the same way in collisions but, if a vulnerable road user is detected in the area in front of the vehicle, the driver is prevented from accelerating away. Such a system does not yet exist in the market, but a blind spot information system for this situation will be mandatory from 2024, and it is thought this will be a relatively straightforward extension to that system that will greatly improve effectiveness.

06 **AEB for vehicle front-to-rear**

AEB is a key and well proven Euro NCAP technology for cars. It has been mandatory on new heavy trucks since 2015, and the regulation governing this has recently been subject to a major upgrade that will come into force next year. Euro NCAP believes this leaves room for the best systems to exceed even this new regulation in terms of their robustness.

07 **Occupant status monitoring**

Inattentive driving is a major contributory factor to serious collisions of all types and heavy trucks are no exception. Truck drivers can be distracted and are more frequently impaired by fatigue. Systems that use cameras to monitor the driver, identify inattention and take action to reduce the risk, are being brought into Euro NCAP's passenger car rating and will be mandatory from 2026. There may be scope to encourage earlier fitment and exceed the regulatory standard, particularly in a professional driving context. There appear to be strong benefits from linking to fleet management systems that allow drivers struggling with fatigue to be identified and helped with softer interventions rather than just in-cab warning.

08 **Crash compatibility**

The single biggest group of fatalities from collisions involving heavy trucks is car occupants. There are differences between countries, but in many the largest group are killed in head-on collisions. Not only is there a large mass ratio to be contended with but the structures of heavy trucks are not very compatible with cars in terms of both geometry and stiffness. Front underrun protection regulations have been in place since 2003 to mitigate this, but the structural interaction remains far from perfect in several respects. There is still more that could be done, particularly where manufacturers offer 'elongated' cabins under the new weights and dimensions regulations for improving safety and environmental performance.

Similar issues occur at the rear of vehicles and less frequently the side, where protection is only designed to be effective for vulnerable road users and not car occupants. Devices intended to mitigate severity in these collisions will tend to be fitted by the body builders more commonly than the OEM.

09 **Passive pedestrian protection**

This will address the same group of crashes as AEB VRU, but in a different way. As good as it is, AEB will not avoid all frontal collisions with VRUs, and heavy trucks are not subject to regulation on their passive pedestrian protection in the ways cars are. Applying the principles from cars is certainly possible but not straightforward.

The near vertical of many heavy trucks significantly changes the distribution of injuries, the probability of damaging secondary impacts with the ground and being runover by the wheels and the same test procedures may no longer be appropriate. However, there is scope for encouraging improved shapes and kinematics, as well as energy absorption, particularly near the edges of the vehicle where AEB is less likely to be effective.

10 **Heavy truck occupant protection**

It is often the case that those outside the heavy truck suffer in collisions, but drivers still represent a substantial minority of fatalities. When it happens, it is usually a frontal collision with another heavy vehicle, or a single vehicle collision often involving rollover. Regulation demands a minimum standard of cab strength to ensure a basic survival space in simple pendulum tests and seat belts are mandatory – but nothing else. Manufacturers are thought to go far beyond this and undertake internal programmes of full-scale crash tests and to some degree, the kind of measures seen in cars, like a frontal airbag, are seen in heavy trucks. But, overall, they appear to remain well behind the best passenger vehicle occupant protection technologies.

In addition to these, several Euro NCAP staples are also relevant, such as **ISA (Intelligent Speed Adaptation)**, **Seat Belt Reminders** and **ISO 17840-compliant Rescue Sheets** for post-crash safety.

Some of these technologies are ready to go, with test procedures easily transferred from our passenger car scheme. Others will take time either for the technologies to develop among the industry and/or for Euro NCAP to develop the assessments.



08 The Truck Safe road map

Euro NCAP plans the same versatile and successful partnership approach to enhance the safety of heavy trucks, as it does already for the passenger car market.

Euro NCAP incentivises consumers to choose safer cars by integrating the performance of complex technologies into the 5-star rating and on a periodic basis increasing the performance requirements to encourage still better performance. These increased requirements are agreed with the vehicle manufacturers beforehand and are communicated to the industry by way of a 5-year roadmap, giving manufacturers lead time to integrate this in their development plans.

The roadmap produced here for heavy trucks endeavours to highlight technologies that are both cost-effective but also realistic in their implementation over the coming years.

“Advanced Driver Assistance technologies are now standard on most European cars and they are contributing to more than a 40% reduction in some crashes. Heavy trucks have the very same crashes but don’t have this technology fitted, leading to a disproportionate amount of casualties in crashes involving heavy vehicles.”

