Title: Post Implementation Review of Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013 **PIR No:** DfTPIR025 **Lead department or agency:** Driver and Vehicle Standards Agency **Other departments or agencies:** Department for Transport **Contact for enquiries:** Policy@dvsa.gov.uk	**Post Implementation Review** **Source of intervention:** EU **Type of regulation:** Secondary legislation **Type of review:** Statutory - other **Date of implementation:** 15/08/2013 **Date review due (if applicable):** 19/01/2018
Summary: Intervention and Review	**RPC Opinion: Not Applicable**

1a. What were the policy objectives and the intended effects? (If policy objectives have changed, please explain how).

The aim of the Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013 (the "2013 regulations") was to implement point 5.2 of Annex II of Commission Directive 2006/126/EC[1] (the Directive). These regulations took effect in August 2013 and introduced changes that set new minimum test vehicle standards (MTVS) for certain vehicles used for practical driving tests. Previous standards had set a theoretically achievable weight known as the Maximum Authorised Mass (MAM) which derived from the weight of the vehicle plus any load that it was designed to carry.

The Driving Standards Agency (DSA) (now merged with the Vehicle and Operator Services Agency (VOSA) to form the Driver and Vehicle Standards Agency (DVSA)) are the authority responsible for driver testing in Great Britain and they handled the implementation of the changes here. The Driver and Vehicle Agency (DVA) have the same responsibilities in Northern Ireland, where they implemented the changes.

The new standards required that in addition to having a MAM large vehicles and vehicle-trailer combinations had to meet a "real weight" requirement at the test – known at the "real total mass" (RTM). This meant that these vehicles and vehicle-trailer combinations had to carry a load to meet the real weight requirements. Driving Licence categories affected by the RTM requirements are C (large vehicle or lorry), C+E (large vehicle or lorry plus trailer), C1+E (medium sized vehicle plus trailer), D+E (bus plus trailer), D1+E (minibus plus trailer) and B+E (car plus trailer).

The aims of the changes were to ensure that drivers of appropriate vehicles are qualified to drive with a greater understanding and experience of driving with a load. This would lead to safer drivers with reduced numbers killed or seriously injured.

1b. How far were these objectives and intended effects expected to have been delivered by the review date? If not fully, please explain expected timescales.

For the Directive to be implemented successfully, it was necessary for regulations to be in place, for a new test to be developed and delivered, for training organisations to comply with the changes and for vehicles presented for test to be laden in accordance with the regulations.

All of these items were achieved. The regulations were effective from 15 August 2013, with vehicles complying voluntarily until 14 November 2013 and compulsory after 15 November 2013. The test was in place by this time. Training organisations complied with the requirement, attending with laden vehicles.

2. Describe the rationale for the evidence sought and the level of resources used to collect it, i.e. the assessment of proportionality.

This is deemed to be a "Low Evidence" PIR because of the small size of the costs and benefits quantified in the IA, the relatively narrow societal impact of the regulation and the difficulty of measuring the impact of

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:403:0018:0060:EN:PDF

the regulation on road safety, especially over the relatively short period of time that has elapsed since implementation.

In undertaking this PIR, we have considered the publicly available information to ascertain the outcomes. These include the road casualties since laden testing was introduced compared with a comparative period before and economic indicators such as fuel duty and costs of items used as load.

We have also gone directly to those using the service – trainers of candidates taking tests in appropriate vehicles along with delegated examiners[2] and others – to obtain views on the way laden testing has been introduced and the economic impact. In addition, we have attempted to contact, via representative bodies, those likely to take tests as individuals in cars towing trailers for various reasons. Unfortunately, we have not received responses from the latter.

Taken overall, it is considered that this is a proportionate approach to assessing the impact of laden testing.

3. Describe the principal data collection approaches that have been used to gathering evidence for this PIR.

As indicated in the previous section, the publicly available information has been used to inform the conclusions made in this PIR. The main areas have included consideration of road casualties and economic factors, for example the cost of items needed to comply with laden testing and fuel duty.

We have attempted to inform and verify these conclusions by obtaining the views of those using the service, primarily trainers of test candidates and delegated examiners. We have also attempted to obtain views of individuals taking car and trailer tests.

The 2013 regulations implement the changes in Great Britain and include tests for the Certificate of Professional Competence (CPC)[3] in Northern Ireland. Northern Ireland have made their own provisions for these tests. We have liaised with DVA in Northern Ireland to assess implementation and they have sought views of trainers on our behalf.

4. To what extent has the regulation achieved its policy objectives? Have there been any unintended effects?

The Directive imposed different requirements affecting different vehicles. With regard to weight, vehicles in category C were required, when fully laden, to weigh 10,000 kgs and, in category C+E, 15,000 kgs for the combination. The load carried on vehicles in categories B+E, C1+E, D+E and D1+E, were required to weigh 600 kgs minimum and 1,000 kgs maximum. These weights were was achieved in the regulations by category C and C+E vehicles carrying Intermediate Bulk Container (IBC)s filled with water. Category B+E, C1+E, D+E and D1+E could bring other loads, such as bags of sand. Fire engines could carry water or foam so long as the laden weight is at least 10,000 kgs.

The road safety benefits arising from the regulatory change are difficult to determine, given the small amount of time since laden testing was introduced and other possible contributory factors. There has been a decreasing trend in accidents in the UK in recent decades. The trend lines of various safety datasets before and after the regulation was implemented have been considered but as expected there are no clear deviations. However, the results from the stakeholder survey conducted provides some evidence that there has been an improvement in driver safety as a result of the regulatory change.

Pass rates have shown a slight increase over the years immediately pre-introduction and after. For all test categories conducted by DVSA, pass rates were 54% in 2010/11, 55% in 2011/12, 56% in 2012/13, 57% in 2013/14, 59% in 2014/15, 58% in 2015/16 and 59% in 2016/17.

Unintended consequences have been considered. We have received reports, from the survey and via other ad hoc feedback, that IBCs can leak over time. Some stakeholder have expressed an interest in the ability to use alternative loads and this has been taken into account in the PIR's recommendations.

[2] Examiners directly employed by some haulage, bus and coach companies, along with emergency services.
[3] A qualification required, in addition to the driving licence, for professional drivers of C and D vehicles to drive in the European Union. Introduced by virtue of the Vehicle Drivers (Certificates of Professional Competence) Regulations 2007.

In view of this, it is sensible to consider whether the system can be modified, to allow additional items to be used as the load.

Additional detail is contained in the evidence base. This covers areas such as the trend in levels of accidents, economic issues regarding costs and benefits across different sectors and views on the changes and their impact from industry representatives who responded to a survey that we conducted.

5a. Please provide a brief recap of the original assumptions about the costs and benefits of the regulation and its effects on business (e.g. as set out in the IA)

A summary table of the costs and benefits of the laden testing is included under "Economic Evidence" in the Evidence Base below.

Costs

Cost to government

A cost of £230,000 in 2013 was identified in training 500 examiners by a one day training session on the new test. The cost per examiner was assumed to be £460 in lost fees while training was carried out – 4 tests at £115 for each test. Ongoing training costs had been estimated at £11,500 per year from 2014-2023.

Cost to individuals

An annual cost of £584,460 (2011 prices) was identified from 2013 – 2023. This was made up of the purchase of bags of sand which was more likely than the purchase of IBCs for individuals. The annual number of tests was estimated as 22,000 and the number of individuals affected would be lower than this as there was a 54% pass rate. It was assumed that those who passed first time would obtain a refund for the bags of sand. It was assumed that the remaining individuals passed the test on the second attempt. This gave a total of 12,188 taking the test each year. The cost of a bag of sand was estimated at £45 in 2011 prices.

Cost to business

The Impact Assessment identified an initial outlay by trainers for IBCs. It was estimated that this would be a one off cost, since IBCs are reusable and durable. A central estimate of £412,601 was made, based on a cost of £60 per IBC (a low estimate was given of £137,534 based on a cost of £20 per IBC and a high estimate was given of £687,669 based on a cost of £100 per IBC). This estimate was based on 1175 vehicles (some 94,000 C, C+E and C1+E tests between January 2009 and December 2010 and 80 tests per vehicle). The assumption was that test demand would be constant.

Loading and filling

The main operational cost was trainers loading IBCs onto vehicles and trailers, and filling them in advance of a test taking place.

For loading, using the DfT Webtag recommended value of time for an LGV driver/passenger[4], this would cost £14.07 per vehicle in 2013, as a one off cost. It was assumed that 1,175 training vehicles would be affected, the total cost of loading was therefore estimated at £16,532 (in 2013 prices).

For filling, a range was used to monetise the cost, ranging from no supervision (taking 0 hours of trainers' time) to full supervision for the full 1.5 hours (taking 1.5 hours of trainers' time). Using the same assumptions for value of time as above, it was estimated that the time opportunity costs for filling the IBCs on a one-off basis would range from £0 - £24,798 (2013 prices). This was a midpoint for the central case as no better estimate of the true amount of supervision was available.

[4] DfT WebTAG 3.5.6 http://www.dft.gov.uk/webtag/documents/expert/unit3.5.6.php

Fuel

It was expected that there were likely to be additional costs in taking vehicles to the driving test centre in view of the need to attend with laden vehicles. The mid point impact was expected to be £106,000. This is shown under Costs to Business in the Evidence Base.

The estimate in the IA did not include additional fuel costs involved with training. These had not been monetised because no estimates of the distances involved were available, nor did RTM legislation mandate the use of a payload in training. As the aim of this PIR is to compare like with like, we are not estimating such costs.

Environment

Using the same assumptions as for fuel costs, in the initial IA the greenhouse gas impacts were assessed. Using the Department of Energy and Climate Change's (DECC) latest carbon values[5], we obtained a central case estimate of approximately £0.01m in GHG costs per year (0.000002 tonnes CO2 per year). There was a central estimate of £12,986. This is shown in the Evidence Base under Environment.

Benefits

Benefits to government

The IA identified fuel costs to businesses from RTM implementation. Some of these costs would be transfers from business to government in the form of fuel duty. In the IA, they were presented as a cost to business and a benefit to government in line with IA guidance. In the central case, benefits to government were estimated at approximately £50,000 per year. This is shown in the Evidence Base under Benefits To Government.

Benefits to business

There were no specific benefits to business.

Benefits to individuals

There were no specific benefits to individuals.

However, wider benefits were identified. These concerned potential improvements in driver behaviour, skills and attitude, with corresponding benefits in road safety.

5b. What have been the actual costs and benefits of the regulation and its effects on business?

The summary table of the costs and benefits of the laden testing, under "Economic Evidence" in the Evidence Base below, compares the estimated amounts with the actual costs and benefits.

Costs

Cost to government

There was negligible cost in developing the test. The main elements of the test remained. The only change was that vehicles presented would be laden. The form of load was established by discussions and meetings, internally within government and with stakeholders. In addition, it was necessary for regulations to be changed, involving lawyers and administrators. There was a time element involved in designing the test but this is not significant.

Cost to business

The same methodology as in the original estimate in the Impact Assessment is used. This assessment of the actual cost is given as a central estimate of £439,450 based on £60 per IBC (the low estimate is £146,483 based on a cost of £20 per IBC and a high estimate is given of £732,417 based on a cost of £100 per IBC). This is based on 1240 vehicles (74,407 tests in a year/60 tests per vehicle). The test figures are the total number

[5] http://www.decc.gov.uk/en/content/cms/emissions/valuation/valuation.aspx

of C, C+E and C1+E tests carried out by DVSA, police, fire and delegated examiners in 2016/17, from DVSA records. The figure of 60 tests per vehicle assumes that the trainers' vehicles are used when taking driving tests. This has been reduced from the 80 used in the original IA because of the feedback from respondees from industry to the survey – this is covered under "4.1 – Assumptions In Impact Assessment" and in *Annex A* below. The calculation is also shown under Costs to Business in the Evidence Base.

Loading and filling

We have updated the figures in the estimate. If the methodology in the impact assessment is applied to tests carried out in 2016/17, we apply the figure to 1240 training vehicles. The updated webtag figure for LGV driver/passenger[6] is £14.78. So the cost of loading is estimated at £18,327 (in 2017 prices).

The responses to the survey indicate that filling the IBCs would take around 1.5 hours. For 1240 vehicles, using the same webtag, this gives £27,491 (in 2017 prices).

Fuel

We have updated the figures in the estimate. These indicate a mid-point cost of £89,880. The calculation is shown under Estimated Operational Costs in Evidence Base.

Costs to individuals

From the survey we conducted, we established that some businesses have sought to offset their costs by passing all or part of the increase to customers. 38.24% of those responding had done this, by varying percentages. For the purposes of this PIR, we are assuming that those who passed costs down, passed down 50%. We calculate that some £109,955 was passed down to customers. The calculation is in the Evidence Base under Costs To The Public.

Environment

The calculation of environmental cost has been updated, based on figures in the Department for Business, Energy and Industrial Strategy's Updated Short Term Traded Carbon Values[7]. This gives a central point of £9,425. A table giving the calculation is also in the Evidence Base under Environment.

