Annex C: Tax Impact Assessment for Heavy Goods Vehicle charging proposals

Who is likely to be affected?
UK operators of heavy goods vehicles of 12 tonnes and over
Foreign operators of heavy goods vehicles of 12 tonnes and over
Potentially, businesses which rely on hauliers eg supermarkets, manufacturing

General description of the proposal
All HGVs, domestic and foreign, will be required to pay a tax for the use of the UK road network. Foreign hauliers will be able to purchase a daily, weekly, monthly or annual permit, while UK hauliers will be buy annual or six-monthly permits at the same time and for the same period as they pay vehicle excise duty.

The Government will also come forward with accompanying measures to offset these additional charges on UK hauliers, either through reductions in other taxes, duties or charges that they currently face, or through appropriate spending measures.

Policy objective
The Government is committed to delivering a fairer deal for UK hauliers. At present, UK hauliers have to pay tolls and/or vignettes to use roads in many EU states. Hauliers from other EU states however can use UK roads without having to pay a charge.

Development of this measure
The UK haulage industry have lobbied for some form of HGV Charging for several years on the basis that it already occurs in the majority of EU states.

In May 2010, the Coalition Agreement stated that: “We will work towards the introduction of a new system of HGV road user charging to ensure a fairer arrangement for UK hauliers”.

This was further supported by the National Infrastructure Plan which in October 2010 confirmed that “To produce the infrastructure for a green growth, low carbon and competitive transport economy, the Government will…establish a system of lorry road-user charging”.
In response, HGV Charging was made a specific part of the Department for Transport’s Business Plan. In both the November 2010 and May 2011 versions Priority 4 is “Tackling carbon and congestion on our roads”, which includes a commitment to: “Introduce HGV road user charging to ensure a fairer arrangement for UK hauliers”.

**Detailed proposal**

The HGV charge would apply to the whole road network and to both UK and foreign vehicles 12 tonnes and over.

It would consist of a time-based charge of up to £1,000 a year or £10 a day for the heaviest vehicles. UK hauliers would pay the annual or six month charge at the same time as they pay Vehicle Excise Duty. Foreign hauliers would have the option to buy daily, weekly, monthly or annual permits.

<table>
<thead>
<tr>
<th>VED band</th>
<th>User charge rate: (foreign vehicles only)</th>
<th>User charge rate (foreign and UK vehicles)</th>
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<tbody>
<tr>
<td></td>
<td>Daily</td>
<td>Weekly</td>
</tr>
<tr>
<td>A</td>
<td>£1.70</td>
<td>£4.25</td>
</tr>
<tr>
<td>B</td>
<td>£2.10</td>
<td>£5.25</td>
</tr>
<tr>
<td>C</td>
<td>£4.80</td>
<td>£12</td>
</tr>
<tr>
<td>D</td>
<td>£7</td>
<td>£17.50</td>
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<tr>
<td>E</td>
<td>£10</td>
<td>£32</td>
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<tr>
<td>F</td>
<td>£10</td>
<td>£40.50</td>
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<tr>
<td>G</td>
<td>£10</td>
<td>£50</td>
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</table>

UK hauliers would begin to pay the charge as they renewed VED from eleven months ahead of the introduction of charging for foreign hauliers, but the overall burden will not increase for the vast majority of vehicles.

Non-payment of the charge will be a criminal offence, which could result in a fine.

The Government will also come forward with measures to offset these additional charges on UK hauliers, either through reductions in other taxes, duties or charges that they currently face, or through appropriate spending measures. Our estimates show that, if this were done by reducing Vehicle Excise Duties, around 98% of UK-registered HGVs of 12 tonnes and over would lose no more than £50 a year as a result of the proposed user charge, with losses minimised for the remaining 2%. The need to remain within EU rules regarding state aid grants and minimum rates of vehicle tax, and the need to strike the right balance between the cost of administering any grant system and the amounts of grant involved, mean that it will not be possible to ensure that 100% of vehicles are no worse off.

