



European
Automobile
Manufacturers
Association

ACEA Position Paper End-of-Life Vehicles Directive: potential inclusion of trucks and buses



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EXECUTIVE SUMMARY

The European Automobile Manufacturers' Association (ACEA) would like to contribute to the ongoing discussions on the evaluation of the End-of-Life Vehicles (ELV) Directive (2000/53/EC), and more specifically on the potential inclusion of heavy-duty vehicles (HDVs), ie trucks and buses.

Ever since the ELV Directive was implemented back in 2000, trucks and buses have been kept outside of its scope, which is limited to the M1 and N1 vehicle categories.

ACEA would like to take this opportunity to elaborate on manufacturers' current efforts with regard to the end of life of trucks and buses. This paper also explains why the situation of HDVs is not comparable to that of passenger cars. Indeed, the automobile industry believes that an extension of the Directive's scope to trucks and buses is not the right solution going forward, especially with the circular economy and the competitiveness of our industry in mind.

COMPLEXITY OF HEAVY-DUTY VEHICLES

Each heavy-duty vehicle is tailored to fulfil specific commercial needs for the transportation of goods and/or people. Hence, there are literally thousands of different HDVs and, unlike in the passenger car segment, there are no 'standard' vehicle models.

Moreover, generally speaking a truck is not a finished vehicle when it leaves the manufacturer's production line. Body builders complete these vehicles with a wide variety of special purpose equipment (cranes, concrete pumps, refrigerator units, etc) needed to fulfil the specific task of a vehicle. Those body builders are often small and medium sized enterprises (SMEs).

The situation is similar for buses, as manufacturers deliver the vehicle chassis (including the driveline) for completion to specialised body makers, many of which are also SMEs. Customers buying buses usually decide on the interior components (like seats, ticket-vending machines, etc) themselves. In other words, manufacturers do not have the choice to use other components (as they are a mandatory part of the tender).

This means that up to three different companies (chassis manufacturer, body manufacturer and professional customer) are responsible for different components of the completed vehicle, which creates a very complex situation when it comes to the producer's responsibility at the end of life of a truck or a bus.

Furthermore, trucks are often retooled by vehicle operators during their long service life. For example, a long-haul truck might be converted into a distribution truck by a body builder after some years of long-haulage operation when reliability is decreasing, and the truck no longer meets the customer's uptime requirements.

Should the scope of the ELV Directive be extended to completed HDVs, recycling targets cannot be set due to the sheer magnitude of customised solutions and the fact that many vehicles are re-built or converted during their service time.

Certain types of trucks (such as long-haul ones) are exclusively designed for the transport of goods using trailers. However, these vehicles represent a specific type (known as category O) that is not produced by truck manufacturers.

MARKET VOLUMES, MILEAGE AND LIFETIME

Heavy-duty trucks and buses (categories N₂, N₃ and M₂, M₃) are sold in low volumes (425,150 vehicles across the entire EU in 2018) when compared to passenger cars (15.2 million units). Moreover, due to their very different usage patterns, the lifetime mileage of heavy-duty vehicles is usually much higher than that of passenger cars.

Trucks and buses are also highly-valuable products that are popular on the second-hand market. This makes them a natural part of the circular economy based on market-driven parameters, ie these vehicles and their components are already being re-used to a large extent. HDVs are used for commercial purposes and reach a longer lifetime than cars. Most of them, after spending the first part of their life in Europe, are still used for a long time in other world regions, where second-hand vehicles are imperative to the development of those countries.

Due to their effective re-use and recycling, as well as the low volumes, only a small number of trucks and buses are scrapped (ie being waste that ends up in landfills) in Europe. Consequently, the relevance of the environmental impact of trucks and buses is limited compared to other consumer goods.

DURABILITY AND REPARABILITY

Given that trucks and buses must perform under extreme conditions and need to have a reliable uptime, durability and reparability are prerequisites for customers. To that end, many manufacturers offer maintenance and repair contracts to ensure the proper performance and a long lifespan of these vehicles. So, also from a design perspective HDVs need to be easily repairable.

For example, manufacturers of trucks and buses provide special maintenance contracts for 'leasing' expensive truck components (starter motor, ECU, pumps, clutches, retarders, gearboxes, silencer, etc) which protect customers from high repair costs and allow for the profitable re-manufacturing of HDV components. In addition, these contracts also promote the development of reliable and durable components and the minimisation of waste.

RE-MANUFACTURING AND RECYCLING

In addition to entire vehicles, parts for trucks and buses are also often re-manufactured many times – think for example of engines and transmissions. Such parts and vehicles are used and sold as new, with guarantees.

As a heavy-duty vehicle becomes older, the fact that it consists for at least 80% of steel and iron, makes the materials used in these vehicles very attractive and suitable for recycling. The re-use and

recycling of trucks and buses is a highly profitable business driven by market forces. As a result, high recycling rates are already a reality.

