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EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT

Accompanying the document

Proposal for a Directive of the European Parliament and of the Council

amending Council Directive 96/53/EC laying down for certain road vehicles circulating within the Community the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic

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A. Need for action

What is the problem and why is it a problem at EU level?

Directive 96/53/EC sets the maximum authorised weights and dimensions of commercial heavy-duty vehicles (HDVs) operating within the EU. By establishing these common standards, the Directive aimed to ensure that HDVs do not exceed limits that can compromise road safety, infrastructure and the environment and that road transport operators can compete on an equal footing in the internal market. The subsequent targeted amendments to the Directive aimed to improve the energy and operational efficiency of road transport operations. This was done by introducing certain derogations from the maximum authorised weights and dimensions of vehicles and vehicle combinations, in order to encourage the uptake of alternatively fuelled powertrains, improve vehicles' aerodynamics and ensure interoperability with other modes of transport.

The Directive was subject to an *ex post* evaluation performed 'back-to-back' with the impact assessment. The evaluation found that the Directive was only partially successful in achieving its objectives. While it facilitated cross-border transport and removed some technical barriers, national derogations and ambiguities in certain provisions created diverging national rules and practices and fragmented the internal market, in particular with regard to the use of heavier HDVs and European Modular Systems (EMS - longer and/or heavier combinations of standard vehicle units). The patchwork of national rules and derogations, together with bilateral arrangements between some Member States, brought legal uncertainty as to the rules applicable to cross-border transport and made enforcement ineffective and inconsistent. The Directive had a very limited impact on sustainability, as the incentives for the uptake of alternatively fuelled vehicles including zero-emission vehicles (e.g. extra weight to accommodate zero-emission technologies) and aerodynamic devices (e.g. extra length to accommodate rear flaps) appeared insufficient. The Directive also failed partially to promote efficiently intermodal operations, mainly due to internal and external inconsistencies of the Directive, including inconsistency with the Combined Transport Directive.

Without EU action, the inconsistent application and weak enforcement of the Directive would continue and the regulatory limitations on innovation and the mismatch with technological advancements would hamper the deployment of vehicles and operational schemes that are more efficient, sustainable and compatible with other modes of transport. Given the cross-border dimension of the economic, social and environmental impacts of commercial road transport operations, improving the Directive to address the identified problems has clear EU relevance.

What should be achieved?

In line with the European Green Deal and the EU internal market goals, this initiative aims to improve the energy and operational efficiency of road transport operations by HDVs and ensure the free movement of goods and fair competition on the internal road-transport market. This should be achieved by: (a) removing barriers to the uptake of zero-emission vehicles (ZEV) and energy-saving devices and incentivising intermodal transport; (b) harmonising the rules on maximum weights and dimensions of HDV in cross-border operations; and (c) improving the enforcement of the rules. The revised Directive will provide for a stable and more suitable regulatory framework that takes into account the specific needs of different types of transport operations while ensuring a high level of safety, the protection of infrastructure and the need for a reduction of greenhouse gases and pollutant emissions from the transport system.

What is the value added of action at the EU level (subsidiarity)?

The evaluation of the Weights and Dimensions Directive confirms the added value of EU action in establishing common standards for HDVs travelling on EU roads. However, shortcomings in the Directive, including legal loopholes and outdated standards, hamper broad deployment of decarbonisation technologies and improvements in operational efficiency in cross-border transport. Lack of coordinated EU action would lead to further market fragmentation, competitive distortions, and discriminatory control practices. All this would weaken incentives to deploy zero-emission vehicles and energy-efficient technologies. Initiatives at the national, local, and sectoral levels will not be sufficient

to address EU-wide problems and their underlying drivers or to meaningfully contribute to achieving decarbonisation targets. The revision of the Directive will maintain the Member States' prerogative to develop solutions tailored to specific infrastructure and local circumstances.

B. Solutions

What are the various options to achieve the objectives? Is there a preferred option or not? If not, why?

Three policy options (PO-A, PO-B, PO-C) have been designed to address the problems and problem drivers identified during the evaluation and impact assessment. All policy options contain decarbonisation, harmonisation and enforcement measures to help achieve the objectives of the initiative, although with a different level of effectiveness and efficiency.