Benefits

Benefits to government

The estimates of tax received by government from fuel duty have been updated in the light of changes in tax rates. These give a central point of some £48,678 per year. The calculation, comparing the estimated and updated tax rates, is in the Evidence Base under Benefits To Government.

Benefits to business

There is no specific benefit to business. However, as indicated above, some business have passed down some of their costs, which can count as a benefit by offsetting part of their increased costs. The amount passed down is estimated at £109,955 as above.

Benefits to individuals

There are no specific benefits to individuals. However, the overall benefits are as indicated in the IA. These relate to road safety.

It has not been possible to ascertain specific road safety benefits deriving from the Directive. This is to be expected in view of the timescale involved since laden testing was introduced. At the time of writing this PIR,

[6] https://www.gov.uk/government/publications/webtag-tag-data-book-march-2017

[7] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/600710/Updated_short-term_traded_carbon_values_for_appraisal_purposes_2016.pdf

the road casualty figures for the relevant vehicles are available until 2015 which gives only two years from when the Directive was transposed to evaluate the effect. In order to consider apportioning credit to a particular measure it is necessary to view the figures after many years, sometimes decades, such as the introduction of the practical test itself in 1935.

In addition, there have been other road safety measures that could affect casualties. Vehicle design, traffic calming measures and issues such as speed cameras can have an effect. As such, it is notoriously difficult to assess the effect of a particular change on road safety.

With this qualification, however, we can look at the road casualty statistics and consider if there any trends. The table indicates a long term reduction, a slight increase in 2014 and then an overall drop back to below the 2013 levels in 2015. The trends are shown in graphs in the Evidence Base under Road Safety Benefits in Great Britain with an overall table in ***Annex E***.

It is also worth considering the feedback from trainers. In the survey, we asked trainers whether they believed RTM had improved drivers' skills. 75% of the trainers of drivers of C and C+E vehicles felt that skills had improved, for drivers of B+E, C1+E, D+E and D1+E vehicles, 67.6% felt that skills had improved and for delegated examiners 91.17% felt that skills had improved. Figures are shown at ***Annex A*** for trainers and ***Annex C*** for delegated examiners.

Whilst this is anecdotal, trainers are in a good position to evaluate the benefit. They give optimism that laden testing has improved standards.

6. Assessment of risks or uncertainties in evidence base / Other issues to note

Some of the figures are based on original estimates and we have added revised figures (such as tax rates and the cost of fuel). All the outcomes are estimates and could vary if assumptions are incorrect. However, we have undertaken a survey with the industry and the figures obtained indicate that the assumptions made are broadly in line with information provided by trainers. In addition, the road safety statistics are based on overall assessment and do not take into account other factors which could have affected casualties.

7. Lessons for future Impact Assessments

There are no specific lessons for future impact assessments.

8. What next steps are proposed for the regulation (e.g. remain/renewal, amendment, removal or replacement)?

The system devised for the introduction of Real Total Mass has proved successful in delivering a test that complies with the Directive, is simple and inexpensive to comply with and is straightforward to check. The cost of implementation and ongoing operation is not considered onerous if taken across the whole industry.

This does not mean there are no areas where there could be improvement. There have been reports – within and outside the survey – that IBCs can, over time, split. This requires replacement of the containers and there had been concern expressed that there could be damage to vehicles. These comments have, however, been anecdotal and, as such, are not reflected in the costs and benefits.

In view of this, it is sensible to consider whether the system can be modified, to allow additional items to be used as the load.

The key element here is that the load must be able to be quickly and easily checked by the DVSA examiner to avoid delays.

We propose to work with the industry to identify whether there are any suitable additional loads which can be used. We would plan to consult before making any changes to the regulations.

Sign-off for Post Implementation Review:

I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the policy.

Signed: Shafiq Pandor **Date:** 11/10/2017

Evidence Base

1. POLICY BACKGROUND – THE DRIVER TESTING AND VEHICLE LOAD REGULATIONS

1.1 Legislative Background to the Driver Testing and Vehicle Load Regulations

In August 2013, Commission Directive 2006/126/EC was transposed into UK legislation by Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013 (the "2013 regulations"). Point 5.2 of Annex II of the Directive amended Directive 2000/56/EC[8], which had previously amended Directive 91/439/EEC[9]. The 2013 regulations amended the relevant sections of the Motor Vehicles (Driving Licences) Regulations 1999, the Vehicle Drivers (Certificates of Professional Competence) Regulations 2007 and the Goods Vehicles (Licensing of Operators) Regulations 1995.

The Directive required that large vehicles and vehicle-trailer combinations had to meet a "real weight" requirement at the test – known at the "real total mass" (RTM). This meant that these vehicles and vehicle-trailer combinations had to carry a load to meet the requirement. Driving Licence categories affected by the RTM requirement are C, C+E, C1+E, D+E, D1+E and B+E. It was left to the discretion of Member States as to how they satisfied the load requirement and whether they wanted to introduce higher MTVs for their jurisdiction. The United Kingdom decided to introduce the minimum requirements and thus avoid what is termed "gold-plating" which means going beyond what is required in the Directive.

The 2013 regulations specified that laden testing could be undertaken voluntarily for tests in the appropriate categories from 15 August to 14 November 2013. It would become a mandatory requirement for tests taken from 15 November 2013.

This PIR is reviewing the arrangements for laden testing on vocational tests taken in Great Britain, in line with the provisions in the 2013 regulations. Northern Ireland have made their own provisions for these tests. However, the review includes tests taken in Northern Ireland by virtue of the Vehicle Drivers (Certificates of Professional Competence) Regulations 2007, to which the 2013 regulations extend.

1.2 Impact of the EU referendum

On 23 June 2016, the EU referendum took place and the United Kingdom voted to leave the European Union. Article 50 of the Lisbon Treaty, giving notice to the EU of the intention to leave, was invoked on 29 March 2017. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation and funding in future once the UK has left the EU.

[8] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:237:0045:0057:EN:PDF

[9] http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31991L0439

1.3 Summary of Principal Changes Brought about by the Directive

The table below summarises the RTM requirements after the Directive was implemented. Before this, there was no requirement for a load on test.

VEHICLE CATEGORY	REAL TOTAL MASS REQUIREMENT	
	Vehicle/Trailer Affected	Minimum Weight
B+E (Car plus trailer)	Trailer	600 kgs
C (Lorry)	Vehicle	10,000 kgs
C+E (Articulated lorry)	Tractor vehicle & Trailer	15,000 kgs for the combination
C1+E (Small lorry plus trailer)	Trailer	600 kgs
D+E (Bus plus trailer)	Trailer	600 kgs
D1+E (Mini bus plus trailer)	Trailer	600 kgs

1.4 Policy Objectives of the Directive

Annex II of the Directive updated the minimum requirements for driving tests - that Member States should take the necessary measures to ensure that applicants for driving licences possess the knowledge and skills and exhibit the behaviour required for driving a motor vehicle.

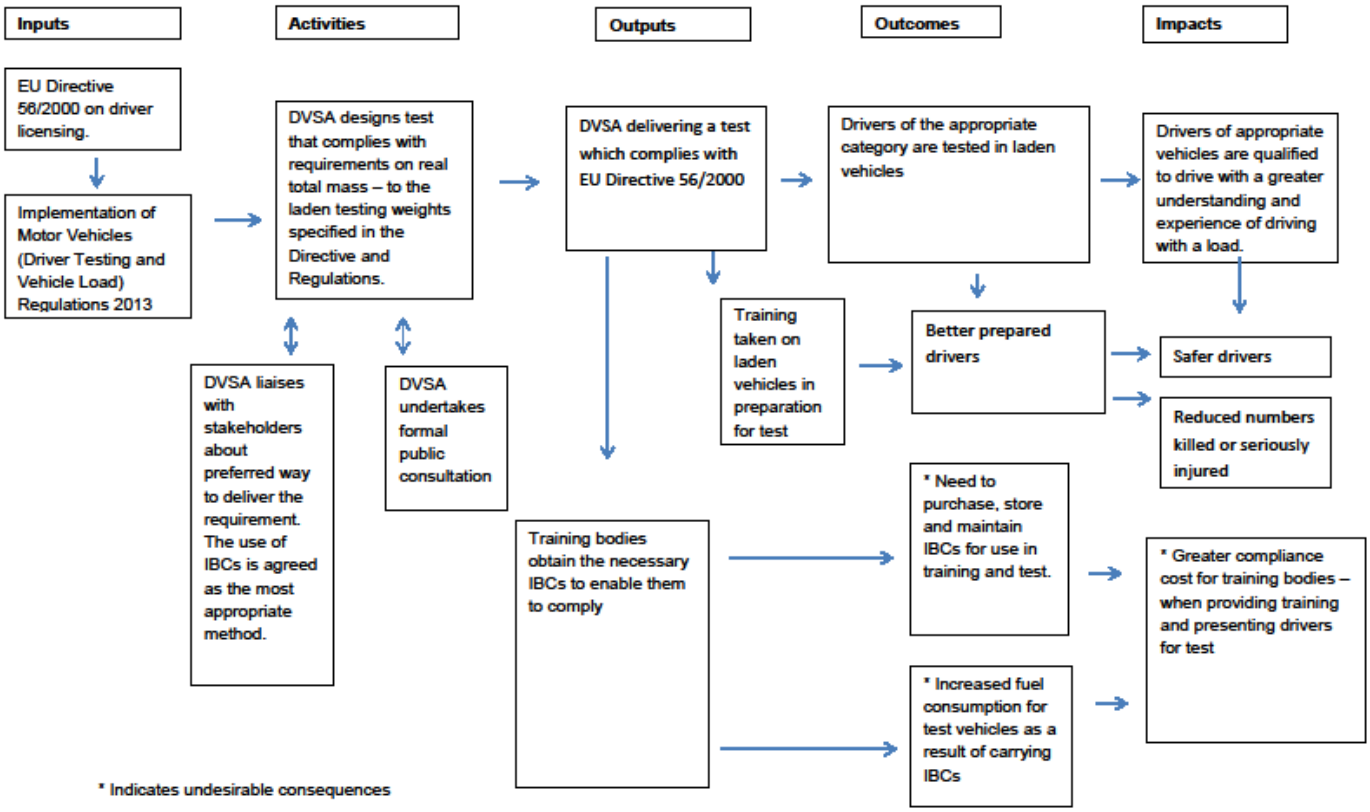
The main objectives of the new arrangements were as set out in the IA:

- Improve road safety by making drivers better prepared for actual driving conditions after they have passed their practical test.

- Avoid the consequences of not implementing the Directive. If the UK had not implemented this EU legislation, then there was the risk that drivers passing their test after the implementation date (30th September 2013) would have found that their driving licences would not have been recognised by other Member States and would have been prevented from driving in those States. Failure to implement would also have risked infraction proceedings against the UK.

The UK did not add any additional objectives to those of the Directive.

The following logic map sets out the assumed causal mechanisms through which implementation of the Directive is expected to contribute to these main objectives.



2. POST-IMPLEMENTATION REVIEW BACKGROUND

2.1 The PIR Requirement

As stated in section 1.1, the RTM requirement was introduced in 2013 by Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013. This Statutory Instrument included a clause mandating that the regulations were reviewed periodically, considering the objectives of the regulations and whether they could be achieved with reduced regulation.

2.2 Proportionality Assessment for the PIR

This is deemed to be a "Low Evidence" PIR for the following reasons:

- The size of the costs and benefits quantified in the IA are small.
- The societal impact of the regulation is relatively narrow and could not be considered to be very high profile.
- It is difficult to measure the impact of the regulation on road safety, especially over the relatively short period of time that this elapsed since implementation.

In undertaking this PIR, we have considered the publicly available information to ascertain the outcomes. These comprise the road casualties since laden testing was introduced compared with a comparative period before and economic indicators such as fuel duty and costs of items used as load.

We have also gone directly to those using the service – trainers of candidates taking tests in appropriate vehicles along with delegated examiners[10] and others – to obtain views on the way laden testing has been introduced and the economic impact. In addition, we have attempted to contact, via representative bodies, those likely to take tests as individuals in cars towing trailers for various reasons. Unfortunately, we have not received responses from the latter.

[10] Examiners directly employed by some haulage, bus and coach companies, along with emergency and armed services.

Taken overall, it is considered that this is a proportionate approach to assessing the impact of laden testing.

2.3 Identification of Research Questions for the PIR

The main research questions identified for the PIR are outlined in the table below. They were determined both by a review of the PIR template in the PIR guidance and by the development of a logic map for the Directive.

PIR Element	Overarching Questions
Implementation Evidence	What options were available to the UK within the Directive? What choices were taken? How do these choices compare with other Member States?
	Did the implementation of the UK regulation avoid gold plating?
	Which public bodies were involved in implementing the Directive?
	Was the Implementation successful?
Outcome Evidence	How have the regulations affected driver training and skills?
	How have the regulations affected the drivers and the driver labour market?
	How have the regulations affected road safety?
	How have the regulations affected businesses?
	How have the regulations affected competition in the industry across the EU?
	Have the regulations had any unintended consequences?
Economic Evidence	What were the costs of the regulations?
	What were the benefits of the regulations?
	How do these costs and benefits compare to initial estimates?
PIR Summary	Have the regulations achieved their objectives and are these objectives still valid?
	What is the recommended course of action for the regulations?
	What will the next steps relating to the regulation be?
	Are there any lessons for impact assessments from this PIR?

