IRU Position on the European Commission proposal for a Regulation on CO2 emissions performance standards for new Heavy Duty Vehicles

Technical analysis and IRU recommendations to European legislators on the European Commission proposal for a Regulation on CO2 Emissions Performance Standards for new Heavy Duty Vehicles.

I. GENERAL

On 17 May 2018, the European Commission (EC) published a proposal for a new regulation on CO₂ emissions performance standards for new Heavy Duty Vehicles (HDVs), with four road freight vehicle categories within the scope.

IRU supports the EC in developing HDV CO₂ emissions reduction standards as one important measure to help the heavy-duty road transport sector decarbonise. It is welcome that CO₂ standards are regulated at the European level in order to avoid market fragmentation and to ensure regulatory stability across the European market.

Reducing CO₂ emissions from the road transport sector is not only important to meet the European and global CO₂ emissions reduction goals, but reducing fuel consumption is also inherently in the interests of road transport operators. They have a strong business incentive to use more fuel efficient trucks and the proposed regulation should help ensure that the average truck is equipped with fuel efficient technologies. It is however important that this shift reflects market trends and is cost-effective without a disproportionate financial impact on road freight transport operators. Therefore IRU supports allowing manufacturers a certain level of flexibility in order to ensure that emissions reductions are achieved in the most cost-effective manner.

II. TARGET LEVEL

IRU supports the proposed target levels of 15% for 2025 and an aspirational 30% for 2030 as a catalyst to encourage further rollout of fuel efficient technology. In the 2025 timeline, it is crucial that this target can be met using already available technologies in order to maintain cost-effectiveness of vehicles. It is essential that the standards do not push manufacturers to invest heavily in technologies or vehicles that do not reflect market demand for reasons of pricing or operational suitability. For example, a higher target could encourage large-scale investment into zero-emission vehicles (ZEV) which are currently unaffordable to transport operators.

For this reason, and as this is the first time that the EU will have CO₂ standards for trucks, IRU supports a cautious approach to setting the target levels. In addition, it remains to be seen in practice how the standards will impact the price of vehicles and to what extent operators will be able to pass on these costs. The 2022 revision should be used to address these questions and to evaluate the impact that standards have on the production of vehicles.
III. SUPER-CREDIT SYSTEM

IRU can support a super-credit system as it offers manufacturers added flexibility in meeting the targets and should incentivise investment into new innovative technologies. This system is more appropriate than a ZEV mandate which would be too constrictive in terms of vehicle choice. However, the application of the 3% cap is essential as this system should not lead to a trade-off between investment in electrification technology and further improvement of ICE vehicles and should not significantly weaken the level of ambition. There must be a balance between enabling and encouraging innovation while ensuring continued improvement to the most utilised vehicles currently. The EC should be granted the power to monitor the development of the electric vehicle market and make adjustments to the cap if necessary.

In addition, there should be a recognition that it will be much more challenging to produce ZEV for the long-haul duty cycle subgroup. A staggered application of the multiplier effect depending on range, whereby long-haul vehicles would have a higher value, could be a way to ensure investment into this subgroup. This would have the effect of ensuring investment into this challenging group is not discouraged as well as recognising that, relatively, long-haul vehicles have a greater impact on reducing CO₂ emissions.

Secondly, the current definition of a low-emission vehicle (LEV) (350g CO₂/km) is only achievable with short range vehicles and therefore ignores the long-haul category. There should be a more realistic and tailored definition of LEV so as to incentivise investment into energy efficient technology across all ranges of vehicles.

Finally, IRU does not follow the logic of allowing vehicles that fall outside the four VECTO categories, particularly buses, to be counted towards meeting the targets, as the focus of this legislation is trucks. Such a clause would weaken the incentive to invest in more fuel efficient trucks. This is particularly the case as the market for ZEV buses is significantly further advanced than it is for trucks. Finally, this mechanism could lead to unfair competition as not all European manufacturers produce buses. Therefore, IRU would suggest to remove the possibility for non-VECTO class vehicles to be included.