PO-A includes seven policy measures that are common to all policy options. PO-A harmonises the conditions for cross-border operations by heavier and/or longer vehicles (44-tonne vehicles and EMS) between Member States that allow such vehicles in their territories in accordance with national derogations. By increasing weight and length limits to accommodate zero-emission (ZE) technologies, it ensures that ZE HDVs do not lose payload compared with conventional internal combustion engine HDVs, which will incentivise the uptake of zero-emission technologies. It also facilitates the carriage of high-cube containers for intermodal transport. Finally, it strengthens enforcement somewhat by setting a minimum number of checks per million vehicle-kilometres and provides minimum requirements for Member States willing to implement intelligent access policies, so as to ensure the harmonisation and interoperability of these schemes across the EU.

PO-B goes further in supporting the transition to zero-emission HDV fleets through economic incentives, such as enabling additional loading capacity for HDVs with zero-emission powertrains or HDVs involved in intermodal (non-containerised) operations. This policy option introduces the target date beyond which heavier HDVs (44 tonnes), allowed by PO-A to be used in cross-border transport, must be zero-emission, but can circulate all throughout the EU. PO-B harmonises the authorisation requirements and administrative procedures for cross-border transport by certain longer/heavier vehicles (e.g. for carriage of indivisible loads) and introduces mandatory weight control equipment (i.e. Weigh-in-Motion system (WIM)) to be installed in road infrastructure for more efficient enforcement.

PO-C aims at the highest level of harmonisation, decarbonisation and enforcement but comes with stronger EU regulatory action than the other two options. It extends the operational domain for EMS to the whole EU territory, which must be zero-emission and/or involved in intermodal operations, imposing at the same time higher vehicle safety standards and stricter driver's qualifications requirements. This policy option entails the highest infrastructure maintenance costs for Member States' authorities and imposes additional compliance costs on operators using modular systems.

Based on the comparison of the policy options in terms of effectiveness, efficiency, coherence, subsidiarity and proportionality, **PO-B is the preferred option.** It provides for the right balance between achieving the desired objectives effectively while ensuring that the measures proposed under this policy option do not go further than what is necessary to resolve the problem efficiently.

What are different stakeholders' views? Who supports which option?

The stakeholders broadly supported the measures common to all policy options, which include increasing maximum weights and dimensions of HDVs to compensate a weight and size of zero-emission technologies and authorising cross-border transport by heavier/longer vehicles between neighbouring Member States that allow the same standards. The authorities and industry representatives considered those measures as well as the harmonisation of vehicle carrier loaded length, and establishing a minimum level of checks of HDVs' weight as the most important measures for decarbonisation, harmonisation, and enforcement. However, a few Member States and rail/intermodal transport stakeholders showed some resistance to allowing cross-border long-distance operations by heavier/longer HDVs (supported greatly by PO-C) due to concerns regarding the impact on road infrastructure and possible modal backshift from rail to road. The stakeholders particularly welcomed additional greening incentives contained in PO-B, such as allowing a maximum extra

weight of 4 tonnes irrespective of the weight of ZE technology and considering trailers and semitrailers as intermodal transport units. Harmonisation and simplification of administrative procedures concerning the permits for abnormal transport operations (in PO-B) were also strongly supported by stakeholders.

C. Impacts of the preferred option

What are the benefits of the preferred option (if any, otherwise main ones)?

PO-B is expected to bring adjustment cost savings (related to the maintenance of road infrastructure) for **national public authorities,** estimated at EUR 3 billion expressed as present value over 2025-2050 relative to the baseline. The costs savings are driven by the decrease in the number of trips relative to the baseline (due to the increase in payload), the shift from road-only to intermodal transport and the reduction in the frequency and severity of overloading practices. In addition, the administrative cost savings for national public authorities are estimated at EUR 22.8 billion. They are driven by the implementation of the one-stop-shop systems at national level and thus cost savings in processing permit requests, and the reduction in the number of manual/roadside checks enabled by the WIM systems. Total cost savings for national public authorities are estimated at EUR 25.8 billion, expressed as present value over 2025-2050, relative to the baseline.