Research Methodologies Used in the PIR

The research methodologies used in this PIR, are described below.

Methodology	Description
Literature Review	The initial consultation and response on the broad options for implementation of the Directive in 2009. This consultation attracted 24 responses.
Stakeholder consultation	An online survey of stakeholders was undertaken in March and April 2017. These included driver trainers in the classes of vehicle, delegated examiners and bodies representing those likely to take car and trailer tests. Training organisations were asked about the costs of complying, the number of tests taken each year, the amount paid for IBCs, how often these are replaced and whether costs are passed down. Delegated examiners were asked about the ease of conducting tests. In addition, in 2015, we issued a questionnaire to other Member States in order to help inform our understanding of how they had implemented this Directive and about the success of the new test. .
Secondary data analysis	Secondary data covering road accidents and duty on fuel have been used in the PIR.
Break-Even Analysis	The actual costs have been estimated and an assessment of the level of benefits that would be required to offset the estimated costs has been made.

3. IMPLEMENTATION EVIDENCE

3.1 What options were available to the UK within the Directive? What choices were taken? How do these choices compare with other Member States?

The principal options that were available within the Directive were as set out below.

Option	UK Approach	Approach in Other EU States
Type of load to comply with RTM requirement. Four alternatives were considered: Option 1 Large vehicles and trailers must have a standard load of either inert, non toxic material or a number of "intermediate bulk container" (IBC)'s, supplied by the training organisation. (An IBC is a bulk storage container with a capacity of 1,000 litres (marked on its exterior) which is filled to capacity with water). For some vehicles, there were alternatives: a fire engine could use the water or foam carried as its load. For categories B+E, C1+E, D+E and D1+E – where the load was more easily identifiable - it was defined as a minimum of 600kg and maximum of 1000kg loaded on the trailer. Option 2 The form of the load would not be specified and it would be the examiner's decision whether the vehicle and its contents complied with the requirements and were acceptable for a practical driving test. The examiner would make a visual check to ensure it was compliant.	Option 1 was chosen. It was considered that this would enable the Directive to be implemented with minimum burden on business and the public sector. Options 2, 3 and 4 would have required trainers to apply for an Operator's licence, imposing a burden of £3,500 for each trainer, which wold have been "gold plating". Whilst this would have given more freedom to trainers in deciding on load, the main disadvantage would have been that they would not have been exempt from Operator licensing. In addition, in Option 3, it would have been necessary to load the vehicle in the scenario where the trainer did not wish to do so. This would have required the test centre to have sufficient staff, and storage facilities to be able to load the vehicle before every test. This was not practical. Option 4 would have required DVSA to purchase weighing equipment, costing some £7,000 to £40,000 per item as well as additional staff to operate these. Option 1 imposed the lowest administrative costs and burdens on both businesses and government whilst providing the same level of road safety impact as the more costly options.	Specified load: Croatia - a concrete cube on a pallet. Northern Ireland - same as UK but, in addition, a 600 litre water filled IBC could be used for B+E, C1, +E and D1+E. Norway did not specify for other than B+E which was a load consisting of parcels with a combined weight of at least 300kg (the contents of the parcels were not specified. Romania - 25kg bags of sand. Sweden - a cargo that is a box constructed design, loaded to 2/3 of the load allowed for the road of a type that can be anchored. Dangerous goods products were banned by France, along with live animals, and Spain ban cement or iron blocks or similar. Sweden also banned animals and dangerous cargo.

Option	UK Approach	Approach in Other EU States
Option 3 DVSA (then DSA) would have held a supply of IBCs and loaded them onto the vehicles and vehicle trailer combinations when they were presented for test. The form of load would not, however, be specified. Option 4 DVSA (then DSA) would weigh vehicles and vehicle trailer combinations when they are presented for test.		

3.2 Did the implementation of the Directive in the UK regulation avoid gold plating?

The UK took the least burdensome option. The use of IBCs is the most straightforward method of ensuring trainers vehicles have a load, avoiding uncertainty of the weight and the expense of obtaining an operator's licence. By doing this, we avoided gold plating the regulations.

3.3 Which public bodies were involved in implementing the Directive?

The Driving Standards Agency (DSA) (now merged with VOSA to form the Driver and Vehicle Standards Agency) in GB and the Driver and Vehicle Agency in Northern Ireland (NI).

DSA and DVA carried out the initial consultation in 2009 covering the broad options for implementation. This consultation attracted 24 responses, including those of major stakeholders - freight transport trade associations, representatives of the passenger carrying industry and local authorities as well as vocational driver trainers. The proposals were supported by the majority of those who responded, with suggestions being made about the arrangements for implementation. The outcome of the consultation was taken into account in developing the final design of the laden testing procedures.

3.4 Was the Implementation Successful?

For successful implementation, it was necessary to put in place the arrangements for testing the relevant laden vehicles. It was also necessary for training organisations to comply with the changes, and to ensure that vehicles presented for test were laden in accordance with the regulations.

Laden testing was introduced as required, with little objection. Training organisations complied with the requirement, purchasing IBCs as necessary and attending for test with laden vehicles.

Testing

DSA and DVA for CPC developed a test in the different vehicle categories which would incorporate laden testing. This followed the following format.

Category or sub-category and description of vehicle	Nature and weight of load required to be carried on the vehicle or trailer or both
B+E (car plus trailer)	A training load weighing a minimum of 600kg and a maximum of 1,000kg loaded on the trailer
C (fire engine)	Water or foam carried on the fire engine so the total laden weight is at least 10,000kg
C (other vehicles)	Five IBCs loaded on the vehicle
C+E (articulated goods vehicle combination)	Eight IBCs loaded on the combination
C+E (combination of minimum test vehicle for category C and a trailer)	Five IBCs on the vehicle and three IBCs on the trailer
C1+E (medium sized lorry plus trailer)	A training load weighing a minimum of 600kg and a maximum of 1,000kg loaded on the trailer
D+E (bus plus trailer)	A training load weighing a minimum of 600kg and a maximum of 1,000kg loaded on the trailer
D1+E (minibus plus trailer)	A training load weighing a minimum of 600kg and a maximum of 1,000kg loaded on the trailer

The test was finalised and in place by the appropriate date.

Training organisations

The organisations delivering vocational driver training had the necessary arrangements in place to implement laden testing from the due date. This followed liaison between DSA and the industry.

Overall view of successful implementation

The test was developed, the mechanism for compliance established and the industry arrangements to enable candidates to take the test put in place. The implementation of laden testing was a success. Analysis is necessary to evaluate the level of satisfaction with the new regime, whether there are suggestions for improvement and the extent to which the wider benefits are realised.

The view of the vocational driver training industry

We have undertaken a targeted consultation with key industry representative bodies. We wrote to the Vocational Training and Testing Advisory Group (VTTAG), who represent the training industry. This was undertaken during March and April 2017. Over 300 trainers are signed up to the trainer booking facility for booking test appointments, which gives an indication of the number of trainers. We ran several online surveys:

- For vehicles C and C+E. We received 166 responses to this survey.
- For vehicles B+E, C1+E, D+E and D1+E. We received 77 responses to this survey.
- For vehicles C and C+E (CPC tests, Northern Ireland). No responses were received to this survey.
- For vehicles C1+E, D+E and D1+E (CPC tests, Northern Ireland). We received three responses to this survey.
- For delegated examiners. We received 35 responses to this survey.
- For sectors most likely to take tests in B+E – equestrian, boating and caravan. No responses to this survey were received.

We asked about satisfaction with the current laden testing arrangements, whether there were problems with the arrangements, the costs of compliance and for suggestions of how the arrangements could be improved.

DVA in Northern Ireland wrote to training organisations on our behalf to cover the implementation of real total mass for CPC tests. We had hoped to receive more feedback than the three responses to the C1+E, D+E and D1+E survey. However, we have considered the responses received and used these in undertaking the assessment.

Similarly, we wrote to the Pony Club, the British Horse Society, the Caravan Club and the Royal Yachting Association, about how real total mass affected their members. We received no responses. In the absence of comments, we have views of trainers in these vehicles and are basing our assessment on these.

For vocational trainers in Great Britain, this is considered a reasonable representation of all views. However, for training organisations in Northern Ireland, and those considered to represent car plus trailer candidates, the results were disappointing.

Level of satisfaction with laden testing

Vehicles C and C+E

Of those industry representatives that responded, 61.9% were better than "slightly satisfied" with the arrangements surrounding laden testing. Comments included the view that the weights required could be higher to be more realistic, some saying they could be lower. Some felt that there should be more checks to confirm the weight. The use of IBCs was questioned by some as they tended to leak after a while which requires replacement and risks damage to the vehicle. Others felt that there could be different types of load such as concrete blocks or sand.

Vehicles B+E, C1+E, D+E and D1+E

Of those trainers that responded, 59.71% of trainers in cars, small lorries, buses and minibuses were better than "slightly satisfied" with the arrangements for laden testing. There were differing views on alternatives. It was suggested that aggregate be used whereas it was pointed out that this might not be marked with the weight. Some felt that the weight was too high for a normal B vehicle and others that some individuals of slight build might have difficulty undertaking the coupling exercise. It was also felt that there should be additional checks to those made at present, to ensure that the weight is correct.

Suggestions for improvements to the system

Industry representatives had various suggestions on how the system could be improved. Some felt that the weight required to be carried on larger vehicles should be increased as the current ones were too low and were unrealistic. Conversely, others suggested that there was no need for laden testing, with some mentioning that it is less relevant to vehicles with auto gearboxes, and that this should be abolished.

There were a number of comments on the type of load that should be carried. Some referred to IBCs being less stable over a longer period, with leaking and, in some cases, splitting. This could potentially be damaging to the vehicle. Respondents suggested alternatives to IBCs, such as carrying a solid load, which would be more stable than water, concrete blocks and aggregate or sand. Giving much more flexibility would be useful for trainers.

There were suggestions on how the examiner could check the load. One trainer suggested that vehicles could use their own weighing machinery. Another suggested that vehicles could be weighed by DVSA with a load, certified and then the relevant part of the vehicle sealed for future use.

3.5 Survey of Member States

In June/July 2015 DVSA conducted an electronic survey amongst CIECA members on the implementation of laden vehicle testing for certain categories of vehicles. Eighteen out of the twenty eight CIECA members completed the survey.

DVSA asked
- To what extent the directive achieved its objectives
- If there were any unintended effects
- Any actual financial costs and benefits of the directive
- Any impacts on small or micro businesses.

The findings can be summarised:

Some member states specified the type of load that could be carried on a practical test. Croatia specified a concrete cube on a pallet, Northern Ireland was the same as the UK but, in addition, a 600 litre water filled IBC could be used for B+E, C1, +E and D1+E. Norway did not specify for other than B+E which was a load consisting of parcels with a combined weight of at least 300kg (the contents of the parcels were not specified), Romania stated 25kg bags of sand and Sweden stated a cargo that is a box constructed design, loaded to 2/3 of the load allowed for the road of a type that can be anchored.

ADR products were banned by France, along with live animals, and Spain banned cement or iron blocks or similar. Sweden also banned animals and dangerous cargo.

None of the eighteen who responded to the question, said that they had any experience of difficulty obtaining a suitable load. There were comments about the initial cost of a load, that, in some cases, the examiner could only estimate whether the load was of the correct amount and the need to purchase heavy duty IBCs to avoid leaks.

Neither were there comments saying that there were difficulties loading vehicles. The only comment related to the lack of anchor points

Suggestions for alternative loads included pallets loaded with 1 tonne of cement building blocks, or a 1 tonne manufactured concrete moulded block clearly marked showing the weight. Others reiterated bags of sand or water tanks, which can be easily handled.

Some responses referred to increases in fuel consumption although this was not specified.

There were anecdotal comments about improvements in driving relating to fuel efficient driving, more realistic feel of the vehicle and handling of the trailer.

Overall, little hard evidence was available, with only around 60% of CIECA members responding. Suggestions for alternative loads was limited, some responses indicating loads already in use in the UK and proposals for cargo that were rejected as potentially dangerous in previous domestic consultations with the industry.

However it appears that there have been no overall problems with implementation of the directive. Suitable loads were obtained with no difficulty and there were no problems with loading or health and safety. The Directive was implemented but the nature and impact on customers remains unclear.

4. OUTCOME EVIDENCE

4.1 Assumptions in Impact Assessment

In the published Impact Assessment (IA) in 2013, a number of assumptions were made. We have reviewed these with comments from consultees in the consultation exercise that we carried out with some useful results. A table of these is at ***Annex A***.

Areas which we would highlight include:
- An upturn in demand for vocational tests, which is likely to have arisen primarily from improved economic conditions. There was a potential for demand to fall with the laden testing provisions, which has not

happened. The latest figures, for 2016/17, give a total of 101,075 tests including 74,407 C ,C+E and C1+E tests, 26,371 B+E tests and 293 D+E and D1+E tests.

