



Department  
for Transport

# Consultation on amendments to permissible vehicle weights and dimensions, including to incentivise cleaner fuel technologies, and other associated proposals

## Summary of Responses

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# 1. Introduction

## Executive Summary

- 1 The Department for Transport (DfT) conducted a public consultation on amendments to permissible vehicle weights and dimensions, including to incentivise cleaner fuel technologies, and other associated proposals which ran for 6 weeks from 22 September 2016 to 2 November 2016.
- 2 The DfT received 27 responses via email and an online form. The responses were from organisations including Transport for London and the Confederation of Passenger Transport, trade associations such as the Freight Transport Association and businesses including Ocado and John Lewis Partnership, as well as individuals.
- 3 Table of questions:

Options: Transpose the requirements of the Directive into national law to allow an increase of up to a maximum of 1 tonne gross vehicle weight for certain vehicles using alternative fuel technologies (as listed in footnote 3 on page 6) and allow an extra 1.5 tonnes for all two-axle buses to operate:

Option 1: in international traffic only.

Option 2: in both purely domestic traffic as well as international traffic.

**Our proposed policy option is option 2**

1	Which option, 1 or 2, do you prefer? Please explain your answer.
2a)	What are your views on the anticipated benefits (e.g. economic, environmental, congestion, safety) that: <ol style="list-style-type: none"> <li>i) Option 1 would bring</li> <li>ii) Option 2 would bring</li> </ol>
2b)	What are your views on the anticipated costs (e.g. economic, environmental, congestion, safety) that: <ol style="list-style-type: none"> <li>i) Option 1 would bring</li> <li>ii) Option 2 would bring</li> </ol>
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: <ol style="list-style-type: none"> <li>i) Option 1</li> <li>ii) Option 2</li> </ol>
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: <ol style="list-style-type: none"> <li>i) Option 1</li> <li>ii) Option 2</li> </ol>
3c)	Can you explain and quantify any fleet capital costs for operators who switch from diesel or petrol to an alternative fuel technology for: <ol style="list-style-type: none"> <li>i) Option 1</li> </ol>

	ii) Option 2
3d)	Can you explain and quantify any fleet running costs for operators who switch from diesel or petrol to an alternative fuel technology for: i) Option 1 ii) Option 2
4	How do you think there will be an impact on small firms? i) For option 1 ii) For option 2
5	What percentage of haulage operators do you estimate will take advantage of extra weight allowances for vehicles with alternative fuel technologies (you may attach and reference further information should you wish): i) For option 1 ii) For option 2
6	What percentage of bus operators do you estimate will take advantage of extra weight allowances for 3-axle buses with alternative fuel technologies (you may attach and reference further information should you wish): i) For option 1 ii) For option 2
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: i) For option 1 ii) For option 2
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?
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?
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?
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?
10b)	Will formalising the carriage of 45-foot containers (as set out in paragraph 1.16 of the background section) bring about any benefits?
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?
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?
12	What percentage of operators do you believe will use these provision in question 11 for intermodal journeys (you may attach and reference further information should you wish)?
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?
14a)	What, if any, are the estimated costs for users of these vehicles associated with this proposal?
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)?
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)?
16	Any further comments on the proposals in this consultation (you may attach and reference further information should you wish)?
17	Any general comments about the draft regulation?

# 1. Detailed Summary of Responses

## Options

*Transpose the requirements of the Directive into national law to allow an increase of up to a maximum of 1 tonne gross vehicle weight for certain vehicles using alternative fuel technologies (as listed in footnote 3 on page 6) and allow an extra 1.5 tonnes for all two-axle buses to operate:*

*Option 1: in international traffic only.*

*Option 2: in both purely domestic traffic as well as international traffic.*

**Our proposed policy option is option 2**

Q1 – Which option, 1 or 2, do you prefer? Please explain your answer.