**Operative date**

Primary legislation will be necessary before any system of HGV road user charging can be introduced. Subject to the constraints of the legislative programme, the Government intends to introduce an appropriate Bill into Parliament in the third session (which commences in May 2013) at the latest, with a view to implementing the user charging scheme before the end of the current Parliament (May 2015). This would mean charging for foreign hauliers being introduced in April 2015, with UK
hauliers facing road user charges and reductions in other taxes and charges from May 2014.

**Current law**

There is no provision for lorry road user charging in UK law at present.

The European Directive 1999/62/EC – the “Eurovignette Directive” requires that any HGV charging scheme must:

- Not discriminate against foreign hauliers;
- Include all HGVs of 12 tonnes and over
- Not apply both a toll (distance based) and a vignette (time based) charge on the same stretch of road, with exceptions relating to tunnels, bridges and congested roads.
- Not charge more than 11 Euros for a daily vignette (although a recent amendment to the Directive allows inflation-uprating of this figure, so it is likely to be 12 Euros for the introduction of charging in the UK)
- Not charge less than 50 times the value of a daily charge for an annual charge.
- Not limit free movement across national borders;
- Not go below stated minima for vehicle tax (in the UK’s case, vehicle excise duty).

The directive has been transposed into the law of England and Wales via The Heavy Goods Vehicles (Charging for the Use of Certain Infrastructure on the Trans-European Road Network) Regulations 2009.

**Proposed revisions**

The HGV charge would be introduced by primary legislation, creating a new tax.
Summary of impacts

<table>
<thead>
<tr>
<th>Exchequer impact (£m)</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-£5m to</td>
<td>-£1.5m to</td>
<td>+£18.7m to</td>
<td>+£18.7m to</td>
<td>+£18.7m to</td>
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<tr>
<td></td>
<td>-£2.5m</td>
<td>-£0.2m</td>
<td>+£23.2m</td>
<td>+£23.2m</td>
<td>+£23.2m</td>
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The figures above show our estimate of the net revenue. A range of figures is shown, given the uncertainties at this stage. These are cash figures. For the purposes of presenting these calculations an assumption has had to be made as to when primary legislation could be introduced; we have assumed 2013, although 2012 is still a possibility.

The net revenue is the gross revenue raised by the charge, minus administration, enforcement and the forecast costs of accompanying compensatory measures, and including revenues resulting from enforcement activity.

We anticipate that the initial set-up costs would occur mainly in the 2013-4 fiscal year, that UK hauliers would contribute a very limited amount of revenue in 2014-15 and that revenue from foreign hauliers would flow from 2015-16.

Estimating gross revenue

This analysis is based on the DfT’s Survey of Foreign Road Goods Vehicles 2009, which showed in particular that in 2009 123,000 foreign vehicles made 1.42m trips to the UK, totalling 4.05m days with an average of 11.5 trips per vehicle.

Estimating gross revenue is complex for a number of reasons. It is not enough to know the total number of days visited or the average number of trips per vehicle. Charges may be paid for days, weeks, months and a full year. Which charging period a haulier pays for will depend on the number of trips carried out during the year, the pattern of those trips, the extent to which future trips can be predicted, and whether cash flow allows paying charges for future periods. In addition, hauliers may respond to the introduction of charging by changing their behaviour.

For illustration, if daily charges were paid for all the 4.05m days of foreign vehicle visits to the UK during the year, then this would result in gross revenue of around £40m (assuming that all foreign vehicles are in the charge category for the largest vehicles, paying £10 a day). This is very much an upper estimate of gross revenue.

The Survey of Foreign Road Goods Vehicles has allowed us to produce a distribution of the numbers of trips by drivers to the UK.
This still does not provide enough information to estimate revenues from charging. If a vehicle were to visit the UK once a month, then it would be best to buy daily permits. For typical two-day-long trips, this would mean paying £240 over a year (for the largest vehicle category). However if all those trips were conducted in a single month, a monthly charge could be purchased for only £100.