- A change in testing arrangements for LGV/PCV tests, with fewer test centres and tests taking place customer owned sites.
- There has been an increase in examiners to 327 from 259, though this fell short of the 500 which had been anticipated.
- Training costs to government have been negligible as examiners have been issued guidance.
- Checking loads has been straightforward and enforcement has been minimal.
- 90% of trainers took intensive courses but there was less emphasis on training from Monday to Thursday and tests taken on Saturdays
- C and C+E vehicles are used between 41 and 52 weeks a year, B+E, C1+E, D+E and D1+E are used between 31 and 40 weeks a year. The estimate was 40 weeks.
- C and C+E vehicles are used between 41 and 60 tests a year, B+E, C1+E, D+E and D1+E are used between 20 and 40 tests a year. The estimate was 80 tests.
- Most travel between 21 and 30 miles a test. The estimate was 10 – 30 miles.
- Trainers for C and C+E had paid between £41 and £50 for an IBC, B+E, C1+E, D+E and D1+E had paid between £31 and £40. The estimate was £60.
- Trainers for C and C+E had bought between 6 and 10 IBCs per vehicle, B+E, C1+E, D+E and D1+E had bought between 1 and 5. The estimate was 5 for C and 1 for B+E, C1+E, D+E and D1+E.
- 38.24% of trainers in C and C+E had replaced IBCs since 2013, 26.47% had not done so but expected to do so in the near future, 35.29% did not expect to in the near future. 27.27% in B+E, C1+E, D+E and D1+E had replaced, 27.27% had not done so but expected to do so, 45.45% did not expect to do so. The estimate was that IBCs would not need replacing.
- 50% of C and C+E and 46.88% of B+E, C1+E, D+E and D1+E had not refilled IBCs. The estimate was that IBCs would not need refilling.
- Most C and C+E (29.85%) filled IBCs in half an hour and B+E, C1+E, D+D and D1+E (38.71%) filled IBCs in an hour. The estimate was one and a half hours.

4.2 CPC in Northern Ireland – vehicles C, C+E, C1+E, D+E and D1+E

We have worked with DVA, who conduct CPC tests within Northern Ireland. They distributed a survey on our behalf to around 90 trainer representatives. Unfortunately, responses were very low with only three being received in vehicle categories C1+E, D+E and D1+E. No responses were received from trainers in vehicle categories C and C+E.

This level of response is considered sufficient only to make a broad assessment of the views of the training industry in Northern Ireland. It is taken together with the views of officials in DVA to provide an overall evaluation of how laden testing has been implemented.

Essentially, the introduction of laden testing in Northern Ireland has been successful. Like Great Britain, it was brought in on time and the trainers were prepared for introduction, bringing vehicles for testing that were correct. Enforcement has been straightforward, with the system designed making it easy for examiners to tell whether the vehicle is laden.

The small numbers who responded to the survey, indicated a wide range of views on various issues. The trends are shown in tabular format at ***Annex B***. The following are the headline views:

- The sense of the value of laden testing was varied, with one said it had improved skills considerably, another a little and another not at all. Two were at least satisfied with the process, one not satisfied.
- All responding undertook intensive courses, two of them on any day, one from Monday to Friday.
- All three preferred a training load package to an IBC, though two had used an IBC. Two had bought 1 to 5 training load packages, another 11 to 15. The price of an IBC ranged from £51 - £60 for one and for the other over £100. The cost of a training load package ranged for two from £21 - £30 and for one from £31 – £45.
- Three of the responses felt that costs had increased by the cost of a training load and additional fuel. Two had absorbed the cost, the other had passed down a proportion of it.
- The regularity of testing varied. The numbers of weeks each year that vehicles were used for testing ranged from 10 – 20 weeks to 31 – 40 weeks and 41 – 52 weeks. Two responses used vehicles for between 20 and 40 tests and the other 100 tests. The average distance travelled ranged from 10 – 20 miles to 21 – 30 miles and 31 – 40 miles.

- The loading and refilling time for IBCs were on the low side - one took less than half an hour to load an IBC and another took half an hour. Two advised whether they refilled IBCs, one not doing so, the other doing so between 1 and 6 months. Filling an IBC took one an hour and the other two hours. One supervised their staff filling the IBCs, one did not.
- One had not needed to replace the IBCs but expected to do so in the near future, another did anticipate needing to replace them.

4.3 Expected benefits

The intention of the proposal was to ensure that the types of vehicles that will be driven after the test are reflected in the test. This should mean that successful candidates are more able to handle laden vehicles. This should feed into training undertaken before the test. It is intended that the result will be better prepared and trained drivers and lower accident rates and improved road safety.

Benefits

Effect of minimal reduction in accidents

The initial IA evaluated the possible effect of a minimal reduction in accidents. A 1% reduction was used to provide a useful indication. To identify relevant accidents, it considered those which are appropriate to LGV drivers not driving properly for the weight of the vehicle. Whilst this group could not be identified directly from the data, three contributory factors indicated accidents where a better trained driver could have avoided the accident:

- UK LGV drivers with 'overloaded or poorly loaded vehicle or trailer' reported.
- UK LGV drivers with 'following too close' reported.
- UK LGV drivers with 'travelling too fast for the conditions' or 'exceeding the speed limit' reported while going around a bend or at a junction.

The IA considered it logical to assume that at least a small proportion of these accidents could have been prevented by better driver training and that a more realistic test would prepare drivers better for how vehicles will handle.

On this basis, it was estimated that with a 1% reduction the following benefits could be achieved in a year:

- 1 less seriously injured = £178,160
- 8 less slight injuries = £109,920
- Total = £288,080

This was based on the following - £1,585,510 for the cost of a fatality, £178,160 for a serious injury and £13,740 for a slight injury [11]

Road Safety Benefits in Great Britain

The main difficulties in assessing benefit are the lack of supporting evidence with regard to road safety and the small period of time following implementation. Because of the different reasons for any change in numbers of accidents – such as vehicle design, driver education and traffic calming measures – it is problematic to give credit to a particular element in any change. Additionally, the latest figures available are from 2015, only two years since the changes, which is insufficient to give a definitive assessment of the road safety value of laden testing.

With this qualification, however, we can look at the road casualty figures and consider if there any trends. The actual figures for these groups indicate a small longer term reduction in casualties – an 8% reduction in all casualties for the relevant vehicles from 2010-12 (when there were 35,537 casualties and 2013-15 when there were 32,640 casualties). This is shown at ***Annex E***.

Regarding the causation factors outlined above, for the period since introduction of laden testing, there was an increase in following too close and travelling too fast for the conditions in 2014 but this was followed by a decrease in 2015. There was also a net decrease in all categories of 32. However, there is an insufficient

[11] Dept for Transport WEB TAG Unit 3.4.1. Table 1

difference, over too short a period, to make a considered opinion of the effect of laden testing on these elements.

The following graphs give an indication of the overall and individual trends. The overall statistics for relevant vehicles are from 2004 to give a wider context. Figures for specific elements start in 2011. Tables of these figures are at ***Annex E***.

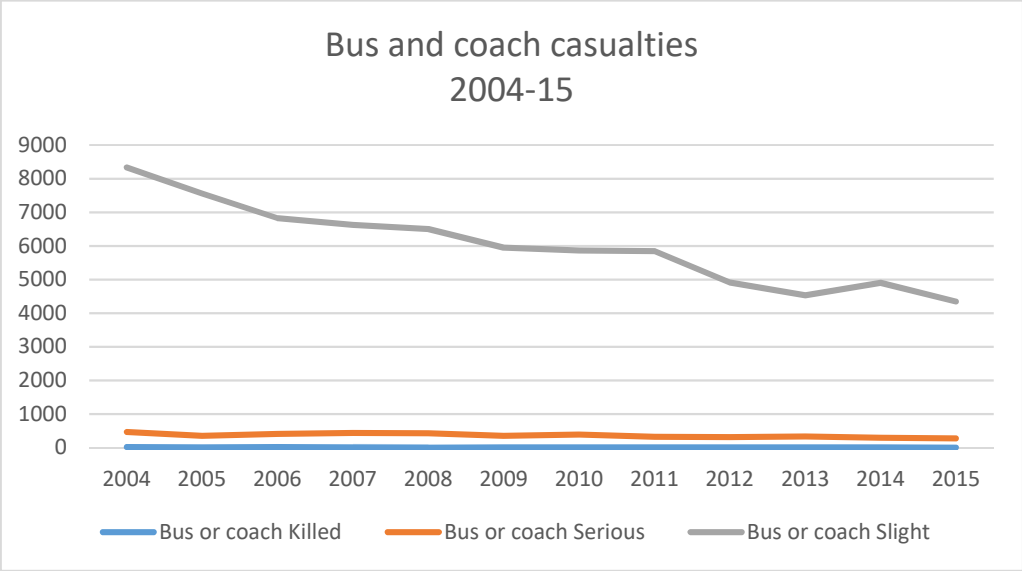
Feedback from trainers

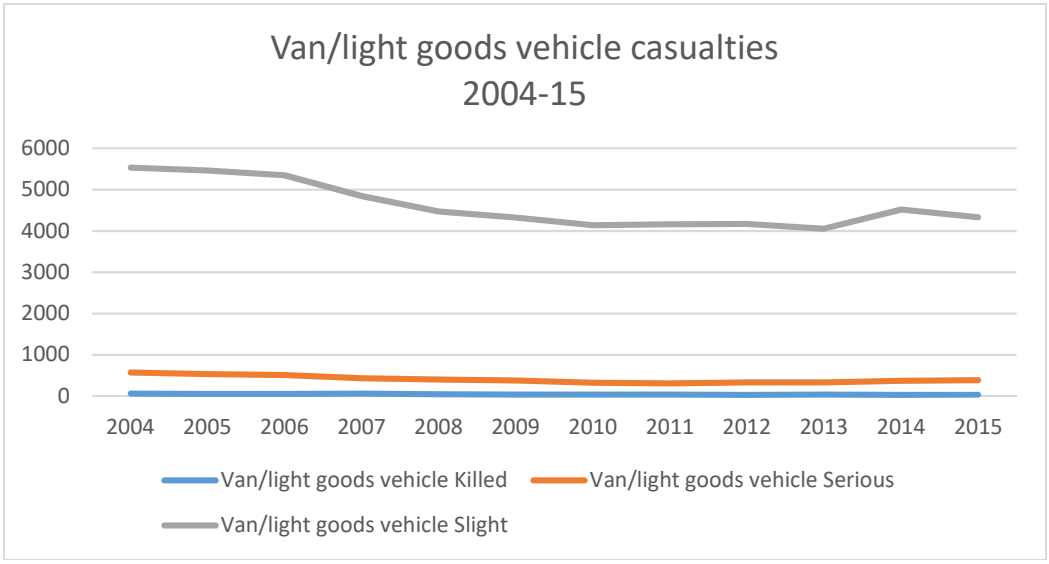
We have also obtained feedback from trainers. In the survey, we asked trainers whether they believed RTM had improved drivers' skills:

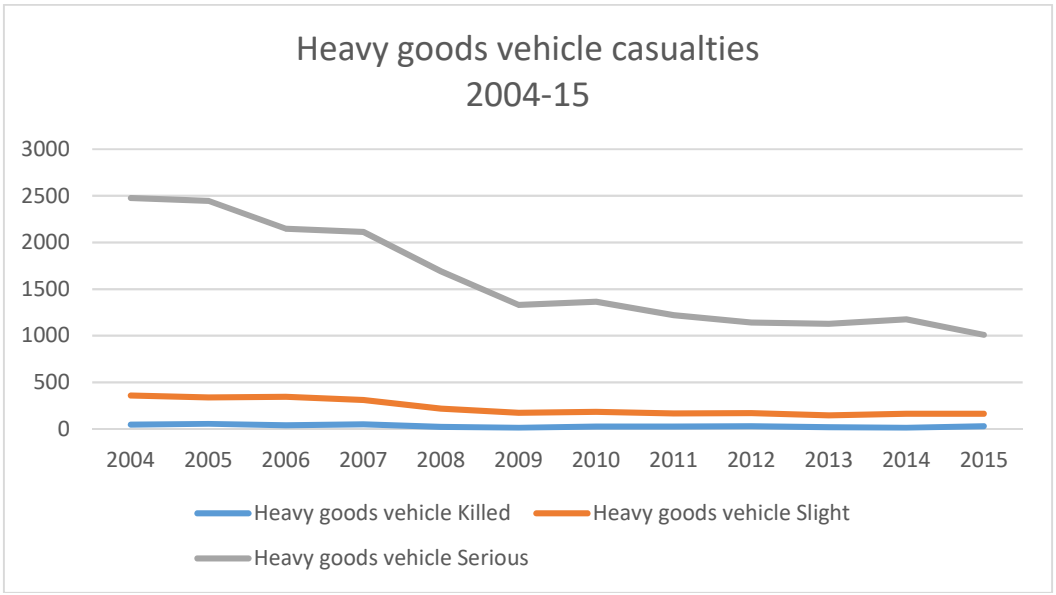
- 75% of trainers of drivers of C and C+E vehicles felt that skills had improved. These were broken down as considerably (20.95%), a good deal (24.32%) or a little (29.73%), with 25% feeling they had not improved at all.
- 67.6% of trainers of drivers of B+E, C1+E, D+E and D1+E vehicles felt that skills had improved. These were broken down as considerably (19.72%) a good deal (14.08%) or a little (33.8%), with 32.39 feeling they had not improved at all.
- 91.17% of delegated examiners felt that skills had improved. These were broken down as considerably (32.35%), a good deal (47.06%) or a little (11.76%). 8.82% felt they had not improved at all.

