Title:

The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Revocations) Regulations 2015

IA No: DfT00320

Lead department or agency:

Maritime and Coastguard Agency

Other departments or agencies:

The Department for Transport

Impact Assessment (IA)

Date: 10/02/2015

Stage: Final

Source of intervention: Domestic

Type of measure: Secondary legislation
Contact for enquiries: Alison Leighton
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RPC Opinion: Awaiting Scrutiny

Tel: 02380 329134

Summary: Intervention and Options

Cost of Preferred (or more likely) Option					
Total Net Present Value Business Net Present Value		Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifie Two-Out?		
£3.10m	£3.10m	£-0.27mm	Yes	OUT	

What is the problem under consideration? Why is government intervention necessary?

In response to the Herald of Free Enterprise disaster in 1987, UK legislation was introduced which requires the weighing of goods vehicles and other cargo on weighbridges in ports. It is viewed by Maritime and Coastguard Agency (MCA) safety experts that this legislation has been superseded by more modern regulations which more appropriately address the root causes of the disaster and that revocation of these requirements would not adversely affect safety. The MCA therefore considers that Government intervention is required to revoke this legislation.

What are the policy objectives and the intended effects?

The objective of this policy is to reduce the costs of complying with safety legislation for businesses in the shipping industry whilst not adversely affecting ship safety. Although the requirement to have cargo weighed still remains in other Regulations, it is intended that the removal of the requirement to have cargo weighed specifically using a weighbridge in ports would create more flexibility for industry on how to do this, which could potentially reduce their costs.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The Red Tape Challenge identified the following three measures relating to the weighing of goods vehicles and other cargo which MCA experts consider could be revoked without adversely affecting ship safety:

- 1) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988;
- 2) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Amendment) Regulations 1989; and
- 3) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Application to non-UK Ships) Regulations 1989.

The Regulations (Option1) would revoke these three measures. No other options are being considered.

Will the policy be reviewed? It will/will not be reviewed. If applicable, set review date: Month/Year					
Does implementation go beyond minimum EU requirements? N/A					
· · ·				Large Yes	
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)				Non- N/A	traded:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:	John Hayes	Date:	

Summary: Analysis & Evidence

Policy Option 1

Description: Revocation of three statutory instruments on the weighing of goods vehicles and other cargo

FULL ECONOMIC ASSESSMENT

Price Base		Time Period	Net Benefit (Present Value (PV)) (£m)			
Year 2014	Year 2015	Years 10	Low: 2.93	High: 3.27	Best Estimate: 3.10	

COSTS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0		0	0
High	0		0	0
Best Estimate	0		0	0

Description and scale of key monetised costs by 'main affected groups'

Due to the limitations of the available evidence base and the uncertainty surrounding how these privately owned businesses would respond to Option 1, it has not been possible to monetise any of the potential costs that have been identified in this Impact Assessment (IA).

Other key non-monetised costs by 'main affected groups'

The key non-monetised costs that have been identified in this IA are the potential costs associated with the removal of weighbridges from ports.

BENEFITS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			0.3	2.9
High			0.4	3.3
Best Estimate			0.4	3.1

Description and scale of key monetised benefits by 'main affected groups'

The best estimate of the benefits to ports from the removal of the statutory requirement to specifically weigh cargo on a weighbridge at the ports is around £3.10 million over 10 years. This is mainly from cost savings from elimination of time required to weigh cargo. There are also monetised benefits from not requiring existing weighbridges to be replaced at the end of their life span and from the removal of costs of maintaining weighbridges.

Other key non-monetised benefits by 'main affected groups'

There are potential cost savings by removing the requirement for ports to have a trained weighbridge operator. This covers recruitment and training but it should be noted this role is subsumed within other roles. However, it may also be considered within the ports best interest to maintain trained staff if weighbridges remain in place. No evidence is available of the potential benefits for ports being able to utilise the space weighbridges currently occupy.