<b>Question 2 Summary</b>	<b>Number of responses</b>
Option 1	
Option 2	25
Other/No Comment	2

- 1.1 The majority of respondents favoured Option 2, which applies this Directive to both domestic and international traffic. No respondents preferred Option 1, and one stated that they welcomed both provisions.
- 1.2 Respondents gave a range of reasons for supporting Option 2: it will encourage greater uptake of alternatively-fuelled vehicles; it will help reduce air pollution; it will enable both domestic and international vehicle fleets to benefit without having to run with a reduced payload; and having separate allowances for domestic and international transport would be complicated to enforce.
- 1.3 Some gave additional suggestions for this option to include, such as the extension of these proposals to vehicles weighing up to 3.5 tonnes.

Q2a) – What are your views on the anticipated benefits (e.g. economic, environmental, congestion, safety) that:

- i) Option 1 would bring
  - ii) Option 2 would bring
- 1.4 Question 2a)i) received fewer responses than 2a)ii). Some replies to 2a)i) said that this option would bring environmental benefits. Others pointed out that the benefits would be limited, as Option 1 restricts the opportunity for uptake of alternatively-fuelled vehicles to international operations.

1.5 Respondents outlined a wide range of benefits for Option 2. Most stated that Option 2 would encourage greater uptake of alternatively-fuelled vehicles and a boost to the UK alternative fuels industry.

1.6 Many of the benefits given were environmental:

*“Growth, in terms of momentum and volume of low emission natural gas vehicles – and other alternatively fuelled vehicles - is essential for reducing dangerous to health levels of transport pollution in the UK”*

*“Principally the benefits are environmental in the operation of freight vehicles but these environmental improvements could have significant economic consequential benefits to the wider society such as those that come with air quality improvements”*

*“Much greater and more nationally widespread benefits in CO<sub>2</sub> savings and air quality improvement”*

1.7 A number of respondents also pointed out that these measures will allow full utilisation of the vehicle or payload, resulting in fewer journeys and less congestion. In the case of tourist coaches, this would allow for higher luggage loadings.

1.8 Some respondents also noted that noise reduction and the possibility of increased night deliveries were benefits of Option 2:

*“Gas vehicles make 50% less noise than their diesel equivalents which would enable them to be more acceptable for night time deliveries”*

*“Because gas vehicles make around 50% less noise than their diesel equivalents, many cities in mainland Europe allow quieter alternatively fuelled vehicles to make night-time deliveries”*

Q2b) – *What are your views on the anticipated costs (e.g. economic, environmental, congestion, safety) that:*

i) *Option 1 would bring*

ii) *Option 2 would bring*

1.9 Question 2b)i) received fewer responses than 2b)ii). All responses to 2b)i) suggested that Option 1 would not bring any anticipated costs.

1.10 The majority of responses to 2b)ii) stated that there would be no or few anticipated costs brought by Option 2. A number of respondents suggested that any increased costs would be offset by the benefits, or by the reduced running costs resulting from operating alternatively-fuelled vehicles.

1.11 Some respondents stated that there might be costs related to wear and tear on roads as a result of heavier vehicles:

*“Additional budgeting for road repair will be required due to additional weight allowances, and EU countries with substandard road conditions could suffer higher repair costs. However, the impact would be predicated on the actual number of vehicles that choose to take advantage of extra weight allowances for vehicles with alternative fuel technologies”*

However, the same point was refuted by another respondent:

*“The extra weight of the vehicles is unlikely to have an impact on environmental wear on roads and bridges because the existing axle weight limits remain in force”*



Q3a) – 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:

- i) Option 1
- ii) Option 2

1.12 Question 3a)i) received fewer responses than 3a)ii). Almost all responses to 3a)i) suggested that Option 1 would bring some monetary savings:

*“Use of biomethane as a transport fuel is currently more expensive than diesel. However, whereas the resource cost of biomethane fuel is expected to fall 20% by 2020, diesel is forecast to rise by 16% by 2020 and by a further 35% by 2030. In other words, biomethane from AD will be cheaper than diesel by 2020, if government introduces supportive policy that ensures industry development”*