IV. TANK-TO-WHEEL METHODOLOGY

IRU does not support the proposed Tank-To-Wheel (TTW) approach to measuring emissions and to defining ZEVs and LEVs as it does not capture the full emissions picture. A TTW approach defines vehicles running on electricity as zero-emission while ignoring the energy source, and at the same time risks downplaying the role that blended renewable liquid and gaseous fuels can also play in decarbonising transport. In the latter case, the emissions reduction takes place before reaching the vehicle tank. The concept of a zero-emission vehicle is also misleading as it ignores pollutant emissions generated through tire and brake usage as well as road abrasion.

IRU is concerned that by basing the standards on TTW, manufacturers are being encouraged to invest more in ZEVs at the expense of ICE vehicles that could in fact be contributing to emissions reduction by using blended renewable liquid and gaseous fuels. Operators are likely to remain heavily dependent on ICE technology for decades to come as there are currently only limited alternative fuel options to replace diesel, therefore this technology must be improved. Legislation must take a technology neutral approach and recognise that there is no silver bullet for reducing CO₂ emissions from heavy-duty road transport. A mix of options will be needed in order to cater to the range of different vehicles, operations and missions. A link should be ensured between legislation on vehicles, fuels and infrastructure.

The 2022 revision should be used as an opportunity to further explore moving towards a Well-To-Wheel (WTW) approach for the 2030 target timeframe. An intermediate solution could be a ‘Carbon Correction Factor’ taking into account the amount of renewable liquid and gaseous fuels sold nationally at fuel stations and adjusting the CO₂ targets accordingly. This would ensure continued incentives for the production of ICE vehicles capable of running on blended renewable fuels.
V. **SCOPE**
IRU supports the stepwise approach to first apply standards to the categories which represent the majority of the market, however, there is a concern that high-performance vehicles may be disadvantaged. Therefore, a ‘heavy haulage’ mission category should be added as a dedicated subgroup in Annexe 1 in order to reflect the role of longer and heavier vehicles. Production of these vehicles should not be discouraged as they increase the efficiency of road freight transport and therefore contribute to reducing CO₂ emissions.

VI. **VECTO TOOL**
It must be ensured that the VECTO tool is continually developed and updated to include new fuel efficient technologies. Including the most recent technologies in VECTO will ensure that it does not act as a market barrier to innovation. A clear timeline should be established outlining this trajectory in order to provide clarity to the industry.

The 2022 revision should also be used to provide clarity as to when CO₂ standards will be extended to other vehicle classes.

VII. **TESTING**
It is essential that operators can have confidence in the CO₂ emissions data provided in the VECTO certificate, therefore sufficient testing will be necessary to ensure this. There are some questions as to how in-service conformity of production testing could work in practice given the complex chain of production which spans well beyond the final manufacturer. Further clarification will be needed, primarily to ensure that this does not impose a burden on operators if it occurs after the sale of a vehicle.

It is also important that there is a measurement of real-world emissions data in order to establish whether the trend of reductions matches that stated through VECTO. It must however be understood by all parties that this data will not directly correlate with VECTO figures as the testing conditions can never be replicated. A fuel meter would be an acceptable way to achieve this as long as the data privacy concerns of operators are respected.

VIII. **DEMAND-SIDE MEASURES**
While recognising the important role standards will play in bringing more fuel efficient trucks to the market, IRU calls for an integrated approach also recognising the need for demand-side incentives for operators. Due to the competitive and fragmented nature of the road freight transport market, transport operators face significant market barriers to the uptake of more expensive vehicles as a result of limited access to finance. They face very constraining business models wherein payback periods for new purchases should remain under two years.

Considering this context, it must be ensured that there is an enabling investment environment to drive fleet renewal and uptake. This can be achieved through an incentive structure including differentiation in road-user charging, fuel taxation and vehicle taxation.

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