Key assumptions/sensitivities/risks

Discount rate

3.5%

1) Given the limitations of the available evidence base it has not been possible to monetise some of the costs and benefits. 2) The estimates of the benefits are very sensitive to the data sources used in this analysis and the assumptions that have been made in this IA. Therefore, these estimates have been used for purely illustrative purposes and should be interpreted as indicative estimates of the order of magnitude of these benefits.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs:	Benefits: 0.3	Net: 0.3	Yes	OUT

Evidence Base

1. Background

The Herald of Free Enterprise (HOFE) disaster happened on 6 March 1987 and resulted in 193 deaths. The bow doors of the vessel were inadvertently left open as the vessel set sail from port allowing water to enter the car deck which caused the vessel to capsize. This was a catastrophic event and a Formal Investigation¹ was held from 27 April to 12 June 1987.

The HOFE Formal Investigation concluded that the HOFE was probably overloaded when she sank and that there was evidence that lorry weights were consistently being under reported to the ferry operator at time of loading. However, overloading was not a contributory factor in the accident.

The Formal Investigation recognised that the International Maritime Organization² (IMO) was the most appropriate forum to bring about significant change. But it was also felt that there was such urgency over some of the recommendations that unilateral action was appropriate at the time. The following three Regulations fell into this category:

a) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988; and the Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Amendment) Regulations 1989

These Regulations apply to certain UK Roll-on, Roll-off (RoRo) passenger ships and require the weighing of all road vehicles (except buses) and all non-vehicular items of cargo exceeding 7.5 tonnes for all voyages on which passengers are carried. Subject to certain exceptions (a certificate of weight must be held), cargo must be weighed at the port at which the ship is to be loaded. The weighing machine must be certified, and operated in accordance with the conditions laid down by an inspector of weights and measures. In addition, the shipper must provide the master of the ship with specific cargo weight details prior to the voyage.

b) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Application to non-UK Ships) Regulations 1989

The purpose of these Regulations is to apply the same weighing requirement to non-UK Ro/Ro passenger ships while they are in a port in the UK.

2. Problem under consideration and rationale for intervention

2.1 Summary

In the 25 years since these UK Regulations were implemented, the IMO has not considered it necessary to bring the same requirements into international legislation and this means that only RoRo passenger ferries operating to and from the UK have validated lorry weights on the outbound journeys. There is no similar requirement for inbound journeys. It is therefore considered that the unilateral nature of these Regulations therefore undermines their effectiveness, reduces any safety value and imposes a burden mainly on UK operators.

There has been no international support for introducing such measures more widely and there is no evidence of their value which might secure such support. In fact, forthcoming amendments to the International Convention for the Safety of Life at Sea (SOLAS) about container weighing are currently being discussed at the IMO and the proposed text of the new regulation VI/2(4) reads:

"In the case of cargo carried in a container*, except for containers carried on a chassis or a trailer when such containers are driven on or off a ro-ro ship engaged on short international voyages as defined in

¹ Formal Investigation – mv Herald of Free Enterprise, Report of Court No. 8074 (ISBN 0 11 550828 7) http://www.maib.gov.uk/cms_resources.cfm?file=/hoffefinal.pdf

² The International Maritime Organization is the United Nations specialised agency with the responsibility for the safety and security of shipping and the prevention of marine pollution by ships.

regulation III/3, the gross mass according to paragraph 2.1 of this regulation shall be verified by the shipper...."

The IMO and the member States have made it clear that there is no need to weigh containers being carried on short voyages on RoRo ferries, such as those to which these three UK Regulations currently apply.

In addition, the Maritime and Coastguard Agency (MCA) safety experts consider that the three Regulations discussed in Section 1 have been superseded by more modern Regulations which more appropriately address the root causes of the HOFE disaster, and that therefore revocation of these requirements would not adversely affect safety. In particular the Formal Investigation of the HOFE disaster, as a longer term recommendation, advised on a review of the design of the ship and the calculations of stability. This was completed and formally addressed through Regulations introduced in 1990, 1992, 1998 and 2004 which are discussed in section 2.3.