Information on the precise pattern of trips to the UK is not readily available without funding special analyses (of UK Border Agency records, for example). DfT will consider such analyses in the future, subject to the outcome of the consultation. The alternative approach used in the interim was to generate a set of random trip patterns that on average matched the distributions produced by the Foreign Vehicle Survey. For these trip patterns, a number of rules determined what charges would be paid – for example, a weekly charge would be paid if it cost less than daily charges, and an annual charge would be paid for most but not all of cases where this would be cheaper than daily charges. This in turn enabled estimates of revenue generated from the charge to be made.

These calculations suggest a gross revenue of around £27.6m per year from foreign hauliers, before making allowance for how the market might change in response to the introduction of charging.

There are two main aspects to this. Firstly, a foreign vehicle might no longer successfully compete for haulage into or out of the UK, with a UK haulier taking the business instead. This would result in a revenue loss to the UK Government, meaning the gross revenue received would be less than calculated above, but it would also result in economic benefits to the UK haulage industry (see the section below on economic impact). Secondly, larger foreign haulage firms may change the utilisation of their fleet, reducing the number of individual vehicles coming to the UK but sending each of these on more trips than before. This would mean that instead of paying many daily charges, they would pay a smaller number of annual charges.

There is little data to inform estimates of the magnitude of these effects. We have used a range of 10-20% reduction in gross revenue for the purposes of this Tax Impact Assessment. This gives a final gross revenue from foreign hauliers in a range of between £22.0m and £24.8m. There would be a small additional amount of revenue from UK hauliers (probably less than £0.5m) because EU law limits our compensation options.

Note that the above calculations assume 100% compliance with the charge. In reality some hauliers would attempt to evade the charge, reducing revenues. Set against this, enforcement activity would result in revenue from fixed penalties issued to noncompliant drivers. Our estimates suggest that the overall effect of these two
factors would be to increase gross revenue by a small amount.

**Estimating costs**

As with gross revenue, there are a number of uncertainties around costs. Therefore we have produced a range of estimates for costs.

We have held discussions with DVLA, VOSA and a number of private sector companies who have experience of running related charging schemes.

The main cost drivers are:

- DVLA to administer the UK haulier charge through the existing VED system;
- A private sector organisation will administer the foreign vehicle charge. The formal procurement process has not yet begun;
- enforcing against UK hauliers that had not paid the charge would be done as part of the existing enforcement of VED, at no additional cost;
- enforcing against foreign hauliers would be done by VOSA.

We have produced some initial estimates of costs, based on scaling up existing enforcement processes and targeting vehicles that had not paid the charge. A range of options and costs have been used. Further work will be necessary on this component of the cost.

The total set-up costs are estimated at £3.0 to £6.7 million. These costs will be spread over the two years before the scheme goes live for foreign hauliers.

Thereafter, we estimate the annual costs to be £3.0 to £4.8 million.

<table>
<thead>
<tr>
<th>Economic impact</th>
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<tbody>
<tr>
<td>We do not anticipate a significant impact to the broader UK economy as the vast majority of UK hauliers will have an unchanged cost burden overall, with exceptions set out in the impact on business section.</td>
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UK hauliers account for 94% of the vehicle miles carried out by HGVs over 12 tonnes in the UK.

There may be a behavioural response from foreign hauliers due to the increase in costs they face; the potential scale of this impact is examined below.

The Road Haulage Association estimates the average daily cost of running a 44 tonne HGV (just over the average weight of foreign vehicles visiting the UK) to be around £300. A daily charge of £10
would represent a cost increase of around 3%. We do not believe any solid evidence exists on the price elasticity of foreign haulage in the UK as it is a market with very specific characteristics due to our island nature. We have therefore looked instead at the available evidence on overall freight traffic demand elasticities. Graham and Glaister’s 2004 literature review considers 143 price elasticity estimates of the demand for road freight and finds “the majority of estimates fall between -0.5 and -1.3” (p268). It notes that “different elasticities emerge for different commodity groups, for different trip types and for different levels of market coverage. Thus, the specifics of any particular context have an important bearing on the magnitude of estimates”. For these purposes none of the elasticities available reflects the specific context of foreign haulage in the UK and hence we need to investigate this issue further during the consultation period with foreign hauliers and their customers; please see the relevant section and question in the consultation document.