*“That depends on the fuel technology. If it costs less than diesel/petrol then they will make savings. If it enables more efficient use of diesel it will make savings”*

*“Potential reduction in fuel costs”*

1.13 The majority of respondents to 3a)ii) stated that Option 2 would bring monetary savings, and like for Option 1, these were mostly linked to fuel costs:

*“Dependant on price but as example 50% reduction in fuel cost for a dedicated NG truck vs diesel”*

*“In the case of natural gas this can lead to fuel cost savings in excess of 30% delivering real world financial benefits to a fleet operator in less than 2 years”*

*“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”*

*“Switching to Natural Gas or LPG will deliver fleet fuel savings in the region of 10-20% whilst giving air quality emission reduction in real life over diesel”*

1.14 Some respondents also highlighted that savings could be made by avoiding vehicle emission levies and congestion charges through using alternative fuel sources.

1.15 One respondent noted that costs may be added:

*“One of the biggest drawbacks in using alternative fuels is their lack of availability internationally. Vehicles equipped with alternative fuel technologies may be required to purchase additional batteries to power electric motors or larger tanks to store alternative fuels when travelling to EU countries that are unable to provide alternative fuels. These additional purchases would add more gross weight to a vehicle leading to lower haulage weights and decreased efficiency”*

Q3b) – 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:

- i) Option 1
- ii) Option 2

1.16 Question 3b)i) received fewer responses than 3b)ii), but replies to both questions illustrated that there would be significant carbon reductions. Some of the quantifications for carbon reduction brought by Option 1 are:

*“Well to tank emissions from biomethane produced from anaerobic digestion is negative, -40.3g CO<sub>2</sub>/MJ. This is calculated by subtracting the carbon content of the feedstock used from the emissions associated with the production and transport of the fuel to point of use in the vehicle. Where feedstock is 100% food waste 75.5g CO<sub>2</sub>eq/MJ must be subtracted from the total biomethane emissions value”*

*“Zero to 90% depending on operation and bio content”*

*“ULEMCO’s dual fuel hydrogen technology will reduce tailpipe carbon emissions from between 40-70% depending on the vehicle and duty cycle. It adds about 150-200kg of primarily due to the weight of the hydrogen cylinders”*

*“When using biomethane as a vehicle fuel, the operator can use a fuel that is carbon negative if the biomethane has been derived from the anaerobic digestion of waste materials, and if the biomethane is from the digestion of crop feedstocks, the carbon footprint is still far lower than that of petrol / diesel. Running vehicles on biomethane has a large (50-80%) benefit vs diesel”*

1.17 For Option 2, some of the information given for carbon reduction is as follows:

*“100% for EV, 40% to 70% for Hydrogen DF, 30% for bio gas”*

*“For example, recent testing from one leading vehicle manufacturer has revealed that new Euro VI gas powered HGVs can deliver a reduction of 96% less carbon particulate emissions and 78% less NO<sub>x</sub> emissions, along with a yearly CO<sub>2</sub> emissions cut of up to 19 tonnes per vehicle, compared to the Euro VI emission standard. They also showed that CO<sub>2</sub> emissions would be cut by as much as 100 tonnes per vehicle if biomethane is used”*

*“1kg of hydrogen, a zero carbon fuel, is equivalent to about 4.5 litres of diesel. For every km travelled using hydrogen rather than using diesel you will save 2.6kgCO<sub>2</sub> from the tailpipe”*

*“Recent LowCVP testing for DfT and TfL has, for example, shown the potential for electric commercial vehicles to deliver 50-60% greenhouse gas savings (on a full Well-to-Wheel basis) over conventional diesel equivalents, assuming grid-average carbon intensity of electricity. Savings approaching 100% would, of course, be achievable if the electricity comes from fully renewable and/or from other near-zero carbon sources. Our testing and other evidence, e.g. from the Low Carbon Truck Trials, suggest that savings from fossil natural gas are likely to be small at best, but substituting biomethane or other non-fossil sources can generate similarly large GHG savings. Importantly the savings from lower carbon fuels and energy are in addition to savings made from operational improvements and on-vehicle technology such as aerodynamics etc. and should not be seen as displacing these necessary initiatives”*