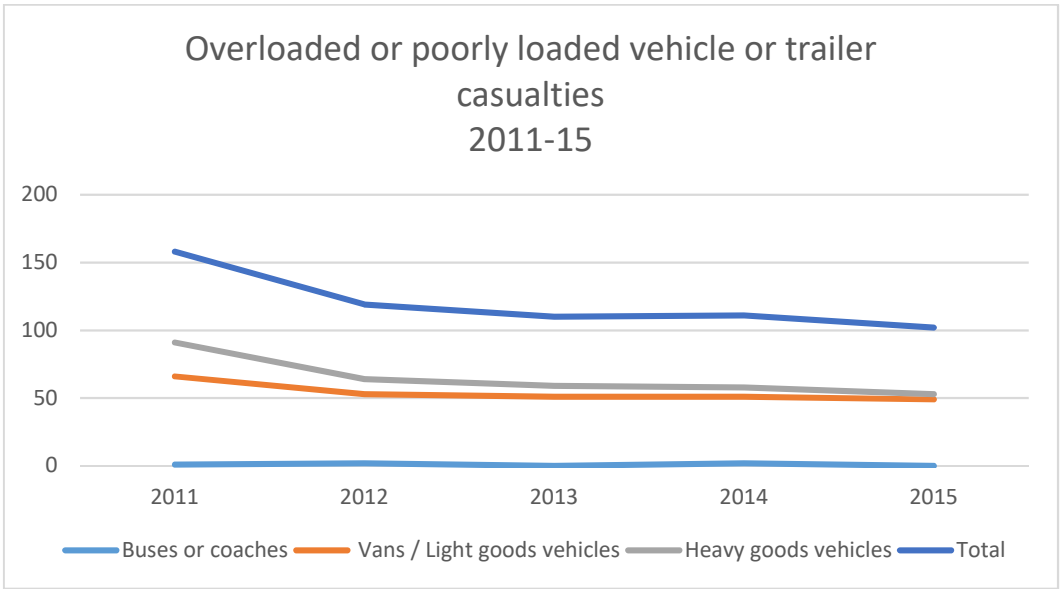
Trainers identified improvements in driving demonstrated by candidates. The most significant area was in braking, followed by vehicle handling and cornering. Laden testing was seen as more realistic by some trainers, with an awareness of loads in terms of distribution and security, and others referred to improvements in negotiating roundabouts and junctions, in planning and anticipation and in speed awareness such as accelerating and moving away. Some felt that there was no difficulty before laden testing was introduced and the measure was unnecessary. Others saw it is beneficial, giving drivers a realistic preparation for driving after they have passed the test.

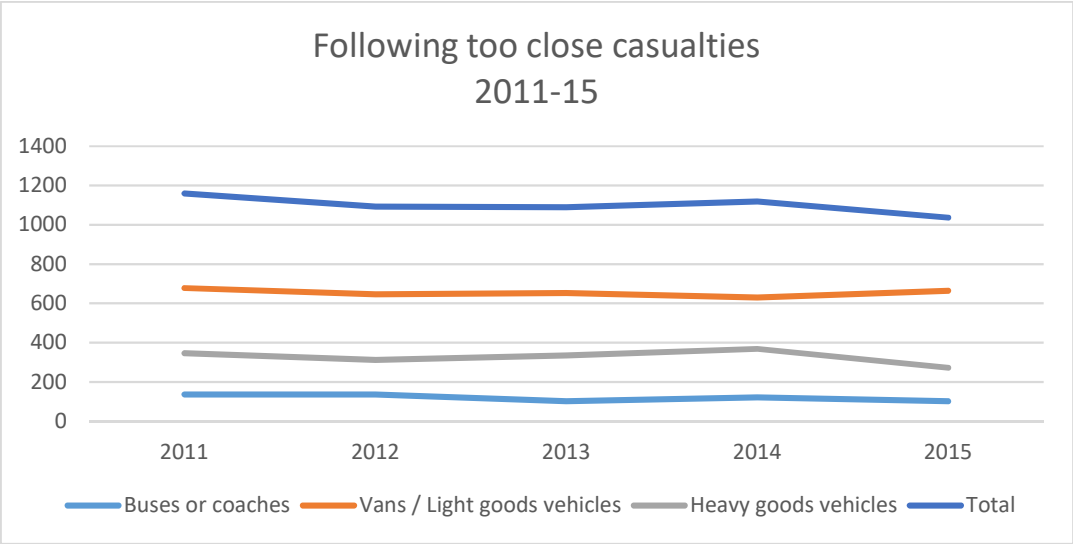
Whilst this is anecdotal, trainers are in a good position to evaluate the benefit. They give optimism that laden testing has improved standards.

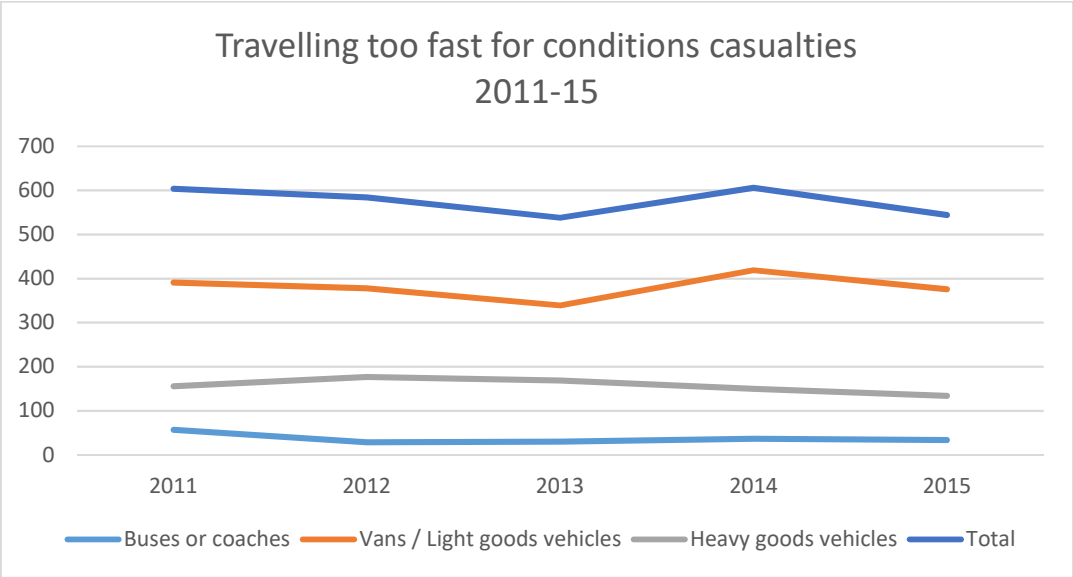



Van/light goods vehicle casualties
2004-15
6000
5000
4000
3000
2000
1000
0
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Van/light goods vehicle Killed
Van/light goods vehicle Serious
Van/light goods vehicle Slight


Heavy goods vehicle casualties
2004-15
3000
2500
2000
1500
1000
500
0
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Heavy goods vehicle Killed
Heavy goods vehicle Slight
Heavy goods vehicle Serious


Overloaded or poorly loaded vehicle or trailer casualties
2011-15
200
150
100
50
0
2011 2012 2013 2014 2015
Buses or coaches
Vans / Light goods vehicles
Heavy goods vehicles
Total





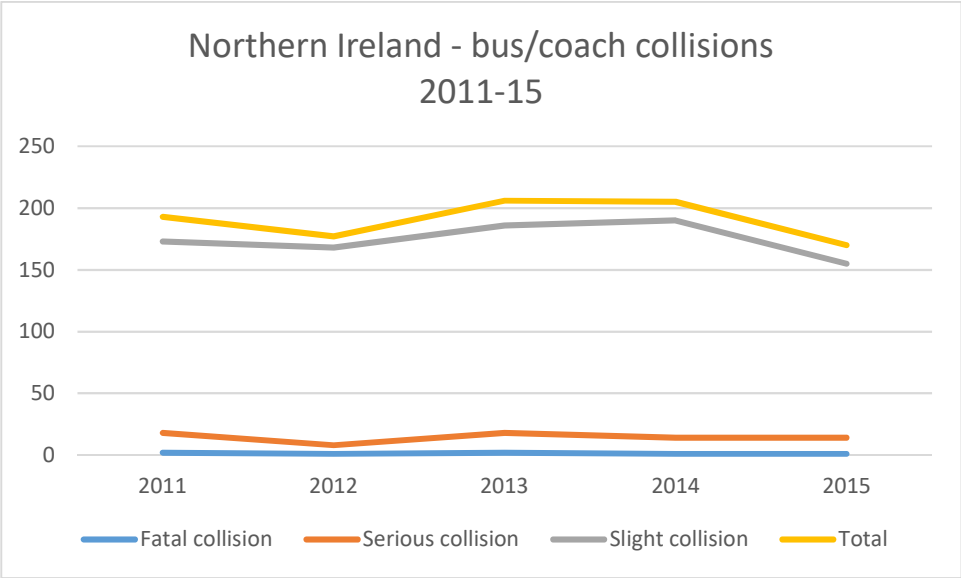
Source: DfT Road accidents and safety statistics

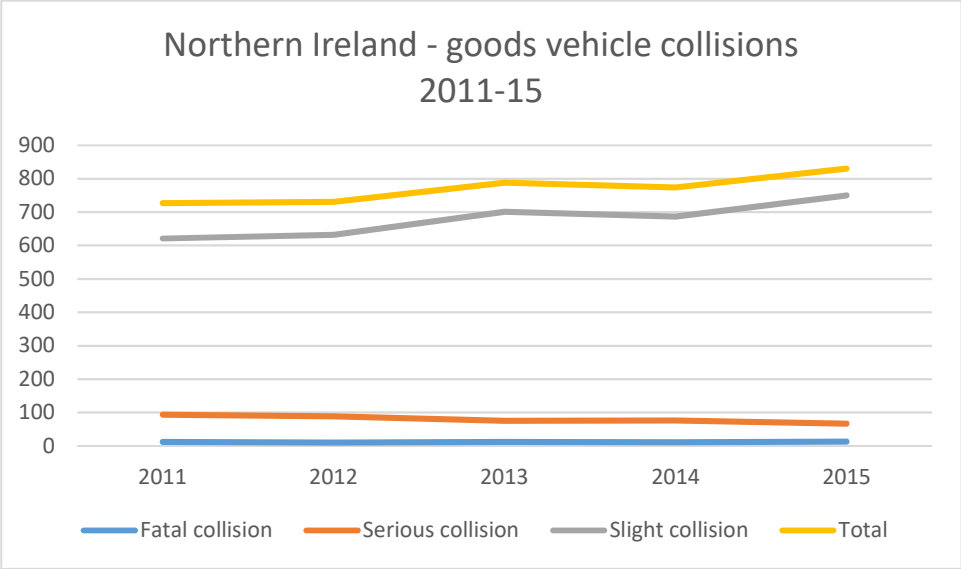
Road safety benefits in Northern Ireland

We have also considered the casualty figures for the two years before laden testing and compared these with those for the two years after. As explained above, it is difficult to ascertain the link between changes in casualties and specific measures, in view of the variety of changes that will have applied during that time.

With this in mind, the following tables gives the differences in statistics for goods, buses and coach vehicles and indicates a reduction for bus and coach collisions but a goods vehicle increase in 2014. These are based on figures in various tables.

These casualty figures differ from those used for GB. This is because the figures are displayed in a slightly different way on both the Northern Ireland and GB sites.





5. ECONOMIC EVIDENCE

The following is a summary of the monetised costs and benefits, forecast against estimated actual figures.

	Forecast	Actual	
Costs to government	£230,000	0	Training – transition. Change is due to issue of guidance and not training.
	£11,500	0	Training – annual. Change is due to issue of guidance and not training.
Total	£241,500	0	
Costs to the public	£584,460	£360,377	Training load annual. Change is due to increased pass rate.
	Nil	£109,955	Passed down from trainer annual
Total	£584,460	£470,332	

Costs to business	£412,601	£439,450	IBCs initial cost. Change is due to fewer tests.
	£16,532	£18,327	Loading IBCs
	£24,798	£27,491	Filling IBCs
	£106,499	£89,880	Fuel (annual). Change is due to lower fuel costs.
Total	£560,430	£575,148	
Minus passed down to customers	£0	£109,955	
Total	£560,430	£465,193	
Environment impact	£12,986	£13,499	Based on carbon values – change is as a result of changed carbon values
Benefits to government	£53,485	£48,678	Fuel duty to government (annual) from increased use. Change is as a result of lower rates of fuel duty.
Benefits to the public	No monetised benefits	No monetised benefits	Benefits are in road safety – no change from estimates
Benefits to business	No monetised benefits	No monetised benefits	Benefits are in road safety – no change from estimates

5.1 Costs

Costs to government

The initial IA considered that each examiner would have one day's pre-implementation in house training at £460 per day. Examiners carry out 4 vocational (LGV/PCV) tests per day a cost of £115 per test. £460 was the cost of lost production for that day of training. There were expected to be 500 examiners with an estimated cost of £230,000.