The weighing of goods vehicles and cargo is also a requirement in other Regulations, although they don't prescribe how cargo should be weighed. There are alternative ways to weigh cargo and the use of weighbridges in ports places costs on ports for the upkeep of the weighbridge, trained staff, etc. Removal of the mandatory requirement for specific use of a weighbridge would extend the scope of how goods may be weighed and could potentially reduce costs for industry.

Revocation of mandatory requirements can only be undertaken through the removal of the enforcing Statutory Instrument. The MCA therefore considers that government intervention is required to revoke this legislation.

2.2 Context

Removal of the three Regulations discussed in Section 1, which were introduced following a major maritime disaster, is controversial and has raised concerns regarding the safety of UK Ro-Ro passenger ships. The MCA is, of course, aware of the tragic circumstances surrounding the HOFE disaster which led to the Formal Investigation and whose recommendations proposed the need for these Regulations. As such the MCA recognises the sensitivities of the possible revocation of these Regulations to the families of those affected and the wider Society.

The intention of the proposed revocation is to remove the statutory requirements, however, that does not mean that the weighbridge facilities are never necessary rather that it is believed that with the introduction of the later Regulations that it should now be for ports to identify what they need rather than impose requirements through legislation.

An informal consultation, over the summer of 2013, on the three Regulations on the weighing of goods vehicles and other cargo with the UK ports affected by this proposed revocation elicited limited comments both for and against the revocation of the Regulations. The main concern against the removal of the Regulations came from one maritime union and one Ro-Ro passenger ship operator. This concern is regarding the under-declaring of weights should the requirement for the weight of cargo become 'declared' rather than 'measured'. Furthermore, it was noted by the National Metrology Group that 'weighbridges are considered to be the highest risk of all weighing equipment in terms of likelihood of inaccuracy, based on finding collated and reported by the National Measurement Office³'. If this is the case, this may contribute to the under-weighing of goods, which the existing Regulations were trying to address.

The Trading Standards Institute further noted (following the formal consultation in 2014) that the accuracy of weighbridges used, whether by ports or from evaluations made upon weighbridges elsewhere, is key to confidence in the data thus obtained. Weighbridges remain "high risk of failure" from the data collated annually by the National Measurement Office (NMO) and this is reflected in the NMO's risk matrix which is published on its website (http://tinyurl.com/mjnneqb-seepage39). However, those weighbridges which are properly maintained and certified can be reasonably relied upon.

A two week scoping exercise was held in January 2014 to gain further thoughts from the industry regarding the proposed revocation of these three Regulations and the Merchant Shipping (Emergency Equipment

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³ Weights and Measures Act 1985, Section 70 Returns, Annual Report 2012 – 2013 http://www.bis.gov.uk/nmo/news-and-events/news/2013/Nov/Section-70-annual-report-published

Lockers) Regulations 1988 (another measure also introduced following the HOFE disaster) and to establish an early indication as to any potential costs and benefits of doing so. In particular, specific questions were posed to establish how they would respond should the proposed revocation take place, and evidence was sought to enable the costs and benefits of the proposed revocation to be monetised in the pre consultation impact assessment (IA). Only five responses were obtained, three on the weighing of goods and two on the equipment lockers.

The formal eight week consultation was undertaken between June and August 2014 on the proposed revocation of all four regulations. As before, comments both for and against the revocation were received. Representatives of the maritime industry accept and support the proposed revocations but the maritime unions (Nautilus, RMT and Unite), and families and friends of victims of the HOFE remained strongly opposed.

In light of the strong opinions received during the formal consultation the Minister of State for Maritime met with the maritime unions and key representatives of industry on 24 November to further consider views on both revocations. The Minister felt that the arguments made in favour of retaining the emergency equipment lockers was persuasive but was content that safety would not be compromised by the revocation of the weighing of goods regulations, the three regulations this final IA is based on.

2.3 Further detail on improved safety standards

In July 1987 the Secretary of State initiated a research programme under the guidance of a Steering Committee comprising experts from across the UK shipping industry to review both the stability requirements for Ro-Ro ferries and wider operational issues. The work programme covered improvement in survival capability if water reaches a vehicle deck; further determination of required level of stability for vessel survival in the event of damage; changes likely to be necessary to Ro-Ro ship design in light of the proposed legislative changes; and improvement in the prevention of water reaching the vehicle deck in the event of damage occurring in realistic seagoing conditions.

