

NGVN response to the Consultation on amendments to permissible vehicle weights and dimensions, including to incentivise cleaner fuel technologies, and other associated proposals.

This response is from The Natural Gas Vehicle Network (NGVN). NGVN represents participants from across the Natural Gas Vehicle (NGV) industry supply chain that play a role in the use of gas as a transport fuel, including network operators, infrastructure providers, vehicle manufacturers, fuel providers and logistics companies. The Network also works with Government and other agencies to develop the framework, within which the industry will operate.

Q.1 Which option, 1 or 2, do you prefer?

NGVN believe that option 2 is the most practical model and would maximise the benefits from the amendments. Option 2 would cover a greater number of vehicles and would also allow for domestic gas vehicle operators to benefit from the changes.

Due to this all our answers below will be in relation to option 2.

Q.2a) What are your views on the anticipated benefits (e.g. economic, environmental, congestion, safety) that:

NGVN believes that the benefits of enacting option 2 will encourage wider sectors of the economy to adopt gas vehicles. Up to now the extra weight has prevented them from doing so. For example, the highest levels of pollution and carbon emissions come from vehicles with the heaviest payloads. A number of companies involved in moving oil and chemicals would have switched to gas powered road tankers if this Directive had been enacted, which allows the additional load of low emission technology to be carried without penalising payload.

Gas vehicles make 50% less noise than their diesel equivalents which would enable them to be more acceptable for night time deliveries. This could reduce daytime heavy goods traffic in congested city centres.

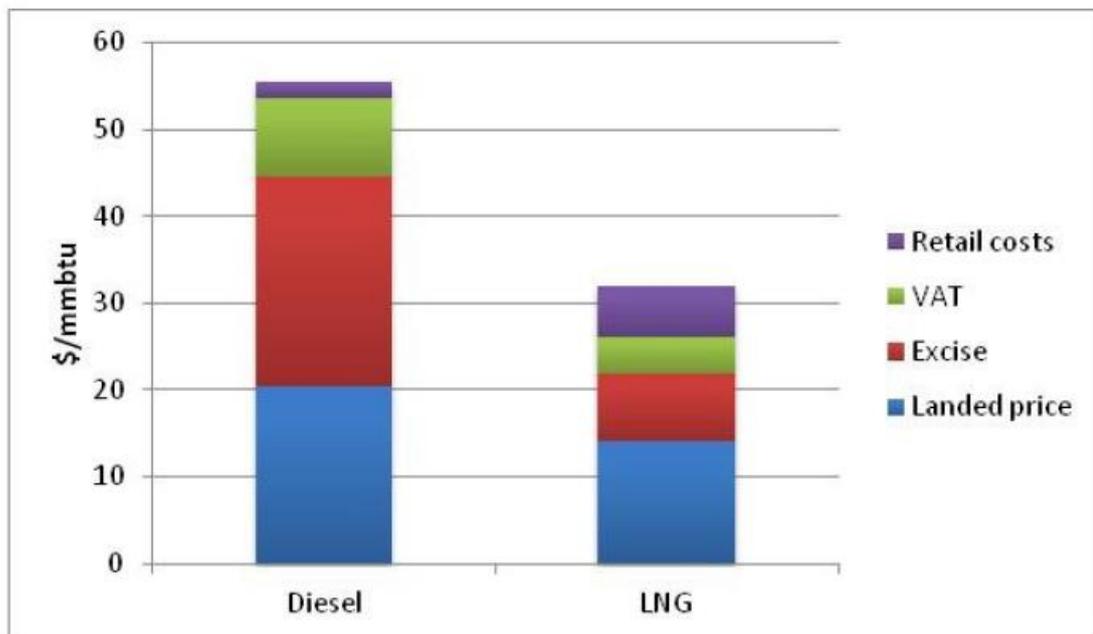
Q.2b) What are your views on the anticipated costs (e.g. economic, environmental, congestion, safety) that:

We do not believe that there would be any costs to the adoption of the amendment. It allows for haulage companies to move to a lower carbon emitting fleet without incurring cost penalties or lower vehicle performance. There are also no additional safety concerns as the vehicles will have design weights that exceed the plated weight and in many cases will be used in other European member states at the higher plated weight. For example, a 4x2 vehicle plated at 18t in the UK, is plated at 19t in France.

Q.3a) Can you explain and quantify any monetary savings that could be achieved for operators who switch from diesel or petrol to an alternative fuel technology for:

A recent report illustrated the current cost differential for gas (in this case LNG) and diesel. The diagram below shows that gas as a transport fuel is significantly cheaper than diesel, even excluding the excise duty differential. Gas price projections show gas staying stable in price due to abundant supply and new unconventional sources. For these reasons we believe gas will remain a cheaper fuel than diesel.