In fact, examiners were issued guidance. There were no direct training costs. In addition, there were fewer examiners than expected.

There was also negligible cost in developing the test. The main elements of the test remained. The only change was that vehicles presented would be laden. The form of load was established by discussions and meetings, internally within government and with stakeholders. In addition, it was necessary for regulations to be changed, involving lawyers and administrators. There was a time element involved in designing the test but this is not significant.

Costs to the public

Cost of purchasing training loads

In the original IA, the cost of purchasing training loads for B+E tests was estimated. Informal consultation with stakeholders had indicated that for individuals, the purchase of bags of sand would be more likely than the purchase of IBCs. Assuming there was no change in the number of drivers pursuing car plus trailer tests, the annual number of tests affected would be 22,000. There was a pass rate of 54.8% (DSA database). Those passing first time would presumably be able to return their bags of sand and obtain a refund. Assuming that the remainder pass on their second attempt, the IA estimated that there would be 12,188 individuals per year needing to purchase a bag of sand.

The cost of a bag of sand was estimated at £45 in 2011 prices[12] and assuming that individuals did not return the sand for a refund after the test and that they had no other use for the sand, this was estimated to lead to an annual cost of £584,460 (2011 prices) from 2013 – 2023.

By applying this methodology to tests in 2016/17, we can compare. There were 26,137 tests conducted by DVSA with a pass rate of 69.36% and assuming that the remainder pass on their second attempt, there would be 8,008 needing to purchase a bag of sand.

Feedback from trainers – see ***Annex D*** - responding to the consultation indicate a mid-point of £30 for a bag. Checking online retailers indicates that this economy of scale may be achievable because of bulk buying, which may not be available to individuals who are simply wanting to apply for a driving test with a load. The original cost of £45 is therefore used here. This is estimated to lead to an annual cost of £360,377. This difference with the original IA is because of the improved pass rate.

Increase in costs for customers

We asked trainers if they had passed their increased costs to customers (see below under "Costs to Business"). We estimate that around £109,955 was passed down to customers.

This gives an overall cost to the public of:

Cost of bags of sand	C1, B+E, D+E, D1+E	£360,377
Passed down from trainers		£109,955
Total		£470,332

Costs to business

Estimated development costs

The Impact Assessment identified an initial outlay by trainers for IBCs. It was estimated that this would be a one off cost, since IBCs are reusable and durable. The cost was estimated as follows:

Category	IBCs required	Proportion of tests	Number of vehicles	Low (£20)	Central (£60)	High (£100)
C	5	71%	834	£83,425	£250,275	£417,125
C+E	8	28.75%	338	£54,050	£162,150	£270,250
C1+E	1	0.25%	3	£59	£176	£294
Total			1175	£137,534	£412,601	£687,669

This estimate was based on:

- 94,000 LGV tests
- 80 tests per vehicle
- Number of vehicles = 94,000 tests/80 tests per vehicle = 1175

The same methodology has been applied to the tests carried out in 2016/17. However, reflecting the feedback in "4.1 Outcome Evidence" above and also at ***Annex A*** below, a figure of 60 tests per vehicle has been used (this is on the higher side of the numbers provided by the industry). The outcome is:

- 74,407 tests taken by DVSA, police, fire and delegated examiners in a year
- 60 tests per vehicle
- Number of vehicles = 74,407 tests/60 tests per vehicle = 1240

Category	IBCs required	Proportion of tests	Number of vehicles	Low (£20)	Central (£60)	High (£100)

[12] For example, a 850kg bag of Wickes building sand was available for £41.42 on 07/11/11 from http://www.wickes.co.uk/invt/220080

C	5	68.77%	853	£85,283	£255,850	£426,417
C+E	8	30.79%	382	£61,091	£183,272	£305,453
C1+E	1	0.44%	5	£109	£328	£547
Total			1240	£146,483	£439,450	£732,417

Estimated operational costs

Loading and filling

The main operational cost was trainers loading IBCs onto vehicles and trailers, and filling them in advance of a test taking place.

For loading, using the DfT Webtag recommended value of time for an LGV driver/passenger[13], the cost would be £14.07 per vehicle in 2013. It was assumed that 1,175 training vehicles would be affected, the total cost of loading was therefore estimated at £16,532 (in 2013 prices).

For filling, a range was used to monetise the cost, ranging from no supervision to full supervision for the full 1.5 hours. Using the same assumptions for value of time as above, it was estimated that the time opportunity costs for filling the IBCs on a one-off basis would range from £0 - £24,798 (2013 prices). This was a midpoint for the central case as no better estimate of the true amount of supervision was available. It was not thought that emptying the containers was necessary but it would be possible to do this while on the vehicle, so no costs were necessary.

If this methodology is applied to tests carried out in 2016/17, we would apply the figure to 1240 training vehicles. The updated webtag figure for LGV driver/passenger[14] is £14.78. So the cost of loading is estimated at £18,327 (in 2017 prices).

The responses to the survey indicate that filling the IBCs would take around 1.5 hours. For 1240 vehicles, using the same webtag, this gives £27,491 (in 2017 prices).

Fuel

It was expected that there were likely to be additional costs in taking vehicles to the driving test centre in view of the need to attend with laden vehicles. The mid point impact was expected to be some £106,000.

This was shown in the following table:

Year	Fuel cost	Cost	Cost	Cost
	p/litre (2011, ex VAT)	10 miles	20 miles	30 miles
Litres used		42000	84000	126000
2013	123	£51,553	£103,107	£154,660
2014	124	£51,967	£103,935	£155,902
2015	125	£52,430	£104,859	£157,289
2016	126	£52,866	£105,732	£158,598
2017	127	£53,250	£106,499	£159,749
2018	128	£53,579	£107,158	£160,736
2019	128	£53,853	£107,706	£161,559
2020	129	£54,071	£108,142	£162,214
2021	129	£54,277	£108,555	£162,832
2022	130	£54,485	£108,970	£163,455

[13] DfT WebTAG 3.5.6 http://www.dft.gov.uk/webtag/documents/expert/unit3.5.6.php
[14] https://www.gov.uk/government/publications/webtag-tag-data-book-march-2017

If these figures are updated and the actual fuel costs to date added, along with current estimates for future years[15],the table is as follows:

Year	Fuel cost	Cost	Cost	Cost
	p/litre (2011, ex VAT)	10 miles	20 miles	30 miles
Litres used		42000	84000	126000
2013	145	£60,900	£121,800	£182,700
2014	136	£57,120	£114,240	£171,360
2015	116	£48,720	£97,440	£146,160
2016	11	£46,200	£92,400	£138,600
2017	107	£44,940	£89,880	£134,820
2018	109	£45,780	£91,560	£137,340
2019	112	£47,040	£94,080	£141,120
2020	114	£47,880	£95,760	£143,640
2021	117	£49,140	£98,280	£147,420
2022	119	£49,980	£99,960	£149,940

This gives a mid point of 89,880.

Total cost

Using this analysis, the overall cost to business, over a year, including initial purchase of IBCs, can be estimated as follows:

IBCs	£439,450
Loading	£18,327
Filling	£27,491
Fuel	£89,880
Total	£575,148

However, we also identified from the survey that 38.24% of trainers had passed a proportion of their costs down to customers, in varying percentages. For the purposes of this PIR, we are assuming that those who passed costs down, passed down 50%. This gives a sum of £109,955 that was passed down, as follows:

	Percentage	Response total		
Trainers who have not passed down increase	61.76%	126	£465,193	Amount not passed down

[15] Table 8, Data tables 1-19 supporting the toolkit and the guidance 2016 (accessed via link to BEIS 2017 at table A1.3.7 - https://www.gov.uk/government/publications/webtag-tag-data-book-july-2017)

Trainers who have passed down some or all of the increase	38.24%	78	£109,955	Amount passed down (50% of increase for those passing down increase)
Total		204	£575,148	

Therefore:

Minus amount passed down to candidates	£109,955
Net total	£465,193

Feedback from trainers and delegated examiners

In addition, we asked trainers and delegated examiners directly how their costs have increased as a result of the introduction of laden testing from 2013 to the present. We received a wide range of information, from very low numbers to very high, and asked some to clarify the figures provided. We excluded figures of below £100 for the whole period from the statistics.

We understand there are approximately 200 trainers. Taking into account the information provided by 106 of these trainers in all categories, who gave the total cost over four years of complying with laden testing as £997,156, we estimate the annual cost across the whole training industry, before costs were passed down to candidates, is as follows:

Cost	£997,156
Responses	106
Total cost/responses	£9407
Total trainers	200
Total cost	£1,881,426
Annual cost	£470,356

Four delegated examiners provided costs and, using these as a guide, we estimate the cost across the whole delegated examiner profession is in the region of the following:

Cost	£35,130
Responses	4
Total cost/responses	£8782
Total trainers	111
Total cost	£974,859
Annual cost	£243,714

These figures are based on too low a sample to be used in the overall calculations. However, they indicate that the actual costs are within a similar range to the estimates.

Environment

Using the same assumptions as for fuel costs, the greenhouse gas impacts were assessed in the initial IA for LGVs on test. Using the Defra company reporting guidelines (August 2010) figure of 2.64 kgCO_2 per litre of diesel fuel and the then DECC's latest carbon values[16], a central case estimate the IA used a central case estimate of approximately £0.01m in GHG costs per year (0.000002 tonnes CO_2 per year). The following is the calculation used.

Year	Carbon price	Carbon cost	Carbon cost	Carbon cost

[16] http://www.decc.gov.uk/en/content/cms/emissions/valuation/valuation.aspx

	£/tCO2	10 miles	20 miles	30 miles
Litres of fuel used		42000	84000	126000
tCO2		0.1	0.2	0.3
Year	Carbon price	Carbon cost	Carbon cost	Carbon cost
	£/tCO2	10 miles	20 miles	30 miles
Litres of fuel used		42000	84000	126000
tCO2		0.1	0.2	0.3
2013	54	£6,027	£12,053	£18,080
2014	55	£6,120	£12,240	£18,361
2015	56	£6,213	£12,427	£18,640
2016	57	£6,307	£12,613	£18,920
2017	58	£6,400	£12,800	£19,199
2018	59	£6,493	£12,986	£19,479
2019	59	£6,586	£13,173	£19,759
2020	60	£6,691	£13,383	£20,074
2021	61	£6,784	£13,569	£20,353
2022	62	£6,889	£13,779	£20,668

This calculation has been updated was based on figures in the Department for Business, Energy and Industrial Strategy's Valuation of Energy Use and Greenhouse Gas[17]. The kgCO2 figures per litre of diesel fuel are 2.597 for 2013, 2.601 for 2014 and 2015, 2.602 for 2016, 2.556 for 2017, 2.511 for 2018, 2.465 for 2019 and 2.420 for 2020, 2021 and 2022.

Year	Carbon price	Carbon cost	Carbon cost	Carbon cost
	£/tCO2	10 miles	20 miles	30 miles
Litres of fuel used		42000	84000	126000
tCO2		0.1	0.2	0.3
2013	60	£6,544	£13,089	£19,633
2014	61	£6,664	£13,328	£19,991
2015	62	£6,773	£13,546	£20,319
2016	63	£6,885	£13,770	£20,655
2017	64	£6,871	£13,741	£20,612
2018	64	£6,750	£13,499	£20,249
2019	65	£6,729	£13,459	£20,188
2020	66	£6,708	£13,416	£20,125
2021	68	£6,912	£13,823	£20,735
2022	69	£7,013	£14,026	£21,039

[17] https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

5.2 Benefits

Benefits to Government

The IA identified that some of the fuel costs to business from RTM implementation would be transfers to government in the form of fuel duty. It included these as both a cost to business and benefit to government. Benefits to government were identified as approximately £0.05m per year, assuming there was no change to fuel duty plans.

The following table compares estimated benefit to government in the IA. The slightly reduced benefit is as a result of a lower tax element[18].