Many top UK and European companies were directly involved in the research, or were represented at Director level on the Steering Committee, including the National Maritime Institute, British Maritime Technology (BMT) Limited, YARD Limited (now BAE Systems) and the Admiralty Marine Technology Establishment (now Qinetic).

In addition to the three Regulations proposed for revocation, further amendments were made to the then existing Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984. Merchant Shipping (Passenger Ship Construction) (Amendment) Regulations 1987 introduced the requirement for bow door cameras, supplementary emergency lighting and indicator lights, and Merchant Shipping (Stability of Passenger Ships) Regulations 1988 which require five yearly lightweight checks and inclining experiments to evaluate any increase in growth (tonnage) which would affect stability.

Furthermore, in 1990⁴ and 1992⁵, more major changes were made. These included:

- Application of SOLAS 90⁶ stability standard (higher standard of resistance to flooding of the hull) to existing Ro-Ro ferries retrospectively, and all new passenger ships;
- Fitting of hull door indicator lights and flood alarms to ensure the bow doors can't be inadvertently left open;
- Provision for the shipowner to provide the master with the ships' stability information during the loading process to ensure the ship remain safe;
- The requirement to record the draught, trim and freeboard prior to departure to ensure the ship is not overloaded;
- Fitting of an automatic draught gauge system to be fitted on Ro-Ro ferries to ensure officers can read the draught in darkness or adverse weather;
- Tightening up of the regulations for watertight doors:
- Improvements to the drainage arrangements on vehicle decks;

⁴ Merchant Shipping (Passenger Ship Construction and Survey) (Amendment) Regulations 1990

⁵ Merchant Shipping (Passenger Ship Construction and Survey) (Amendment) Regulations 1992

⁶ The International Convention for the Safety of Life at Sea (SOLAS) whose main objective is to provide the minimum standards for the construction, equipment and operation of ships, compatible with their safety. SOLAS 90 relates to the stability of passenger ships in the damaged condition.

- The introduction of a boarding card system for all passengers to ensure accurate counting and avoid overloading of passengers; and
- The introduction of an approved berth list (approved by the Department of Transport (DOT), now the Department for Transport) of permitted berths for each ferry to ensure that practical arrangements for using each berth are planned in advance.

The technical content of these amending Regulations were developed by a partnership between the then Department of Transportation and industry and subject to consultation before coming into force. This follows a tradition of close engagement with the shipping industry in rules development enshrined in the Merchant Shipping Act 1984 (section 429) and exemplified by arrangements such as the Load Line Committee in the 1890s and the Bulkheads Committee after the sinking of the Titanic.

The IMO applied these requirements internationally through SOLAS following the robust review and challenge by Member States and the maritime industry represented at the IMO with the exception of the need for vehicle weighbridges. This essentially means that UK ships (and any ships operating from UK ports) have additional requirements to comply with which may be seen as gold plating.

Ship design has further advanced significantly in the years since this tragic accident. Specifically, there are now higher safety standards concerning the watertight subdivision (where the hull of a ship is divided into sections, each of which is watertight in its own right) and damage stability (where the ship does not capsize/sink when damage occurs); more stringent requirements for operating watertight doors; and ships are now subject to stability tests and, specifically for Ro-Ro passenger ships, the stability of a ship is also required to be assessed and reassessed throughout the loading of goods vehicles and cargo to ensure that the stability of a ship is not compromised.

These increased safety standards are found in the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998, SI 1998/2514, as amended and Merchant Shipping (Passenger Ship Construction: Ships of Classes III to VI(A)) Regulations 1998, SI 1998/2515, as amended. SI 1998/2514 revoked and replaced the Merchant Shipping (Passenger Ship Construction) Regulations as amended and the Merchant Shipping (Passenger Ship Construction and Survey) Regulations as amended. In addition, Merchant Shipping (Ro-Ro Passenger Ships) (Stability) Regulations 2004, (the 2004 Regulations), SI 2004/2884 implements Directive 2003/25/EC and addresses specific stability requirements for Ro-Ro passenger ships.