Figure 11: Estimated split for retail UK LNG and diesel



Source: Citi (2013)

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The adoption of the amendment will facilitate haulage companies to purchase NGVs and take advantage of the monetary benefits.

Q.3b) Can you explain and quantify any carbon reductions that could be achieved for operators who switch from diesel or petrol to an alternative fuel technology for:

There are around 35 million vehicles operating on UK roads. Over 40% of our road transport CO₂ emissions, along with nearly half the nitrogen oxide (NO_x) and a substantial amount of particulate matter is produced by just 11% of these vehicles, comprising light commercial vehicles (LCV), heavy goods vehicles (HGV), buses and coaches. But 20% of the total transport sector greenhouse gas emissions, however, come from the UK's 208,000 HGVs.

If just one per cent of vehicles (in the four classes above) were replaced by natural gas-powered equivalents, the UK would benefit from a CO₂ saving of over 64,000 tonnes per annum and a reduction in NO_x emissions of some 13 tonnes. Unsurprisingly, the emission implications for each of these vehicle classes is disproportionately higher the heavier the vehicle.

¹ Le Fevre, C. (2014). The Prospects of Natural Gas as a Transport Fuel in Europe. The Oxford Institute for Energy Studies. Available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/03/NG-84.pdf>.

Recent testing from one leading vehicle manufacturer reveals that new Euro VI gas powered HGVs can deliver a reduction of 96% less carbon particulate emissions and 78% less NOx emissions, along with a yearly CO2 emissions cut of up to 19 tonnes per vehicle, compared to the Euro VI emission standard. It also shows that CO2 emissions would be cut by as much as 100 tonnes per vehicle if biomethane is used.

Q.3c) Can you explain and quantify any fleet capital costs for operators who switch from diesel or petrol to an alternative fuel technology for:

Currently NGV's are more expensive to procure. However this cost is rapidly coming down. Also the above price differential between gas and diesel means that the additional capital cost will be less of a barrier. The adoption of this amendment will facilitate more manufacturers to develop gas alternatives and so further decrease the initial capital costs.

Q.3d) Can you explain and quantify any fleet running costs for operators who switch from diesel or petrol to an alternative fuel technology for:

The lower cost of fuel means that fleet running costs would be lower for operators. Maintenance or servicing is comparable with diesel models.

Q.4 How do you think there will be an impact on small firms?

Small companies require their vehicles to be reliable, serviceable and to have uninterrupted supply. Currently whilst gas vehicles meet these criteria there is reluctance from small firms to adopt alternative fuels. For UK emissions this is damaging because small firms make up the majority of haulage companies in the UK. Government needs to assist these companies to be able to make the transition to lower emitting vehicles. The adoption of this directive will allow more vehicles onto the market, and lead to greater acceptance for smaller firms. As described above, running costs are lower for NGV's and so this will help smaller companies reduce their operational costs.

Q.5 What percentage of haulage operators do you estimate will take advantage of extra weight allowances for vehicles with alternative fuel technologies for (you may attach and reference further information should you wish?):

There are a number of companies that are trialling NGVs currently. However the absence of dedicated gas HGVs has meant that the current fleet is small. A selection of current trials are:

Table 10: Sample UK HDV pilots using natural gas

Company	Number of vehicles	Total fleet	Description	Start date
Tesco ¹¹²	35	2,000	BioLNG/LNG (15/85) supplied by GasRec to Daventry depot	May 2013
Muller Wiseman	21 increased to 40	1,000	Dual-fuelled vehicles. 55% LNG. 2 LNG stations operated by Chive	2007
Stobart	5 inc to 25	2,350	Dual-fuelled vehicles. 65-70% LNG	2010
John Lewis	8	2,700 (570 tractors)	Dual-fuelled vehicles. 35-55% CNG linked to biomethane plant	2012
DHL ¹¹³	101	7,500	Dual-fuelled LNG vehicles refuelled by BOC at DHL's Bawtry depot	2011

Source: Company websites and presentations

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Recently a number of vehicle manufacturers such as Iveco and Scania have released dedicated gas HGVs. The adoption of this amendment will mean that UK haulage companies will be more likely to increase the % of alternative fuel vehicles amongst their fleet.