Matthew Avery, Chief Research Strategy Officer, Thatcham Research

	Provisional weighting	2024						2027			2030			
		Safe driving		Crash avoidance		Post crash	Safe Driving		Crash Avoidance	Crash Avoidance	Crash Protection			
		ISA	AEB Vehicle front-to-rear	LSS (Lane Support Systems)	AEB VRU	Direct Vision	AEB Nearside turn	Rescue sheets	OSM	Motion Inhibit	AEB Reverse	AEB turn across vehicle path	Passive PedPro	Crash compatibility
City Safe	VRU crossing	40%	🟡		🟡				🟡					🟡
	Stationary or walking VRU	5%	🟡		🟡	🟡			🟡					🟡
	VRU in collision with low speed manoeuvring heavy truck	20%			🟡	🟡	🟡		🟡	🟡				
	VRU in collision with a reversing heavy truck	5%							🟡		🟡			
	Car occupant in collision with a heavy truck	15%	🟡	🟡	🟡				🟡			🟡		🟡
	Heavy truck occupant in collision	5%	🟡	🟡	🟡			🟡	🟡			🟡		🟡
	PTW in collision with a heavy truck	10%	🟡	🟡					🟡			🟡		

	Provisional weighting	2024			2027			2030			
		Safe driving	Crash avoidance		Post crash	Safe Driving		Crash Avoidance	Crash Protection		
		ISA	AEB Vehicle front-to-rear	LSS	AEB VRU	Rescue sheets	OSM	AEB turn across vehicle path	Passive PedPro	Crash compatibility	Occupant Protection
Highway Safe	VRU crossing	5%	🟡		🟡			🟡			🟡
	Stationary or walking VRU	5%	🟡		🟡	🟡		🟡			🟡
	Car occupant in collision with a heavy truck	65%	🟡	🟡	🟡			🟡			🟡
	Heavy truck occupant in collision	15%	🟡	🟡	🟡		🟡	🟡			🟡
	PTW (Powered Two Wheeler) in collision with a heavy truck	10%	🟡	🟡				🟡			🟡

09

Who benefits from the rating?

Euro NCAP sees this as a partnership approach with all stakeholders interested in achieving Vision Zero. The approach needs to be 'win-win'. We believe the following stakeholders can gain from Euro NCAP's new Truck Safe rating.

Cities and road authorities

- > Lowering the barriers to develop schemes to incentivise 'safer vehicles' as part of wider safety strategies, by sharing the costs of developing tests and criteria across a membership organisation
- > Substantially increasing the influence of local schemes can have on global vehicle design through the development of a harmonised standard, while retaining the flexibility to set restrictions and/or incentives through mechanisms that work in local jurisdictions (e.g. financial incentives, contracting, road user charging etc.)

Freight shippers

- > An easy, internationally-recognised way of embedding requirements for safer vehicles in transport contracts
- > Clearly demonstrable progress towards Corporate Social Responsibility (CSR) targets
- > A way to identify carriers that care about their environmental impact

Freight carriers

- > Clear, simple information on vehicle safety
- > Transition, from the disruptive and expensive aftermarket requirements of several local schemes to an OEM integrated safety solution
- > International Harmonisation – 'City A' might require a different safety standard than 'City B' in order to qualify for their incentive scheme. With a ready to use safety rating system, freight shippers or road authorities can adopt one common standard, encouraging manufacturers to more quickly adopt safety technologies knowing that one solution fits all

Vehicle manufacturers

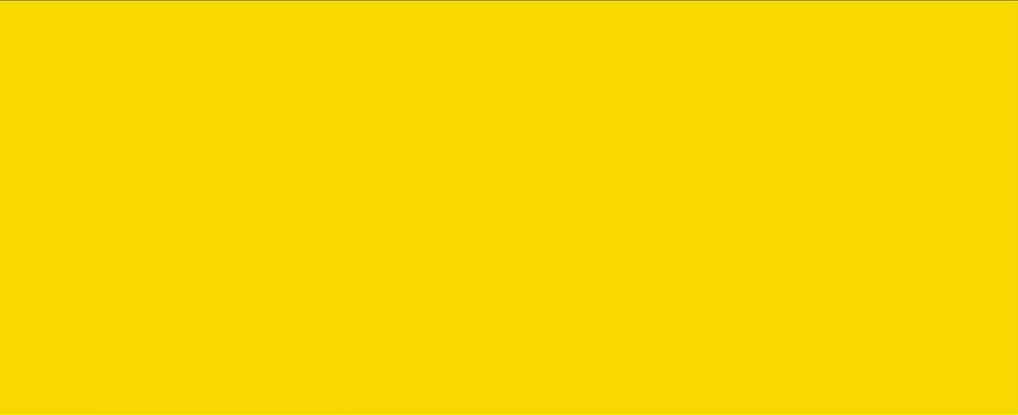
- > Create a market for safety – an environment where innovation and new and improved safety features are encouraged, which will ensure there is a mechanism for a steady stream of customers
- > Harmonisation and standardisation – a reduction in the demand for bespoke configurations or post-registration dealer fit systems that vary

Wider society

- > A safer freight industry that can sustain our society and prosperity with a much lower price in terms of casualties. A safer future for Europe

A safer freight industry that can sustain our society and prosperity with a much lower price in terms of casualties. A safer future for Europe.





www.euroncap.com
info@euroncap.com

Mgr. Ladeuzeplein 10
3000 Leuven
BELGIUM