However, to illustrate the impact this behavioural response could have on revenues and foreign haulage we have used the mean elasticity found in this paper of -1.07. This is not directly applicable to the situation we are considering where the required evidence is the cross-elasticity of demand between UK and foreign hauliers but serves to estimate the potential impacts.

Using the mean elasticity of -1.07, a 3% increase in price could lead to a decrease in haulage by foreign-registered vehicles in the UK of 3.21%, resulting in a similar reduction in revenue from the charge. Given estimated gross revenues from foreign hauliers of between £22.0m - £24.8m per year, this implies the behavioural response could reduce revenues by between £0.71m-£0.80m per year.

The reduction in haulage undertaken by foreign companies may be replaced by domestic haulage companies, or alternatively vehicle miles may fall due to changes in the set up of businesses who currently use foreign haulage. Using the elasticity above implies 0.19% of the UK haulage market could be affected given that currently foreign hauliers account for 6% of the vehicle miles carried out by vehicles over 12 tonnes. The logistics sector as a whole is estimated to be worth 3% of gross value added and responsible for around 3% of total employment¹. Hence at most 0.006% of UK economic activity may be affected by this measure. We intend to investigate further during the consultation the evidence on whether this activity would switch to domestic haulage companies or not.

There is also a more recent survey of the literature on the price

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¹ Source: Office of National Statistics; categories included are freight transport; postal and courier services; warehousing and storage; cargo handling, and; other transportation support activities.
sensitivity of freight transport in De Jong et al (2010). This survey finds a “best-guess elasticity” (page iv) for vehicle kilometres to vehicle kilometre price of -0.9. This is slightly lower but consistent with the evidence above. The paper also recommends the use of a transport model for use in cost-benefit analysis saying that the elasticities quoted should only be used to get a first impression of the likely effects. The data does not exist to analyse foreign vehicle response with standard transport models; hence DfT will investigate this issue via the consultation with businesses affected.

References:

| Impact on individuals and households | We do not anticipate a significant impact on UK individuals and households. We would expect any pass-through to goods prices due to increasing costs of foreign haulage to be zero or very low. As detailed in the economic impact section the cost of operating a foreign HGV in the UK is expected to increase by around 3%; and only 6% of the UK haulage market would be affected by this. The UK haulage sector is highly competitive with over 90,000 licensed operators. Hence any pass-through would be significantly lower than the 3% figure and only for those goods taken by foreign hauliers. We will investigate this issue further during the consultation to gain evidence from foreign hauliers or their customers on the impact on haulage rates that this tax could have, and hence prices of goods. |
| Equalities impacts | There is no equality issue raised by this policy. It applies equally to all HGV owners/operators, regardless of their age, disability, gender, gender reassignment, race, religion or belief, or sexual orientation. In compliance with EU law, the HGV charge will not discriminate between UK and foreign hauliers, both of whom will be required to pay the user charge. Notices informing drivers that the charge needs to be paid and instructions on how to do so will be available in a number of relevant EU languages and/or in pictorial form. |
| Impact on business including third sector | UK HGV operators The Government is committed to making the scheme broadly revenue neutral for domestic hauliers. The need to remain within EU rules regarding state aid grants and minimum rates of vehicle tax, |
and the need to strike the right balance between the cost of administering any grant system and the amounts of grant involved, mean that it may not be possible to ensure that 100% of vehicles are no worse off. At present, we foresee that the likeliest course of action will be to reduce VED to levels at or just above the minimum rates set out in the Eurovignette Directive. By doing this, we believe that around 98% of the current UK HGV vehicle fleet of 12 tonnes and over will pay no more than £50 extra per year, and 94% will pay nothing extra at all. This is in the context of HGV running costs of around £80,000-£100,000 a year.