The 2004 Regulations extend the application of a Regional Agreement, the Stockholm Agreement, to Member States throughout Europe to ensure a common high level of safety. The Stockholm Agreement aimed to improve the specific stability standards of Ro-Ro passenger ships by taking into account the effect of water accumulation on the vehicle deck after damage following the Estonia disaster in 1994 when more than 850 lives were lost.

In addition, following the Estonia disaster, the IMO established a panel of experts which subsequently published 12 Resolutions⁷ on new safety requirements for Ro-Ro passenger ships and which resulted in the UK Regulations noted above. Since the introduction of these Regulations there have been no further significant incidents to Ro-Ro passenger ships occurring from similar problems and actions which caused these disasters.

There have also been several more major safety initiatives since 1992 and these include the introduction of the International Safety Management (ISM) Code in 1998 to significantly improve the management of ships and the International Ship and Port Facility Security (ISPS) Code to enhance ship and port security and protection minimising risk of, for example, terrorist outrage on ships. Additionally, there has been much improvement in the areas of navigation systems, electronic charting, automatic identification systems (AIS) and vessel traffic management to help ensure that the probability of accidents, groundings and collisions of ships are much reduced. These can be found in the Merchant Shipping (Safety of Navigation) Regulations 2002 as amended and the Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) Regulations 2004 as amended.

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⁷ http://www.imo.org/OurWork/Safety/Regulations/Pages/RO-ROFerries.aspx

With these higher standards in practice the MCA safety experts considers that these three Regulations proposed for revocation now add very little additional meaningful safety.

2.4. Further detail on weighing of cargo

It was recognised in the Formal Investigation that the weight limits abroad were higher than in the UK and that there was an advantage to be gained from under reporting the weight of freight when proceeding internationally. The requirement for accurate weighing of freight brought in by these three existing Weighing of Goods Vehicles and other Cargo Regulations was intended to address this under reporting.

These Regulations place a requirement on ship owners to weigh goods vehicles before they are loaded onto any Ro-Ro passenger ships (UK and non-UK ships) leaving UK ports unless a weight certificate approved by the Trading Standards Institute is held. The weighing should be carried out at the port using a weighbridge which is used and maintained in line with the Weighing Equipment (Non-automatic Weighing Machines) Regulations 1988. This weighbridge requirement provides a last minute double-check on the declared weight.

The requirement for shippers to provide masters of ships with their cargoes weight is also a requirement of other existing UK Regulations (Merchant Shipping (Carriage of Cargo) Regulations 1999, SI 1999/336). This information is used by the Master to ensure the cargo can be safely stowed and secured on board the ship and transported under all expected conditions during the intended voyage.

Knowing the precise weight as opposed to the declared weight of cargo has only a marginal effect on the ship's stability calculations. However there is no requirement in UK law to weigh cars, passengers or their baggage and the variations in weight here could be similar. The outcomes of research into the discrepancies of truck weights have been incorporated into the MCA's guidance for calculating ship stability, which is compared to the overall observed displacement with the calculated displacement. Any significant difference is treated as an additional weight, and to add a weight margin where there may be uncertainty about vehicle weights.

In addition, the MCA has been an active member of the IMO Correspondence Group developing an amendment to the international standards for the carriage of goods which is covered in the International Convention for the Safety of Life at Sea (SOLAS) Chapter VI, Carriage of Goods. The amendment is looking to introduce a mandatory requirement for the verification of the gross weight of containers, together with associated guidelines aimed at ensuring the verification of container weights. It is seen as a significant step towards improving safety on international voyages but the work at the IMO does not apply to domestic or short international voyages, as noted in section 2.1.

The outcome of the Correspondence Group presented a number of options by which verification could be achieved but does not detail any one as a definitive solution. As such the need for weighbridges in port areas as part of normal commercial operations may still remain, however, the use of them is only one option under discussion and the location of the weighbridge may not have to be at the port.