*“If just one per cent of vehicles [light commercial vehicles, heavy goods vehicles, buses and coaches] were replaced by natural gas-powered equivalents, the UK would benefit from a CO<sub>2</sub> saving of over 64,000 tonnes per annum and a reduction in NO<sub>x</sub> emissions of some 13 tonnes. Unsurprisingly, the emission implications for each of these vehicle classes is disproportionately higher the heavier the vehicle. 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 NO<sub>x</sub> emissions, along with a yearly CO<sub>2</sub> emissions cut of up to 19 tonnes per vehicle, compared to the Euro VI emission standard. It also shows that CO<sub>2</sub> emissions would be cut by as much as 100 tonnes per vehicle if biomethane is used*

*“If biomethane or Bio-LPG is used then the carbon savings will be in excess of 85%. Standard LPG gives a saving of 5-7% over diesel depending on vehicle and drive*

*cycle. Fossil CNG and LNG provide savings between 15-30% well to tank depending on source of supply. Dedicated NG trucks are improving on their efficiency loss compared to diesel as vehicle configuration is properly matched to the engine”*

*“For buses, LowCVP publish data for accredited low emission buses. This shows WTW CO2 savings of 60-70% for electric buses compared to diesel. This is a conservative figure as it is based on grid electricity carbon factors that have since improved, and are expected to continue to improve”*

- 1.18 Many respondents gave answers with the caveat that reductions would depend on the technology in use, and one stated that it would depend on how viable the technology is against conventional fuel.

Q3c) – *Can you explain and quantify any fleet capital costs for operators who switch from diesel or petrol to an alternative fuel technology for:*

- i) Option 1*
- ii) Option 2*

- 1.19 Question 3c)i) received fewer responses than 3c)ii), but respondents to both questions agreed that there would be some higher fleet capital costs, mainly relating to the cost of alternatively-fuelled vehicles.

- 1.20 Examples of quantification of these costs for Option 1 include:

*“The capital costs of new dedicated gas vehicles are not prohibitive. NGV Network’s 2015 report UK Market Review - The Role of Natural Gas in Road Transport notes a cost premium of £15k - £30k per gas HGV. Measures to even the playing field between diesel and alternative fuelled vehicles will ensure this cost premium is not added to with reduced operating margins due to vehicle weight differences. Growth in the number of alternative fuelled vehicles will also benefit SMEs, enabling them to access refuelling stations and use what would be a growing second hand market of gas powered vehicles”*

*With “ULEMCo’s technology the extra cost is the cost of the on-board hydrogen storage equipment and the labour to fit them. For an HGV refuse truck for instance this is an additional cost from new of approximately 15-20% at current small scale volumes. When larger volumes are possible the capital cost will be less than 10%”*

- 1.21 For Option 2, many respondents pointed out that the fleet capital costs will depend on the technology used. Most agreed that Option 2 would involve fleet capital costs for operators who buy alternatively-fuelled vehicles, as these can be more expensive than conventional vehicles. Some mentioned that it is important to maintain existing financial incentives for using new fuel technologies, e.g. government grants.