UK haulage operators may benefit from a small reduction in foreign haulage operations, as set out in the economic impact section, but we do not have evidence to understand the precise repercussions of this. Better evidence may emerge during the consultation.

**Carriage of goods by rail and water** – It is not an objective of the charging scheme to bring about modal shift. Since the effect of the scheme on the costs of UK road transport operators will be broadly neutral, we do not expect the scheme to affect the carriage of goods by rail or water, either positively or negatively.

**Small firms**

If, as is planned, UK hauliers pay the annual user charge at the same time as paying Vehicle Excise Duty, in one payment using the same form, the introduction of the charge will not place any extra administrative burden on small firms.

<table>
<thead>
<tr>
<th>Impact on public sector</th>
<th>DfT/DVLA/DVA/VOSA</th>
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<tbody>
<tr>
<td><strong>DfT/DVLA/DVA/VOSA</strong></td>
<td>We estimate that set up costs would be around £3.0 million to £6.7 million, mostly involving changes to IT systems to administer the charge for UK vehicles and to enforce it at the roadside. We estimate there would be annual administration and enforcement costs of £3.0 million to £4.8 million.</td>
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| MOJ/Courts Service      | For UK-registered vehicles, payment of the charge will be simultaneous with payment of VED. Levels of VED evasion by HGV keepers are low (0.9%)² and we do not expect them to increase as a result of the charge. The number of VED evasion cases coming to court will not be affected by the charge. Additional cases involving drivers of foreign-registered vehicles may |

² Rate of unlicensed goods vehicles in Great Britain traffic in 2009: *Vehicle Excise Duty Evasion, 2010*. 
end up in the magistrates court. We anticipate, however, that any increase in business for the courts will be small. The evidence of other EU states running similar schemes is that the vast majority of hauliers pay the charge and that those that are caught evading it generally pay the charge and a penalty without going to court. Evidence from the UK’s graduated fixed penalty and deposit scheme, in operation since May 2009, also shows that the number of foreign-based drivers preferring to go to court rather than pay an on-the-spot deposit is very small (less than ten cases in two years).

<table>
<thead>
<tr>
<th>Other impacts</th>
<th>Sustainable impact/Carbon assessment</th>
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<tbody>
<tr>
<td></td>
<td>Our analysis suggests that this policy is unlikely to affect carbon or other vehicle emissions. However we will explore the possibility of introducing differential charges as soon as it becomes practical to do so.</td>
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</tbody>
</table>

**Health impact**

There are two major ways in which HGVs can have an negative effect on health:

- Asthma etc caused by emissions
- Accidents

As stated above, the policy as it currently stands is unlikely to have an impact on emissions.

As it doesn't aim to reduce the number of HGVs on the road, it is unlikely to have a dramatic effect on the number of accidents. However, the accident rate for foreign HGVs is higher than that of domestic HGVs.

This policy may increase the number of foreign HGVs being stopped by VOSA, (in order to see whether the charge has been paid) which could in turn lead to more potentially unsafe HGVs being detected and made to rectify defects before they can cause harm.

The charge being introduced from 2014 will not be varied based on the environmental performance of the vehicle. However we are committed to applying such a differential as soon as practicable after the charging regime comes into force in 2014. This could lead to additional benefits in terms of improved air quality and public health. We will be actively examining over the coming months a number of considerations relevant to the practicality of this, including the full range of costs and benefits involved, the relationship with the existing EU directive and the scope for securing EU agreement for amending it.
Monitoring and evaluation

We will monitor the HGV Charging Scheme and evaluate its results, once the system has been in operation for at least twelve months. Evaluation is expected to look at how effective the administration of the charge is, in terms of running costs compared to pre-launch estimates, compliance rates achieved for foreign and UK vehicles, and the effectiveness of enforcement strategies. We will also evaluate methodologies that could be used to estimate the impact on the international road haulage market into and out of the UK, although recognising that identifying such impacts might prove difficult.

Further advice

If you have any questions about this change, please contact Peter Steele on 020 7421 4271 (hgvcharging@dt.gsi.gov.uk)