	Estimated				Actual			
Year	Tax element	Tax benefit	Tax benefit	Tax benefit	Tax element	Tax benefit	Tax benefit	Tax benefit
	p/litre	10 miles	20 miles	30 miles	p/litre	10 miles	20 miles	30 miles
Litres used		42000	84000	126000		42000	84000	126000
2013	62	£25,832	£51,664	£77,496	0.5795	£24,339	£48,678	£73,017
2014	62	£26,052	£52,104	£78,157	0.5795	£24,339	£48,678	£73,017
2015	63	£26,319	£52,638	£78,957	0.5795	£24,339	£48,678	£73,017
2016	63	£26,558	£53,116	£79,675	0.5795	£24,339	£48,678	£73,017
2017	64	£26,743	£53,485	£80,228	0.5795	£24,339	£48,678	£73,017
2018	64	£26,871	£53,743	£80,614	0.5795	£24,339	£48,678	£73,017
2019	64	£26,943	£53,886	£80,829	0.5795	£24,339	£48,678	£73,017
2020	64	£26,957	£53,914	£80,871	0.5795	£24,339	£48,678	£73,017
2021	64	£26,957	£53,914	£80,871	0.5795	£24,339	£48,678	£73,017
2022	64	£26,957	£53,914	£80,871	0.5795	£24,339	£48,678	£73,017

Benefits to the public

No specific economic benefits to the public have been identified.

Benefits to business

No specific economic benefits to business have been identified.

6. PIR RECOMMENDATION

6.1 Have the regulations met their objectives and do these objectives remain valid?

The objectives of the regulations were:

- To implement the Directive
- Better prepared drivers with consequential improved road safety

Implementation of the Directive remains a valid objective for the present time, with Great Britain as a member of the EU prior to withdrawal in 2019. The longer term validity of the objective will depend on wider issues surrounding driver testing and how the test develops following departure.

Implementation of the Directive

The system devised for the introduction of Real Total Mass has proved successful in delivering a test that complies with the Directive, is simple and inexpensive to comply with and is straightforward to check. It has allowed trainers and candidates to take vehicles to test using IBCs and, for smaller vehicles, training packages, which have been relatively economical to purchase and easy to use and check. We consider that Option 1 is the best option over the other three that were considered.

[18] https://www.gov.uk/government/publications/rates-and-allowances-excise-duty-hydrocarbon-oils/excise-duty-hydrocarbon-oils-rates

We are unaware of any initial problems in introducing laden testing. Operational managers reported a smooth introduction, with trainers bringing the correct loads to test and vehicles performing as expected. Candidates operated vehicles as required with no detriment to test performance or pass rates.

Better prepared drivers and road safety

It is too early to draw any conclusions from road safety as it is not long enough since introduction to do so. In addition, there are a variety of other changes – to vehicle design, to traffic calming measures and speed limits. However, overall road casualties have reduced during the period which is encouraging. In addition, trainers have in the main confirmed that the changes have led to better skilled drivers.

6.2 Evaluation of system

The system developed does its job effectively in enabling trainers and candidates to bring vehicles to test with the correct load and for this to be easily checked by the examiner. It is a suitable system for the long term.

This does not mean there are no areas where there could be improvement or unintended consequences. There have been reports – within and outside the survey – that IBCs can, over time, split. This requires replacement of the containers and there had been concern expressed that there could be damage to vehicles.

In view of this, it is sensible to consider whether the system can be modified, to allow additional items to be used as the load. It is therefore recommended that:

- consideration is given to whether additional items are allowed as the RTM load for test. These could comprise:
- bags of sand (as is used for smaller vehicles) and aggregate.
- more permanent items held in the vehicle, for example concrete blocks or iron bars.
- a fully loaded vehicle containing an actual load.

The key element here is that the load must be able to be quickly and easily checked by the DVSA examiner to avoid delays.

We propose to consider whether there are alternative suitable loads that could be used. We would intend to consult with the industry making changes to regulations.

6.3 Achievement of business objectives

The business objectives were achieved – to implement Directive 2000/56/EC effectively. This was done without gold plating and in a way that the requirements with regard to the weight of the vehicle to be brought to test could be complied with. Information from trainers indicates that costs to business were not excessive.

6.4 Appropriateness of the implemented solution

The solution was suitable for the aims of the project. The use of IBCs has allowed trainers to replicate a load on a vehicle and for this to be achievable quickly and without undue effort and expense.

Other solutions suggested as options 2 to 4 (duplicating the wording in the Directive and leaving it to the examiner to make a decision, DVSA supplying IBCs, and DVSA weighing the vehicle) would have required the trainer to hold an operator's licence. This was considered a burden on business and the review supports this view.

It is considered that the system of IBCs works well, with trainers knowing what they need to do to comply and the job of checking being straightforward, avoiding any delay which could have occurred with the other proposals. As indicated elsewhere, we intend to look at alternative loads.

6.5 What is the recommended course of action for the regulations?

We believe that Government intervention is still required. Whilst it is not yet decided what the impact on leaving the European Union will be on driver testing, it is considered that laden testing is beneficial for driving skills and should therefore remain in the test for these vehicles.

The recommendation therefore is that the regulations remain. However, as indicated elsewhere, there is benefit in adding additional options to the loads that can be used. We want to work with the industry to determine the best system.

6.6 What will the next steps relating to the regulation be?

We plan to review alternative loads that can be used for laden testing. We would intend to involve the industry in this. In the light of suggestions made, we may look to make the necessary regulatory changes to allow them to be used.

6.7 Are there any lessons for impact assessments from this PIR?

The initial impact assessment was a comprehensive analysis of the options available. It covered all realistic possibilities and reached the best solution. That outcome is still valid with some modification which are being considered following this PIR.

Annex A

Post Implementation Review of Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013

Assumptions in IA

Issue	Assumption in original IA	Outcome
Test demand	Assumed would remain constant. Number of tests between January 2009 and December 2010 were: • B + E = 21,870 • C, C + E, C1 + E = 94,641 • D + E, D1 + E = 286	Tests for these categories have gradually increased. Include DVSA, police, fire, delegated examiner licence acquisition tests: 2010/11 • B + E = 11,685 • C, C + E, C1 + E = 43,264 • D + E, D1 + E = 163 2011/12 • B + E= 13,946 • C, C + E, C1 + E = 45,852 • D + E, D1 + E = 226 2012/13 • B + E = 14,531 • C, C + E, C1 + E = 45,365 • D + E, D1 + E = 300 2013/14 • B + E = 17,190 • C, C + E, C1 + E = 46,536 • D + E, D1 + E = 315 2014/15 • B + E = 19,772 • C, C + E, C1 + E = 52,327 • D + E, D1 + E = 299 2015/16 • B + E = 22,027 • C, C + E, C1 + E = 66,867 • D + E, D1 + E = 280 2016/17 B+E = 26,371 C, C+E, C1+E = 74,407 D+E, D1+E = 293
Number of LGV/PCV test centres	Assumed number of test centres would remain at	Business model of LGV and PCV testing has changed, with testing

	current levels – at the time 70 test centres.	having moved to customer owned sites. There are now 52 DVSA sites and 71 customer sites conducting tests.
Number of examiners	The aspiration was to employ approximately 500 examiners who conducted tests affected by RTM.	Whilst numbers have increased, we have not reached this total. DVSA employed 259 examiners conducting these tests in March 2013. There were 327 in December 2016.
Training	Each examiner would have one day's pre-implementation in house training at £460 per day. Examiners carry out 4 vocational (LGV/PCV) tests per day a cost of £115 per test. £460 was the cost of lost production for that day of training.	Examiners were issued guidance. There were no direct training costs.
Enforcement	Was thought to be minimal as examiners would only be expected to ensure the RTM requirement was met as part of the existing visual check of the vehicle.	This has proved to be the case. Easily identifiable loads in the form of IBCs – whose weight is known – make checking an easy task.
Ongoing training	Owing to staff turnover, it was assumed that DSA ongoing training costs would be equal to 5% of the initial training costs per year (Historical average staff turnover based on estimates from DSA Human Resources.)	Issuing guidance and inclusion on existing pre-course training have meant that there has been no direct training costs.
Number of tests and training vehicles	94,000 practical tests conducted between January 2009 and December 2010. Assumed approximately 1,175 vehicles would be affected by implementation of RTM (80 tests per vehicle divided by the 94,000 tests carried out by DSA). Due to the high capital cost and insurance premiums, assumed that all LGV vehicles/trailers presented for a test would be owned by professional training organisations rather than private individuals.	In 2016-17, some 74,407 tests were conducted by DVSA. This gives the number of training vehicles as 1240. Operational observation confirms this is the case.
Courses	It was assumed that most vocational driver training was undertaken with a trainee typically undergoing	We asked trainers which was the nearest to the arrangement they follow.

	training from Monday to Thursday before taking a practical test on Friday or Saturday.	<u>C and C+E</u> • 62 (42.47%) attended an intensive course lasting from Monday to Friday, with tests on Fridays and Saturdays • 70 (47.95%) an intensive course with tests on another day • 14 (9.95%) a test without an intensive course. <u>B+E, C1+E, D+E and D1+E</u> • 15 (20.55%) attended an intensive course lasting from Monday to Friday, with tests on Fridays and Saturdays • 51 (69.86%) an intensive course with tests on another day • 7 (9.59%) A test without an intensive course.
Vehicles	It was assumed that each training vehicle, discounting down time for holidays and maintenance, would be utilised for 40 weeks each calendar year.	We asked trainers how many weeks a year they were used. <u>C and C+E</u> • 41(26.97%) - less than 10 weeks • 12 (7.89%) - 10 to 20 weeks • 8 (5.26%) - 21 to 30 weeks • 13 (8.55%) - 31 to 40 weeks 78 (51.32%) - 41 to 52 weeks. At 152 responses, a mid point is 76, in the 41 – 52 week range. This is not considered to be significantly higher than the estimate. <u>B+E, C1+E, D+E and D1+E</u> • 20 (27.03%) - less than 10 weeks • 5 (6.76%) - 10 to 20 weeks • 8 (10.81%) - 21 to 30 weeks • 11 (14.86%) - 31 to 40 weeks • 30 (40.54%) - 41 to 52 weeks. At 74 responses, a mid point is 37, in the 31 to 40 week range. This is not considered to be significantly lower than the estimate.
Tests	It was assumed that each training vehicle would be used for 80 tests a year.	We asked trainers how many tests were taken for each vehicle a year.

		<u>C and C+E</u> • 56 (38.1%) - less than 20 tests • 14 (9.52%) - 20 to 40 tests • 13 (8.84%) - 41 to 60 tests • 13 (8.84%) - 61 to 80 tests • 20 (13.61%) - 81 to 100 tests • 31 (21.09%) - more than 100 tests At 147 responses, a mid point is 73.5. This is in the 41 – 60 test range B+E, C1+E, D+E and D1+E • 23 (31.08%) - less than 20 tests • 14 (18.92%) - 20 to 40 tests • 11 (14.86%) - 41 to 60 tests • 9 (12.16%) - 61 to 80 tests • 8 (10.81%) - 81 to 100 tests • 9 (12.16%) – more than 100 tests At 74 responses, a mid point is 37. This in the 20 to 40 test range.
Distance travelled on each test	A range of 10 – 30 miles with a best estimate of 20 miles.	We asked trainers the distance travelled on test <u>C and C+E</u> • 24 (16.00%) - under 10 miles • 47 (31.33%) - 10 to 20 miles • 44 (29.33%) - 21 to 30 miles • 26 (17.33%) - 31 to 40 miles • 9 (6.00%) - more than 40 miles At 150 responses, a mid point is 75. This is in the 21 – 30 mile range. <u>B+E, C1+E, D+E and D1+E</u> • 10 (13.51%) - under 10 miles • 22 (29.73% - 10 to 20 miles • 16 (21.62%) - 21 to 30 miles • 18 (24.32%) - 31 to 40 miles • 8 (10.81%) - more than 40 miles At 74 responses, a mid point is 37. This is in the 21 – 30 mile range.
Cost of IBCs	A mid point of around £60	We asked trainers how much they paid for IBCs <u>C and C+E</u>

		• 21 (16.80%) - less than £20 • 24 (19.20%) - £21 to £30 • 16 (12.80%) - £31 to £40 • 19 (15.20%) - £41 to £50 • 21 (16.80%) - £51 to £60 • 5 (4.00%) - £61 to £70 • 7 (5.60%) - £71 to £80 • 5 (4.00%) - £81 to £90 • 3 (2.40%) - £91 to £100 • 4 (3.20%) - More than £100 At 125 responses, a mid point is 62.5. This is in the £41 - £50 range. <u>B+E, C1+E, D1+E and D+E</u> • 8 (23.53%) - less than £20 • (17.65%) - £21 to £30 • 4 (11.76%) - £31 to £40 • 3 (8.82%) - £41 - £50 • 1 (2.94%) - £51 to £60 • 3 (8.82%) - £61 to £70 • 3 (8.82%) - £71 to £80 • 2 (5.88%) - £81 to £90 • 4 (11.76%) - £91 to £100 • 0 (0.00%) - more than £100 At 34 responses, a mid point is 17. This is in the £31 - £40 range.
Number of IBCs	Not expected to buy more than the necessary number for each vehicle – 5 (C), 8 (C+E), 1 (B+E, C1+E, D1+E and D+E).	We asked how many IBCs had been bought for each vehicle <u>C and C+E</u> • 36 (27.69%) – 5 IBCs • 54 (41.54%) – 6 to 10 IBCs • 18 (13.85%) – 11 to 15 IBCs • 14 (10.77%) – 16 to 20 IBCs • 8 (6.15%) – more than 20 IBCs At 130 responses, a mid point is 65. This is in 6 – 10 IBCs range. <u>B+E, C1+E, D1+E and D+E</u> • 25 (80.65%) – 1 to 5 IBCs • 6 (19.35%) – 6 to 10 IBCs • 0 (0.00%) – 11 to 15 IBCs • 0 (0.00%) - 16 to 20 IBCs • 0 (0.00%) – more than 20 IBCs At 31 responses, a mid point is 15.5 responses. This is in the 1 - 5 IBCs range.