Q.6 What percentage of bus operators do you estimate will take advantage of extra weight allowances for 3 axle buses with alternative fuel technologies for (you may attach and reference further information should you wish?):

Q.7 What percentage of bus operators do you estimate will take advantage of the extra weight allowance for 2 axle buses and use part of this extra weight allowance for alternative fuel technologies for:

Q.8 Article 10f of the Directive states that a shipper must give a statement of weight to the haulier who is transporting their container or swap body. Do you believe that this is best achieved as we have set out in the draft regulations (Annex 5), by in part, reflecting a similar requirement in the existing Merchant Shipping (Carriage of Cargoes) Regulations 1999?

² Le Fevre, C. (2014). The Prospects of Natural Gas as a Transport Fuel in Europe. The Oxford Institute for Energy Studies. Available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/03/NG-84.pdf>.

Q.9a) Do you believe there will be any costs from this new provision and can you provide any evidence as to what the scale of these costs might be?

Q.9b) Do you believe there will be any benefits from this new provision and can you provide any evidence as to what the scale of these benefits might be?

Q.10a) Will formalising the carriage of 45 foot containers (as set out in paragraph 1.16 of the background section) bring about any monetised costs?

Q.10b) Will formalising the carriage of 45 foot containers (as set out in paragraph 1.16 of the background section) bring about any benefits?

Q.11a) Will there be any costs from allowing the extra 2 tonnes in weight (from 40 tonnes to 42 tonnes) for articulated vehicles comprising a two-axle tractor unit drawing a three-axle semi-trailer as part of an intermodal transport operation?

Q.11b) Will there be any benefits from allowing the extra 2 tonnes in weight (from 40 tonnes to 42 tonnes) for articulated vehicles comprising a two-axle tractor unit drawing a three-axle semi-trailer as part of an intermodal transport operation?

Q.12 What percentage of operators do you believe will use these provisions in question 11 for intermodal journeys (you may attach and reference further information should you wish?):

Q.13 Do you agree with the proposed approach of amending the Construction and Use regulations to permit use of hydrogen, natural gas and biomethane fuelled

vehicles that have been type approved to relevant EU gas fuel system safety standards?

Yes, this will make implementation into fleets quicker and easier. Industry believes that this approach will meet the requirements in a logical and effective way without lowering standards.

Q.14a) What, if any, are the estimated costs for users of these vehicles associated with this proposal?

The cost should be zero as they will be bought and operated in exactly the same way as diesel vehicles with no additional administration.

Q.14b) What, if any, are the estimated benefits for users of these vehicles (e.g. in administrative time saving through not having to apply for VSOs)?

The benefits will be that they can be bought and operated in exactly the same way as diesel without additional internal administration or obstacles. Therefore equalising the situation for gas and diesel vehicles. It will also remove current regional differences from differing interpretations of current standards. The proposed change will uniform administration and therefore reduce costs.

Q.15 Should the Construction and Use amendments also remove the need for VSOs for post registration converted vehicles (provided the fuel system components have been approved to EU gas fuel system safety standards and installed correctly)?

Yes, this would bring consistency across the entire alternative fuels vehicle market.

Q.16 Any further comments on the proposals in this consultation (you may attach and reference further information should you wish)?

NGVN believes that these amendments should be extended to allow gas, and electric vehicles to operate above the 3.5 tonne threshold without the additional restrictions provided the vehicle remains within its design weight.

The likely result is that the conversion from diesel to gas for Light Commercial Vehicles, typically used by supermarkets and other dot.com deliveries, will not happen without this further amendment. This is particularly unfortunate because internet shopping and home deliveries, by definition mostly in urban areas, are growing. This growth trend is likely to continue. Germany has recognised these benefits and is changing the law for electric vehicle

drivers. There is potential to replace in excess of 1000 dot.com diesel delivery vehicles with natural gas alternatives.

NGVN also would recommend that amendments be made to allow for additional length for alternative fuels vehicles. This will allow them to carry a greater amount of low carbon fuel therefore reducing overall carbon emissions. This would match the additional length being allowed for aerodynamic reasons but would result in even greater carbon savings. In this instance length refers to tractor and trailer combined.

Industry has expressed concerns that the allowance of additional weight could move vehicles into higher excise duty thresholds. If the additional payload allowance moves the vehicle across a Vehicle Excise Duty threshold, we request that the vehicle is taxed as the lower level. For example, if a 15t vehicle is plated at 15.5t the VED will rise from just over £200 to over £600. This could prevent smaller companies from purchasing lower carbon emitting vehicles or increase fleet costs disproportionately to the carbon being saved.

We are happy to answer any questions relating to this response. Please contact Natalie Flay: Tel: 01926 513741 Email: natalie@eua.org.uk