- 1.22 The replies which quantified what the fleet capital costs might be included:

*“This can be as little as the extra cost for the on-board hydrogen storage components in the case of dual fuel conversions and up to the cost of fully electrified fuel cell vehicle. In the case of the latter, for buses it can be shown that once commercial fleet volumes are reached the total cost of ownership will be no more than 10-15% of current diesel bus fleet operations”*

*“Typically, 15% increase in capital cost of vehicle for gas and c£1m for gas refuelling infrastructure. Other fuels such as hydrogen, significantly greater costs”*

*“LPG/diesel dual fuel systems cost between £3k (van) to £8k (truck) to fit. Dedicated natural gas engines have an additional cost to current Euro VI diesel of between*

*£2.8k (van) and £27k truck depending on configuration. LNG fuel tanks are more expensive than CNG tanks due to the thermal and impact requirements. Hydrogen vehicles are over three times the cost of their diesel equivalents at the moment”*

*“Gas and hydrogen conversions are circa £20k per vehicle, a 3.5t electric van is circa £30k more expensive than the diesel equivalent for a smaller payload”*

1.23 Some highlighted that capital costs may also be affected by infrastructure costs – e.g. providing enough power to fully recharge electric vehicles. One respondent stated that while they support this Directive, they believe that these infrastructure investment and development costs will impact its potential to radically alter the market for alternatively-fuelled vehicles.

1.24 Some respondents also noted that this Directive will facilitate manufacturers to develop more alternatively-fuelled vehicles, which will eventually decrease capital costs.

Q3d) – *Can you explain and quantify any fleet running costs for operators who switch from diesel or petrol to an alternative fuel technology for:*

i) *Option 1*

ii) *Option 2*

1.25 Question 3d)i) received fewer responses than 3d)ii), but respondents to both questions agreed that there would be lower fleet running costs, mainly based around the savings to be made on fuel. Many respondents were also keen to note that calculating fleet running costs depends on the type of technology used.

1.26 For Option 1, respondents all stated that fleet running costs would be lower.

1.27 Similarly, for Option 2, respondents all asserted that fleet running costs would see a reduction for switching to alternative fuel technology. Some of the quantifications of these costs included:

*“Currently, the supply chain is young and therefore expensive to utilise, there is therefore often a 10-20% premium for an OEM alternatively fuelled vehicles. In spite of this there are significant savings due to Government duty incentives and the fact fuel is often fundamentally less expensive, in the case of natural gas this can lead to fuel cost savings in excess of 30% delivering real world financial benefit in less than 2 years”*

*“Assuming a diesel price of £0.90/litre (ex VAT) and electricity at base commercial rate of £0.11/kWh a truck covering 150000km/year might cost around £51k per year in diesel fuel. This would fall to around £20k using electricity. The savings could potentially be higher if off-peak tariffs were negotiated and will be dependent on the drive cycle”*

1.28 As for question 3c), respondents for this question also underlined the importance of maintaining duty differentials between alternative and conventional fuels.

1.29 One respondent gave an example from the USA, where HGVs with natural gas engines have not been selling as well as those with diesel engines as the average payback for the premium cost for such a vehicle is four years, after factoring in fuel cost savings.

1.30 Some respondents stated that maintenance costs for fleets running on alternative fuels can potentially be costly, and so operators may experience increased fleet running costs through maintenance, or retraining or hiring staff to maintain vehicles.

Q4 – How do you think there will be an impact on small firms?

- i) For option 1
- ii) For option 2

- 1.31 Question 4i) received fewer responses than 4ii). In some responses, respondents compared Options 1 and 2, more so than had been done in previous questions.
- 1.32 For Option 1, most respondents were either unsure, or felt it would give a slight flexibility or competitive advantage to small firms.
- 1.33 One respondent stated that many small firms would be too small to justify the increased capital and running costs of alternatively-fuelled vehicles as well as the infrastructure investment needed to refuel them. However, they also pointed out that once these technologies and refuelling stations become more widespread, small firms would be able to use refuelling stations as they do with diesel stations now.
- 1.34 Another respondent said that small firms would be advantaged by being able to fully utilise the payload of their vehicles running on alternative fuels.
- 1.35 For Option 2, the responses were mixed. Some respondents stated this Option would bring positive impacts to small businesses – in many cases due to the more widespread use of alternatively-fuelled vehicles more generally, which will expand the second-hand market and infrastructure:
- “In the medium to longer term these proposals will encourage greater take-up of new, alternatively fuelled vehicles (predominantly by larger firms) which will then be available for smaller firms through the second-hand market. As vehicle demand grows, so too will investment in infrastructure, which will also make it easier for such small firms to access the alternative fuels and energy infrastructure”*
- “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”*
- “Option 2 would be more beneficial to the small firms allowing its alternative fuel vehicles to take on a full payload domestically”*
- “Small businesses may well benefit from reduced running costs for their vehicles”*
- 1.36 Other respondents predicted a less positive impact on small businesses, which was focused on the fact that smaller businesses would find it more difficult to afford the initial fleet capital costs for alternatively-fuelled vehicles.
- 1.37 A number of respondents also replied that they were not sure of any impact, or that they didn’t foresee any particular impacts arising.