Number of IBCs replaced	Not expected to buy more than the necessary number for each vehicle	<u>C and C+E</u> • 52 (38.24%) had replaced IBCs since 2013 • 36 (26.47%) had not replaced IBCs since 2013 expected to need to replace them in the foreseeable future • 48 (35.29%) had not replaced IBCs since 2013 and did not expect to need to replace them in the foreseeable future <u>B+E, C1+E, D+E and D1+E</u> • 9 (27.27%) had replaced IBCs since 2013 • 9 (27.27%) had not replaced IBCs since 2013 but expected to need to replace them in the foreseeable future • 15 (45.45%) had not replaced IBCs since 2013 and did not expect to replace them in the foreseeable future

How often IBCs refilled	Did not expect IBCs to be refilled	<u>C and C+E</u> • 5 (3.68%) refilled under a month • 20 (14.71%) between a month and six months • 21 (15.44%) between six months and a year • 8 (5.88%) between a year and eighteen months • 8 (5.88%) between eighteen months and two years • 6 (4.41%) over two years • 68 (50.00%) I am unlikely to empty/refill the IBCs <u>B+E, D1+E, D+E, D1+E</u> • 4 (12.50%) refilled under a month • 4 (12.50%) between a month and six months • 6 (18.75%) between six months and a year • 0 (0.00%) between a year and eighteen months • 3 (9.38%) between eighteen months and two years • 0 (0.00%) over two years • 15 (46.88%) I am unlikely to empty/refill the IBCs

Time to fill IBCs	One and a half hours	<u>C and C+E</u> • 22 (16.42%) estimated that they filled an IBC in half an hour • 40 (29.85%) in one hour • 17 (12.69%) in1.5 hours • 24 (17.91%) in two hours • 31 (23.13%) in longer than two hours <u>B+E, C1+E, D1 and D1+E</u> • 9 (29.03%) estimated that they filled an IBC in half an hour • 12 (38.71%) in one hour • 3 (9.68%) in 1.5 hours • 3 (9.68%) in two hours • 4 (12.90%) in longer than two hours. This gives a mid point of an hour and a half for C and C+E and one hour for B+E, C1+E, D+E and D1+E. This is close to the original IA.

Time to load IBCs onto a vehicle	Half an hour	<u>C and C+E</u> • 33 (24.81%) took less than half an hour • 24 (18.05%) took half an hour • 44 (33.08%) took between half an hour and an hour • 25 (18.80%) took between an hour and two hours • 7 (5.26%) took longer than two hours <u>B+E, C1+E, D+E and D1+E</u> • 19 (54.29%) took less than half an hour • 7 (20.00%) took half an hour • 7 (20.00%) took between half an hour and an hour • 2 (5.71%) took between an hour and two hours • (0.00%) took longer than two hours This gives a mid point of just over half an hour for C+E. The mid point is less than half an hour for B+E, C1+E, D+E and D1+E. These are close to the original estimates to be accurate. Supervision may be added but was not vital. C and C+E tests - of 132 who responded, 79.55% (105) supervised filling the IBC, 20.45% (27) did not. B+E, C1+E, D+E and D1+E tests - of 30 who responded, 73.33% (22) supervised filling the IBC, 26.67% (8) did not.

Driver skills, knowledge and behaviour	Did not estimate view on improvement of driver skills. However, asked in survey whether RTM had improved driver skills, knowledge and behaviour and ability to drive a laden vehicle safely.	<u>C and C</u> • 31 (20.95%) - considerably • 36 (24.32%) - a good deal • 44 (29.73%) - a little • 37 (25.00%) - not at all <u>B+E, C1+E, D+E and D1+E</u> • 14 (19.72%) - considerably • 10 (14.08%) – a good deal • 24 (33.80%) - a little • 23 (32.39%) - not at all

Annex B

Post Implementation Review of Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013

Responses from Northern Ireland Trainers

Question	Responses
For how many weeks each year, on average, are each of your vehicles used for testing and training?	10 – 20 weeks (1) 31 - 40 weeks (1) 41 - 52 weeks (1)
For how many tests each year, on average, are each of your vehicles used?	20 - 40 tests (2) More than 100 tests (1)
What is the average distance travelled on each test?	10 - 20 miles (1) 21 - 30 miles (1) 31 - 40 miles (1)
What is closest to the testing and training arrangement you follow?	An intensive course lasting from Monday to Friday, with tests on Fridays and Saturdays (1) An intensive course with tests on another day (2)
It was envisaged that the real total mass requirement for these vehicles could be met by either one IBC or one training load package (such as a bag of sand) at between 600kg and 1000kg. Have you tended to use IBCs or a training load package?	A training load package (such as a bag of sand) (3)
If you have used an IBC, since laden testing was introduced, how many IBCs have you purchased per vehicle?	Up to 5 IBCs (2)
How much have you paid for each IBC?	£51 - £60 (1) More than £100 (1) (£300)
How long does it take two people to load an IBC onto a vehicle for a B+E, C1+E, D+E or D1+E test?	Less than half an hour (1) Half an hour (1)
How long does it take to fill an IBC with water?	One hour (1) Two hours (1)
Is filling an IBC supervised?	Yes (1) No (1)
How often are IBCs re-filled?	I am unlikely to empty/refill the IBCs (1) Between a month and six months (1)
Have the IBCs needed replacing since laden testing was introduced in 2013?	The IBCs have not needed replacing but we expect to need to replace them in the foreseeable future (1) The IBCs have not needed replacing and we do not expect to need to replace them in the foreseeable future (1)
Training load packages	1 - 5 training load packages (2) 11 - 15 training load packages (1)
How much have you paid for each training load package?	£21 - £30 (2) £31 - £45 (1)
Overall, do you feel your costs have increased as a result of the introduction of laden testing?	Yes (3)
How do you estimate this increase is made up?	Cost of IBCs/other load (2) (£30 and £25) Additional fuel costs (3) (£20, £10 and £75)
Have you passed down any the increased cost of laden testing to your customers?	No, I have absorbed the cost (2) 41% - 50% of the increase (1)
Do you feel the introduction of RTM laden testing has helped improve driver skills, knowledge and behaviour to improve their ability to drive a laden vehicle safely	Considerably (1) A little (1) Not at all (1)

How would you rate your satisfaction with current laden testing arrangements for vehicles in categories C1+E, D+E and D1+E?	Very satisfied (1) Satisfied (1) Not satisfied (1)

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Delegated examiners

We asked delegated examiners a number of questions. Many organisations conduct different tests.

Type of organisation	4 (11.43%) - Haulier 8 (22.86%) - Bus operator 0 (0.00%) - Coach operator 23 (65.71%) - Emergency services
Licence category of vehicle	26 (31.71%) - C 10 (12.20%) - C+E 11 (13.41%) - C1+E 13 (15.85%) - B+E 13 (15.85%) - D+E 9 (10.98%) - D1+E
Has the introduction of real total mass led to an increase in costs?	17 – Yes 17 - No Items leading to this increase included fuel, IBCs, staff for loading IBC, towing vehicle
Please indicate whether you have found the arrangements for testing with real total mass	31 (96.88%) - Straightforward 1 (3.13%) – Problematic Issues included the need for one fire service to remove IBC containers in-between tests, difficulty for those who are less well built to move the trailer to undertake coupling and the cost of adding loads.
Do you believe the arrangements for real total mass testing can be improved?	5 (15.63%) - Yes 27 (84.38%) – No There were five comments. These included the vehicle being fully loaded, any load being limited to bring it up to category C, no change, the use of other materials and endorsement of using a water carrier for the fire service
Do you feel the introduction of RTM laden testing has helped improve drivers' skills, knowledge and behaviour to improve their ability to drive a laden vehicle safely?	11 (32.35%) - considerably 16 (47.06%) - a good deal 4 (11.76%) - a little 3 (8.82%) - not at all

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Training load

We asked trainers whether they had purchased IBCs or training load package such as bags of sand. The regulations give them the option of using either on the test for these vehicles. Did not apply to C and C+E.	B+E, C1+E, D+E and D1+E 27 (37.50%) - one IBC 45 (62.50%) - a training load package
How many training load packages have been purchased per vehicle?	B+E, C1+E, D+E and D1+E 31 (63.27%) - 1 - 5 training load packages 3 (6.12%) - 6 - 10 training load packages 3 (6.12%) - 11 - 15 training load packages 5 (10.20%) - 20 training load packages 7 (14.29%) - more than 20 training load packages
How much had been paid for each training load package?	B+E, C1+E, D+E, D1+E 17 (37.78%) - £20 or less 4 (8.89%) - £21 - £30 5 (11.11%) - £31 - £45 11 (24.44%) - £46 - £60 8 (17.78%) - above £60

Post Implementation Review of Motor Vehicles (Driver Testing and Vehicle Load) Regulations 2013

Road Safety Casualties

Road Casualty Statistics – relevant vehicles since 2004[19] [20]

Great Britain

	Bus or coach			Van/light goods vehicle			Heavy goods vehicle		
	Killed	Serious	Slight	Killed	Serious	Slight	Killed	Slight	Serious
2004	20	468	8332	62	569	5,535	47	359	2,477
2005	9	354	7,557	54	533	5,461	55	340	2,448
2006	19	407	6,827	52	512	5,350	39	344	2,147
2007	12	443	6,624	58	436	4,846	52	311	2,113
2008	6	426	6,497	43	402	4,468	23	217	1,690
2009	14	356	5,947	36	381	4,326	14	175	1,330
2010	9	392	5,867	34	325	4,135	28	184	1,366
2011	7	325	5,845	34	306	4,159	28	167	1,220
2012	11	312	4,911	33	330	4,170	29	169	1,141
2013	10	332	4,531	37	334	4,055	21	147	1,128
2014	7	293	4,898	33	367	4,515	14	162	1,177
2015	5	275	4,346	32	385	4,333	31	162	1,010

Total casualties 2010-12 – 35,537
Total casualties 2013-15 – 32,640
2867 decrease – 8%

Overloaded or poorly loaded vehicle or trailer

Year	Buses or coaches	Vans / Light goods vehicles	Heavy goods vehicles	Total
2011	1	66	91	158
2012	2	53	64	119
2013	0	51	59	110
2014	2	51	58	111
2015	0	49	53	102

Following too close

Year	Buses or coaches	Vans / Light goods vehicles	Heavy goods vehicles	Total
2011	136	678	346	1160
2012	135	646	312	1093
2013	102	653	335	1090
2014	121	630	368	1119
2015	101	664	272	1037

[19] RAS30068 Reported other road user casualties by road user type and severity, Great Britain, 1979 - 2015
[20] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/568484/rrcgb-2015.pdf

Travelling too fast for the conditions

Year	Buses or coaches	Vans / Light goods vehicles	Heavy goods vehicles	Total
2011	57	391	156	604
2012	29	378	177	584
2013	30	339	169	538
2014	37	419	150	606
2015	34	376	134	544

Source: DfT Road accidents and safety statistics

Northern Ireland

Year	Vehicle	Fatal collision	Serious collision	Slight collision	Total	Share	Collision rate per 1000 licensed vehicles
2011[21]	Goods vehicles	12	94	621	727	7.2	6
	Buses/coaches	2	18	173	193	1.9	32
2012[22]	Goods vehicles	10	89	632	731	6.9	6
	Buses/coaches	1	8	168	177	1.7	30
2013[23]	Goods vehicles	12	75	701	788	7.4	7
	Buses/coaches	2	18	186	206	1.9	35
2014[24]	Goods vehicles	11	76	687	774	7	7
	Buses/coaches	1	14	190	205	1.8	36
2015[25]	Goods vehicles	13	67	750	830	7.3	7
	Buses/coaches	1	14	155	170	1.5	30

[21] Figure 19: Number of vehicles involved in injury road traffic collisions: 2011

https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/archive/2011_annual_report.pdf

[22] Table 14: Number of vehicles involved in injury road traffic collisions 2012

https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/archive/2012_detailed_trends_report.pdf

[23] Table 14: Number of vehicles involved in injury road traffic collisions 2013

https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/archive/2013_detailed_trends_report_-_annual_bulletin_-_published_25th_june_14.pdf

[24] Number of vehicles involved in injury road traffic collisions 2014 https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/documents/2014_detailed_trends_report_-_annual_bulletin_-_published_26th_june_15.pdf

[25] Table 3.2 Police Recorded Injury Road Traffic Collisions and Casualties Northern Ireland, Detailed Trends 2015 https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/2016/december/2015-detailed-trends-report---annual-bulletin---published-30th-june-16.pdf