Road transport operators would benefit from adjustment costs savings estimated at EUR 42.8 billion expressed as present value over 2025-2050 relative to the baseline. They are linked to the reduction in the operation costs and the reduced time required for cooperating with the public authorities for manual/roadside weight checks. The reduction in operation costs is driven by the increase in the average payload and the reduction in the number of trips (due to the extra length and weight to accommodate ZE technologies, the harmonisation of the maximum permitted weight of 5- and 6-axle HDV in cross-border transport, allowing cross-border transport of 44 tonnes and EMS between 'allowing' Member States and harmonisation of the loaded length of vehicle carriers), and by the shift from road-only to intermodal operations (due to the alignment of the definition of intermodal transport with the Combined Transport Directive). In addition, road transport operators benefit from the elimination of permits for the use of higher trucks to accommodate high-cube containers in intermodal transport (EUR 3.2 billion, expressed as present value over 2025-2050 relative to the baseline), and from the reduction in the time needed to prepare and submit requests for the issuance of special permits for the transport of indivisible loads (EUR 1.2 billion expressed as present value over 2025-2050 relative to the baseline) enabled by the application of the one-stop-shop principles at national level and the digitalisation of documents. Total costs savings for road transport operators are estimated at EUR 47.3 billion expressed as present value over 2025-2050 relative to the baseline.

PO-B is expected to bring external cost savings for CO_2 emissions (estimated at EUR 3.5 billion expressed as present value over 2025-2050 relative to the baseline), for air pollutant emissions (EUR 2.1 billion) and noise emissions (EUR 0.7 billion). They are enabled by the greater use of ZE HDVs, the shift to intermodal transport and the decrease in the number of trips (due to the increased payload). PO-B is also expected to result in a reduction of the external costs of fatalities of roughly EUR 0.9 billion, enabled by the shift to intermodal transport and the decrease in the number of trips.

What are the costs of the preferred option (if any, otherwise main ones)?

PO-B is expected to lead to adjustment costs for **national public authorities** estimated at EUR 4.3 billion expressed as present value over 2025-2050 relative to the baseline. They cover the maintenance of road infrastructure due to the extra weight allowance for ZEV, the updating of the inventory of bridges and tunnels, the implementation of the one-stop-shop principle at national level and the deployment of Weigh-in-Motion systems every 300 km in the TEN-T network. In addition, national public authorities will be faced with administrative costs of EUR 16.4 million for the maintenance and management of the one-stop-shop systems at national level. Total costs for national public authorities are estimated at EUR 4.4 billion expressed as present value over 2025-2050 relative to the baseline. Overall, considering the costs and costs savings, PO-B results in **net costs savings for national public authorities** of EUR 21.5 billion.

For **road transport operators**, PO-B is expected to lead to adjustment costs estimated at EUR 2.1 billion due to the reduction in overloading practices. Operators that were previously operating overloaded trucks will now have to comply with the weight limits and more vehicle-kilometres will be required to transport the same quantity of goods. This will affect transport operators which were operating under infraction. PO-B results in **net cost savings for road transport operators** estimated at EUR 45.1 billion, expressed as present value over 2025-2050 relative to the baseline.

What are the impacts on SMEs and competitiveness?

The preferred policy option is expected to have a positive impact on the competitiveness of SMEs, which constitute the great majority of the commercial road transport sector (99% of the road transport operators are SMEs). In particular, SMEs engaged in cross-border as well as intermodal operations will benefit from measures helping to improve operational and energy efficiency and facilitating the transition to zero-emission operations. **Net cost savings for road transport operators** are estimated at EUR 45.1 billion, expressed as present value over 2025-2050 relative to the baseline.

Will there be significant impacts on national budgets and administrations?

Total costs for national public authorities are estimated at EUR 4.3 billion expressed as present value over 2025-2050 relative to the baseline. The major cost element of the preferred policy option (around 96% of the total costs) for Member States administrations is represented by adjustment costs linked to the maintenance of infrastructure. However, considering both costs and cost savings, PO-B is expected to result in **net costs savings for national public authorities** of EUR 21.5 billion.

Will there be other significant impacts?

The initiative may also help alleviate the acute problem of the shortage of professional drivers, in particular in long-haul operations. The operations by heavier/longer vehicles enabling the carriage of the same amount of cargo with fewer vehicle-trips, more efficient roadside checks and faster administrative procedures for abnormal transport will help optimise the use of the working time of drivers and the usage of vehicles. In addition, the uptake of zero-emission vehicles equipped with the latest safety standards and improved comfort of cabins may help improve the image of the profession and attract young people and women to work in the sector.

Proportionality

The preferred policy option is assessed to be the most proportionate option to what is necessary to reach the overall policy objectives.

D. Follow up

When will the policy be reviewed?

No review is planned at this stage.