Q5 – What percentage of haulage operators do you estimate will take advantage of extra weight allowances for vehicles with alternative fuel technologies (you may attach and reference further information should you wish):

- i) For option 1
- ii) For option 2

- 1.38 Few replies were received for Option 1:

<b>Question 5</b>	<b>Number of responses</b>
0-20%	4
Don't know/unable to say	5
No response	18

1.39 Responses to 5ii) varied:

<b>Question 5</b>	<b>Number of responses</b>
0-20%	2
21-40%	3
41-60%	1
Other	1
Don't know/unable to say	8
No response	12

1.40 One respondent cited data from the US on the number of natural gas-powered HGVs sold in 2015 (7-8% of total HGV sales) and the recent drop in oil prices as reasons why the percentage of operators likely to take advantage of weight allowances would likely be in the single digits. Another stated that the limited range of suitable products on the market would mean take-up amongst operators may be slow.

1.41 A further response affirmed that the adoption of this Directive will make haulage companies more likely to increase the amount of alternatively-fuelled vehicles in their fleet.

*Q6 - What percentage of bus operators do you estimate will take advantage of extra weight allowances for 3-axle buses with alternative fuel technologies (you may attach and reference further information should you wish):*

i) For option 1

ii) For option 2

1.42 Similar to question 5, few responses were received about Option 1:

<b>Question 6</b>	<b>Number of responses</b>
0-20%	3
Don't know/unable to say	6
No response	18

1.43 For Option 2, more responses were received, but the majority of respondents were unsure:

<b>Question 6</b>	<b>Number of responses</b>
0-20%	2
21-40%	2

<i>Don't know/unable to say</i>	10
<i>No response</i>	13

1.44 Respondents were generally positive about an increased uptake of these technologies for 3-axle buses, where usage of alternative fuels is currently quite low:

*“Considering higher costs to switch to alternative fuel technologies, there would be a lower incentive to use the 3 axle buses due to increased oil usage over using 3 motor vehicles. On the other hand, allowing for 3 axles buses over 2 axles buses would allow for increased number of items being transported, increasing efficiency over time, thereby, effectively cutting costs of transport. Hence, it is estimated that around 40% would take advantage of this new ruling”*

*“Currently there are virtually no alternative powered 3 axle coaches. This change will allow those vehicles to be developed as technology improves”*

*“The 3-axle bus market in the UK is quite small, mostly accounted for by long-distance coaches. There are limited products available in this sector and the need for long range, widespread fuel availability and intensive vehicle operation mitigates against alternative fuel take-up. There may be some transfer from 2-axle to 3-axle vehicles on applications such as commuter coach services where the additional axle and weight concession makes an electric vehicle practical”*

Q7 - *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:*

- i) For option 1*
- ii) For option 2*

1.45 Again, there were few responses for Option 1:

<b>Question 7</b>	<b>Number of responses</b>
0-20%	3
<i>Don't know/unable to say</i>	6
<i>No response</i>	18

1.46 Option 2

<b>Question 7</b>	<b>Number of responses</b>
21-40%	1
41-60%	2
81-100%	1
Other	2
<i>Don't know/unable to say</i>	8
<i>No response</i>	12

- 1.47 One respondent replied that extra weight allowance for buses would benefit both smaller and larger firms without additional costs.
- 1.48 Some respondents affirmed that many operators would purchase vehicles plated at a higher GVW, highlighting the benefits of using the entire payload of the vehicle. One however stated that the full potential of the vehicle would not be used frequently.