The need to formally declare weights of cargo items under the 1999 Carriage of Cargoes Regulations, and the deterrent effect of random Department for Transport weight checks, has improved the reliability of declared weights over the last 20 years. However, the 1999 Carriage of Cargoes Regulations places an offence on shippers who provide incorrect information and on owners/masters who accept cargo without the required documentation. It should be noted that although a weighbridge has to be installed by the port there is no offense if a port does not provide one.

3. Policy objective

The objective of this policy is to reduce the costs of complying with safety legislation for businesses in the shipping industry whilst not adversely affecting ship safety.

The intended effect of revoking the three Regulations discussed in Section 1 is to reduce the costs to business associated with providing the specific equipment that is currently mandated under these Regulations as well as the costs associated with meeting the other requirements of these Regulations. For example, although the requirement to have cargo weighed will remain in other Regulations, it is intended

that the removal of the requirement to have cargo weighed specifically using a weighbridge in ports would create more flexibility for industry on how to meet this requirement and how to manage the risks to the safety of their individual operations, which could potentially reduce their costs.

4. Description of options considered

Revocation of these three regulations is the only considered option. This was identified under the Red Tape Challenge because MCA safety experts consider that the increased safety standards which have been implemented since the introduction of these Regulations, as discussed in Section 2.3, address the issues which resulted in the HOFE disaster. In addition, the requirement for shippers to provide accurate information as to the weight of the cargo being transported remains in other Regulations, as discussed in Section 2.4. The removal of the requirement to have cargo specifically weighed on a weighbridge allows for alternative methods of weighing to be used.

5. Costs and benefits of the proposed Regulations (Option 1)

5.1 Introduction

This IA assesses the additional costs and benefits of the proposed Regulations (Option 1) compared to the "Do Nothing" scenario; the "Do Nothing" scenario represents what would happen if the Government does not take any action. A 10 year appraisal period has been used and it is assumed that this begins on 1 June 2015 and ends on 31 May 2025. The 10 years in the appraisal period are referred to as Year 1 to Year 10 below.

The discussion of the additional costs and benefits of the proposed Regulations (Option 1) is structured as follows:

- Costs of Option 1 (Section 5.3);
- Benefits of Option 1 regarding the revocation of the requirements on the use of weighbridges (Section 5.4); and
- Summary of monetised benefits of Option 1 (Section 5.5).

For the purposes of this IA, the additional costs and benefits of the proposed Regulations (Option 1) during the appraisal period have been monetised to the extent that is possible.

The IA has been revised following the consultation. Only two consultees responded to the specific questions raised in the pre consultation IA and these, plus subsequent information from these consultees, has been used to further strengthen the evidence base. However, given the limitations of the available evidence, it has not been possible to monetise some of the costs and benefits of the proposed Regulations (Option 1) that have been identified, and it has been necessary to make a range of assumptions. Where it has not been possible to monetise a cost or benefit, a qualitative description of the cost or benefit is provided. The assumptions that have been made are outlined below. It should be noted that the conclusions of this cost-benefit analysis are sensitive to these assumptions. It is assumed, based on the expert judgement of MCA safety experts, that this policy would have no impacts on safety.

It should also be noted that the estimates of the monetised benefits that are presented in this IA are very sensitive to the data sources used in this analysis and the assumptions that have been made in this impact assessment. Consequently, there are large uncertainties around these estimates. Therefore, these estimates have been used for purely illustrative purposes and should be interpreted as indicative estimates of the order of magnitude of these benefits.

5.2 Groups Affected

The requirement for the weighing of goods vehicles and other cargoes apply to UK and non-UK Ro-Ro passenger ships when operating as passenger ships of Classes II and II(A)⁸ from a UK port.

⁸ Classes of vessels are defined in the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998, SI 1998/2514 and the Merchant Shipping (Passenger Ship Construction: Ships of Classes III to VI(A)) Regulations 1998, SI 1998/2515.