Industry believes that the re-use and recycling of second raw materials is important as well. In fact, this is already part of the business models of many vehicle manufacturers today. Throughout the 19 years that HDVs have been outside the scope of the ELV Directive, the vehicle recycling industry has handled, treated and de-polluted trucks and buses in a way similar to passenger cars and thus basically already applies existing environmental legislation to HDVs.

PHASING OUT OF HAZARDOUS SUBSTANCES

All vehicle manufacturers operating in the EU must fulfil the requirements of the REACH Regulation in terms of the restriction, or even prohibition, of potentially dangerous materials and substances. REACH applies to (the chemical composition of) all products put on the European market, including trucks and buses. Manufacturers of heavy-duty vehicles are already phasing out heavy metals on a voluntary basis whenever that is technically and economically possible.

One example is the substitution of hexavalent chromium salts in surface treatments and mercury (with the exception of head lights). However, an important difference when comparing trucks and buses with light-duty vehicles is that HDVs have to operate under more extreme conditions (higher temperatures and more vibrations for example) and are often operated around the clock. These higher technical specifications cannot always be fulfilled without the use of heavy metals.

As heavy-metal substitution has become an important part of manufacturers' material strategy, the automobile industry is consequently reducing the use of heavy metals as much as possible, also for heavy-duty vehicles. The heavy-metal restrictions and exceptions set out in the ELV Directive are adapted to the specifications of passenger cars. The situation for heavy-duty vehicles, however, has not been assessed to the same extent and may differ from passenger cars.

ACEA members fully accept their responsibility as producers and proactively work to stimulate the reuse, repurposing and recycling of trucks and buses. As demonstrated, a continuation of the 19-year-old exclusion of trucks and buses from the ELV Directive would not change that. Industry therefore would like to emphasise that the environmental relevance and benefits – in addition to the possible technical and economic implications – of extending the existing regulation to HDVs must be fully understood before mandating additional measures.

CUSTOMER DEMAND

Today, the Green Public Procurement process already sets requirements for city buses and garbage trucks, for example, when it comes to phasing out heavy metals and other substances of very high concern. This also applies to customers in the EU defence sector which have similar procurement requirements for military transport solutions.

The majority of truck and bus manufacturers are also selling modified HDV diesel engines for use in

construction equipment, non-road mobile machinery, power generators, ships and vessels. Some of those engine applications are part of the scope of the RoHS Directive since July 2019, which has led to customer requirements regarding compliance with heavy-metal and other substance restrictions under RoHS for the engines concerned. Since HDV engines form the basis for those industrial engines, the heavy-metal substitution process triggered by the RoHS Directive also leads to RoHS-compliant engines for trucks and buses.

Because of the Ship Recycling Regulation (1257/2013/EU), the use of heavy metals and other substances of concern must be reported by manufacturers of marine engines (ie modified HDV engines) as part of the inventory of hazardous materials (IHM) already today.

DISMANTLING INFORMATION FOR TRUCKS AND BUSES

Heavy-duty vehicle producers are providing dismantling manuals for trucks and buses on a voluntary basis. Those manuals contain information on how to safely de-pollute HDVs before components are further dismantled. Manufacturers also provide an overview of which materials are used in which (bigger) parts. Moreover, (polymer) parts are also voluntarily being marked with material symbols (VDA 260).

4 key recommendations for a possible revision of the ELV Directive:

1. With regard to trucks and buses, the scope of the ELV Directive should be kept limited to vehicle categories M1 and N1.
2. The recycling of trucks and buses is a highly profitable business, which is driven by market forces. It therefore does not need to be ruled by legislation.
3. When considering to extend the scope of the ELV Directive, this must have a demonstrated added value of improving waste management and helping to make the recycling business more profitable than it is today. In any case, it is necessary to carefully evaluate whether enforced recycling would come at the expense of other environmental aspects, or even lead to a trade off with other resources.
4. A heavy-metal restriction is not needed. The automobile industry is already actively reducing the environmental impact of heavy-duty vehicles by decreasing the use of heavy metals in line with its material strategies. Given that REACH applies to HDVs, and that industry is voluntarily substituting heavy metals, more legislation to prohibit materials and substances used in trucks and buses is unnecessary.



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ABOUT THE EU AUTOMOBILE INDUSTRY

- 13.8 million Europeans work in the auto industry (directly and indirectly), accounting for 6.1% of all EU jobs.
- 11.4% of EU manufacturing jobs – some 3.5 million – are in the automotive sector.
- Motor vehicles account for €428 billion in taxes in the EU15 countries alone.
- The automobile industry generates a trade surplus of €84.4 billion for the EU.
- The turnover generated by the auto industry represents over 7% of EU GDP.
- Investing €57.4 billion in R&D annually, the automotive sector is Europe's largest private contributor to innovation, accounting for 28% of total EU spending.

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