



Euro NCAP calls on truck trailer manufacturers to save lives and voluntarily improve rear underrun protection

- › Industry urged to help prevent more than 400 fatal collisions a year and improve the safety of protection devices designed to stop cars sliding beneath the rear of trucks and trailers.
- › Matthew Avery, Euro NCAP's Director of Strategic Development, together with representatives from Germany's ADAC will present research findings at the UNECE Working Party on General Safety Provisions (GRSG), taking place in Geneva.
- › Euro NCAP calls on both trailer and truck manufacturers to encourage the adoption of improved rear under run protection structures voluntarily, rather than waiting for regulatory change.

HANNOVER, GERMANY – At this year's IAA Transportation show, Euro NCAP is calling on Europe's truck and trailer manufacturers to take immediate action on rear underrun protection, with voluntary upgrades and retrofit solutions that can save lives.

Following Euro NCAP's hard-hitting research and testing (revealed in June) of the safety protection fitted to the rear of trucks and trailers in Europe, Matthew Avery, Director of Strategic Development for Euro NCAP, will soon present the organisation's findings to global vehicle regulators and call for urgent regulatory review.

At the 132nd session of the United Nations Economic Commission for Europe (UNECE) Working Party on General Safety Provisions (GRSG), taking place in Geneva from 28 September, Euro NCAP will outline how the equivalent underrun protection advocated by IIHS-HLDI in the US are significantly more effective than those in Europe, and reduce the likelihood of this common type of accident from proving fatal. The GRSG, a subsidiary of the World Forum for Harmonisation of Vehicle Regulations (WP.29), prepares draft regulatory proposals on general vehicle safety.

Euro NCAP is urging industry to seize the opportunity to act ahead of regulation. Regulatory updates can take many years to develop and implement, while proven safety solutions are already available today. Voluntary action offers a unique opportunity to accelerate the introduction of safer solutions, demonstrate industry leadership and help prevent hundreds of deaths on Europe's roads each year.

Revisiting trailer rear underrun test results: a double failure in road safety

The testing programme was supported by the UK's National Highways and Department for Transport, alongside international partners including Germany's ADAC, Sweden's Trafikverket and the US Insurance Institute for Highway Safety (IIHS) exposed critical

vulnerabilities that contribute to an estimated 400 fatal trailer rear underrun collisions across Europe every year.

Rear underrun collisions occur when a passenger car impacts the back of a heavy trailer and slides underneath it. In these scenarios, the trailer bed acts like a guillotine, directly impacting the passenger compartment and bypassing the car's engineered crumple zones and restraint systems.

The testing campaign evaluated real-world physical impacts alongside crash avoidance technologies. It revealed:

- › **Trailer Rear Underrun Protection Failure:** When crash-tested at 56 km/h (35 mph), European trailer rear guards built to the current mandatory UN standard failed structurally. The guards buckled, allowing even five-star rated passenger vehicles to slide underneath and suffer catastrophic damage.
- › **ADAS detection gaps:** While vehicles equipped with early-generation Advanced Driver Assistance Systems (ADAS) successfully detected standard laboratory targets every time, detection rates dropped significantly when facing real commercial vehicles, such as skeletal or curtainside trailers. While next-generation ADAS hardware and software will steadily improve detection capabilities as new vehicle fleets roll out, Euro NCAP notes that with the average age of passenger cars continuing to rise, it will take more than 15 years for crash-avoidance technology to significantly mitigate this issue.

Why US voluntary underrun protection offers the blueprint for a solution

During comparative testing against trailers with rear underrun barriers built to the voluntary US IIHS TOUGHGUARD benchmark, the guard held firm under identical impact conditions. By resisting the energy of the impact, the US-spec bar allowed the passenger car's front crumple zones and airbags to deploy as intended, protecting occupants.

Modifying European trailer specifications to match the protection structures as exemplified by IIHS offers a blueprint for a solution for European industry to make a significant difference to road safety. Just as new ADAS features are phased into consumer cars, upgraded underrun protection must be rapidly phased into commercial truck and trailer fleets. Regulatory updates take time – time that road users do not have.

We applaud the next step conversations in the UNECE working groups. But legislation should set the floor, not the ceiling. We know why these fatalities happen, and thanks to the IIHS leading voluntary solution already adopted in the US, we know how to fix them. We are calling on European trailer builders and heavy transport fleets to step up now. There is no reason to wait for legal mandates when simple, voluntary changes to trailer rear guard designs can start saving lives on our roads immediately. This is a real opportunity for industry to prevent deaths on European roads and meet Vision Zero targets.

— Matthew Avery, Director of Strategic Development Euro NCAP

Editor's note

For full results, visit www.euroncap.com or [Euro NCAP's newsroom](#) for journalists.
For media information, please contact **Cordelia Wilson** at media@euroncap.com.

Follow and share



About Euro NCAP

Euro NCAP carries out safety assessments on new cars, trucks and vans, offering consumers, policymakers and industry realistic and independent insights into the safety performance of some of the most popular vehicles sold in Europe. Established in 1997 and backed by several European Governments, motoring, consumer and insurance organizations, Euro NCAP has rapidly become a catalyst for encouraging significant safety improvements to new vehicle design.

Euro NCAP ratings strictly apply to vehicles of the specifications offered in Europe. The ratings do not necessarily apply to models offered in other regions, even when sold under an identical name, as production specification and equipment may vary.