**Questions regarding general provisions of the new Directive that we are required to implement and not related to the policy options above**

*Q8 – 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?*

1.49 This question received few responses:

<b>Question 8</b>	<b>Number of responses</b>
Yes	2
No	0
Other	3
Don't know/unable to say	14
No response	8

- 1.50 One respondent stated that these regulations are consistent with the existing requirements under merchant shipping law for shippers to provide such information on any load as is necessary to enable it to be handled and carried safely.
- 1.51 Another was keen to stress the importance of these regulations not adding any administrative burdens to hauliers.
- 1.52 A further point was made on the need to include the terminal representative's agreement to load or unload cargo with the transporter.

*Q9a) – 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?*

1.53 This question only received two responses, both of which stated that costs would not be material:

*“Costs are administrative only and should be minimal”*

*“Anyone despatching cargo will presumably be aware of its weight (as this information is a usual particular of the contract of sale that gives rise to a shipment) and is in any event in a position readily to establish the weight of his cargo at the time he is stuffing it in to the container. There is no reason to suppose that the cost of providing a statement of its weight to a haulier, alongside the other information that is already provided, will be material”*



*Q9b) – 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?*

- 1.54 As with question 9a) above, this question only received two responses. Both asserted that this provision would improve safety by providing accurate information about the container being handled.
- 1.55 Both respondents also stated that this provision would facilitate compliance by reducing overloading. Reduction of overloading should also reduce damage to road surfaces and reduce emissions from vehicles according to one respondent.

*Q10a) – Will formalising the carriage of 45 foot containers (as set out in paragraph 1.16 of the background section) bring about any monetised costs?*

- 1.56 As with questions 9a) and b) above, this question only received two substantial responses. Both claimed that this measure would not bring about any significant costs.
- 1.57 One further respondent replied “yes” but gave no further details.

*Q10b) – Will formalising the carriage of 45 foot containers (as set out in paragraph 1.16 of the background section) bring about any benefits?*

- 1.58 Respondents were positive about the benefits of formalising such containers, citing the increase in efficiency, flexibility and competitiveness that this will bring as benefits.
- 1.59 One respondent also pointed out that the marginal increase is small, and not without precedent.
- 1.60 Another respondent stated that these containers are in such common use, there is a definite need to formalise their carriage.

*Q11a) – Will there be any costs from allowing the extra 2 tonnes in weight (from 40tonnes to 42tonnes) for articulated vehicles comprising a two-axle tractor unit drawing a three-axle semi-trailer as part of an intermodal transport operation?*

- 1.61 Responses to this question were mixed.
- 1.62 Those who said there would be costs stated that they would be minimal, including labour costs and minimal road damage costs.
- 1.63 Others outlined how there might be benefits or savings, such as reduced vehicle use due to the increased weight allowance, which will also cut down fuel costs, and environmental and flexibility benefits.
- 1.64 Some respondents replied with a “yes” or “no” without giving further information.
- 1.65 One further respondent had a question about the maximum authorised gross combination weight stated for 4x2 towing vehicles.

*Q11b) – Will there be any benefits from allowing the extra 2 tonnes in weight (from 40tonnes to 42tonnes) for articulated vehicles comprising a two-axle tractor unit drawing a three-axle semi-trailer as part of an intermodal transport operation?*

- 1.66 Respondents gave varied answers to this question, with benefits including:

*“The benefit in increased flexibility of operations will improve UK competitiveness in intermodal transport operations”*

*“It is easier to fit alternative fuel conversions on 2 axle tractor so will open the market up more”*

*“Greater payload will mean reduced vehicles”*

- 1.67 One respondent pointed out that while there may be benefits, many of their organisation’s members do not use this vehicle combination.
- 1.68 Some respondents replied with a “yes” or “no” without giving further information.