The UK CSM Database⁹ shows 47 UK Ro-Ro passenger ships registered under the UK flag in February 2014. These are broken down as follows:

Class of Ship	Currently on the UK flag Feb 2014	Joined the UK flag in the last 10 years 2005 -2014
Class I	2	2
Class II	24	10
Class II(A)	19	3
Multi	2	0
Total	47	15

In addition, it should be noted that in 2013 there were 95 non-UK and 20 non-EU passenger ships registered to operate in the UK. Due to recent technical problems with the MCA database these figures are unable to be revised but indicated the number of non-UK ships which would also be affected by the revocation of these Regulations.

Weighbridges can be either self-operated or manned. MCA research and the consultation has identified 14 UK ports which operate weighbridges in accordance with these UK Regulations for these specific ships. These are Gourock, Dover, Glasgow, Aberdeen, Orkney, Southampton, Kirkwall, Shetland, Harwich, Holyhead, Birkenhead, Portsmouth, Stornaway and Ullapool. The split between self-operated and manned weighbridges is unclear and the scoping study and consultation did not provide substantial information to base an assumption. Furthermore, comprehensive data on the number of weighbridges at each port is not available.

5.3 Costs of Option 1

5.3.1 Potential costs of the removal of weighbridges (Non-monetised)

MCA research has identified 14 ports that are currently required to have weighbridges due to their Ro-Ro passenger ship trade.

If weighbridges were removed from these ports as a result of the proposed Regulations under Option 1, there could be some costs associated with this.

However, there would be no requirement in the proposed Regulations for ports to remove the weighbridges and individual ports can make their own decisions about this.

The MCA considers that it is potentially unlikely that ports would remove all their weighbridges entirely due to the ongoing discussions in the IMO. In addition, there would still be a requirement to weigh cargo and the MCA expects that weighbridges would remain as one of the alternatives as a means to do it.

The three responses relating to these requirements that were received from industry as part of the two week scoping exercise indicate that under Option 1:

- two of the three respondents would continue to use existing weighbridges until they needed to be replaced and one respondent would cease using five of their existing weighbridges immediately; and
- of the two respondents that would continue to use existing weighbridges until they needed to be replaced, one respondent would not replace them, and the other respondent would hold a public consultation before a decision was made.

The respondent that would immediately cease using five of their existing weighbridges noted that it would form part of a wider project within the Port and therefore the potential costs are difficult to quantify. During the formal consultation the respondent further explained that the removal of their weighbridges would need to include a design for traffic calming measures. This is because weighbridges naturally slows the freight flow. However, the use of weighbridges for traffic calming is not a requirement in these Regulations and is therefore not a relevant consideration for estimation of costs and benefits in this IA.

⁹ The Customer Service Manager database lists all large ships on the UK Ship Register with MCA managers, and which ships comply with the four Regulations proposed for revocation.

Furthermore, there is also uncertainty regarding how other ports would respond to the revocation of the Regulations during the 10 appraisal period. For example, the three responses relating to these requirements that were received from industry indicated that the lifespan of a weighbridge can range from 10 to 25 years. Therefore, it has not been possible to monetise these costs. Nevertheless, it is assumed that ports would only choose to remove weighbridges if the benefits to them were greater than the costs they would incur.

5.3.2 Safety impacts (Non-monetised)

MCA safety experts consider that the revocation of these requirements would not adversely affect safety because they have been superseded by more modern regulations (as discussed in section 2.3) which more appropriately address the root causes of the Herald of Free Enterprise disaster. It is therefore considered that this policy would have no impacts on safety.

5.4 Benefits of Option 1

5.4.1 Introduction

The MCA recognises that trading patterns vary over time and geographically, and this may impact on the amount of use of weighbridges in the commercial activity of any given port.

It has not been possible to quantify how many weighbridges each port has and their exact lifespans, and there is considerable uncertainty regarding which ports would cease using their existing weighbridges during the appraisal period and when they would do so. This IA therefore has to make several assumptions in monetising these potential cost savings. This IA also only estimates the potential cost savings for the port that reported it would immediately cease using their five existing weighbridges. This therefore does not include cost savings to other ports from the removal of requirements to use their existing weighbridges.