Q12) – *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):*

1.69 This question received few responses:

<b>Question 12</b>	<b>Number of responses</b>
0-20%	1
21-40%	1
Don't know/unable to say	10
No response	15

1.70 One respondent gave further data on their response:

*“Best residual value on 6x2 tractors so these will still make up majority of fleets”*

## Questions regarding the proposal to rescind the requirement of a vehicle special order (VSO) for type-approved hydrogen and gas powered vehicles

Q13 – *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?*

- 1.71 The majority of respondents who replied to this question were in agreement with the proposed approach. Reasons for supporting this amendment involved relieving operators of some administrative burdens, making implementation of such vehicles quicker and easier, and removing barriers to uptake of such vehicles.
- 1.72 Some respondents stated that while they agreed with this approach, they did have other concerns around this amendment. These included, for example, the exclusion or inclusion of certain types of fuels from or in this approach, and others such as:

*“Other synthetic gases, derived from renewable sources, may achieve similar potential benefits to biomethane, but may not meet the current definition of ‘biomethane’ (though this definition is not provided in the draft regulation). A more general wording would thus be useful to avoid excluding new energy sources unnecessarily and adding to future policy-making and regulatory burdens”*

*“Removal of the VSO will not be sufficient to dramatically increase the amount of alternatively fuelled and low carbon vehicles on UK roads”*

In some cases, respondents gave suggestions for what they hoped to see in order to encourage greater uptake of such vehicles.

*Q14a) – What, if any, are the estimated costs for users of these vehicles associated with this proposal?*

- 1.73 Responses to this question were mixed. Some respondents stated that there would be no additional costs, or that there would be savings through a reduction in administrative burdens.
- 1.74 The costs given by some respondents included the capital costs of acquiring alternatively-fuelled vehicles and the high cost of components due to the lack of choice among suppliers.

*Q14b) – 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)?*

- 1.75 The majority of respondents agreed there would be at least a slight benefit to this proposal, with almost all respondents stating that it would be a reduction in administrative burdens for hauliers.
- 1.76 Some respondents noted that while this provision may have benefits in reducing administration, they had concerns over the exclusion of gas mixed with diesel as a fuel type from this approach.

*Q15) – 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)?*

- 1.77 The majority of respondents were in favour of this proposal. The main reason given for supporting this measure was that it would bring consistency across the alternative fuels market.
- 1.78 Many respondents also stated that they would like to see some regulations remain in place or formalisations of process be introduced in regard to these vehicles:

*“A method would and should be needed to show that the conversion meets or betters the emission standards of the type approved vehicle”*

*“The requirement for VSOs for retro-fit gas systems should only be removed if there is a suitable code of practice for installations and a national accreditation scheme for systems and installers”*

*“We believe that there should remain controls put in place to ensure retrofit systems are fitted according to any approvals that might exist for a retrofit system”*

## Further views

*Q16) – Any further comments on the proposals in this consultation (you may attach and reference further information should you wish)?*

- 1.79 Responses addressed some that were not covered by the proposals.
- 1.80 A number of respondents expressed a wish to see these proposals extended to cover category N1 vehicles, that is, vehicles weighing up to 3.5 tonnes.
- 1.81 Other issues discussed by respondents to this question included encouraging all energy consuming activities on board a vehicle to be decarbonised, increasing vehicle-use efficiency through increasing overall payloads, additional kerb weights for alternative fuel-powered vehicles for 4-axle vehicles, and drive cycles.

*Q17) – Any general comments about the draft regulation?*

- 1.82 Comments on the draft regulation included suggestions to adopt international standards for alternative fuels, ensure all alternative fuels are supported by the legislation, extend the regulations to vehicles weighing under 3.5 tonnes, and allowances to accommodate extra weight in compressed gas vehicles so that the payload would be equal to petrol/diesel models.