The port that reported it would immediately cease using five of their existing weighbridge indicated that three of their existing weighbridges would need to be replaced in the near future and their other existing weighbridges would need to be replaced within the next 10 years. Therefore, for the purposes of this IA, it is assumed that this port would have replaced three of these weighbridges in Year 1 and two of these weighbridges in Year 10 under the "Do Nothing" scenario.

5.4.2 Potential cost savings to ports from not requiring weighbridges to be replaced (Monetised)

In response to the formal consultation, the port that indicated it would cease using five of their weighbridges estimated that to replace one weighbridge would cost £32,000. The IA scoping study showed a range of costs to replace a weighbridge: £32,000 to £54,000 based on three responses received. These values have been used for calculation of the low and high estimates of the cost savings from not requiring weighbridges to be replaced. The mid-point of these estimates of these cost of replacing a weigh bridge (at £43,667 cost of replacing a weighbridge) has been used for the best estimate of this cost saving in this Impact Assessment.

On the basis of the assumptions described in Section 5.4.1, the best estimate of the potential cost savings from not requiring weighbridges to be replaced have been estimated (not discounted) at £131,000 in Year 1; and at £87,333 in Year 10.

5.4.3 Potential cost savings to ports from not requiring maintenance of weighbridges (Monetised)

In response to the formal consultation, the port that indicated it would cease using five of their weighbridges confirmed that the total maintenance costs for their total of six weighbridges was £45,000 in 2014. This equates to average of £7,500 per weighbridge per year. This was higher than the estimated cost obtained during the scoping study, of £3,300 per year. The IA scoping study and consultation obtained separate estimates of costs to maintain a weighbridge of £1,800 and £7,500, based on two responses received from the consultation. These values have been used for calculation of the low and high estimates of this cost saving. The mid-point of the estimates obtained from the consultation and scoping study has been used for to calculate the best estimate of this cost saving. This mid-point is £4,650 per weighbridge per year. On the basis of the assumptions described in Section 5.4.1, assuming that there are 5 weighbridges that otherwise require maintenance in each year, the best estimate of the cost savings from not requiring maintenance of weighbridges has been estimated at around £23,250 per year.

5.4.4 Potential benefits from not requiring UK and non-UK goods vehicles and cargo to be weighed using a weighbridge (Monetised)

The respondent that would immediately cease using five of their existing weighbridge indicated that they weighed around 1.2 million freight vehicles in 2013 and that this took around 45 seconds per vehicle. For the purposes of this IA, it is assumed, as a simplifying assumption, that these values remain constant during the appraisal period.

It is estimated that the mean gross hourly pay in the water transport sector was around £15.69 per hour in 2013¹⁰. This has been uplifted by 30% to account for non-wage employment costs in line with the Standard Cost Model¹¹ and has been converted to 2014 prices using HM Treasury GDP deflators¹². Therefore, for this IA, it is assumed that the average value of workers' time is around £20.85 per hour.

The potential value of benefits of the time savings from not requiring goods vehicles and cargo to be weighed using a weighbridge has therefore been estimated at around £314,000 per year. It is assumed that these benefits are a cost saving to businesses who, following the removal of this requirement, will be able to reduce wage costs or redeploy staff to other business activities.

5.4.5 Potential cost savings from not requiring trained weighbridge operators (Non-monetised)

The existing Regulations require any person operating a weighbridge located within a port to hold a certificate of competence issued by a chief inspector of weights and measures. Weighbridges outside ports are subject to the Weights and Measures Act 1985 and the Weighing Equipment (Non-automatic Weighing Machines) Regulations 2000 (SI 2000/932) and the Non-automatic Weighing Instrument Regulations 2000 (SI 2000/3236). However, these two Regulations do not apply to weighbridges in ports and therefore the requirement to have trained staff operating weighbridges would be removed in its entirety under Option 1. This could potentially result in cost savings for ports. It has not been possible to monetise these potential cost savings but are discussed qualitatively below.

Recruitment

The three responses received from industry indicated that no one person is recruited specifically for operating a weighbridge. The role is subsumed within other roles for example a compliance manager role. However, no evidence is available on the proportion of their time that would be saved if a port removed their weighbridges. Therefore, it has not been possible to monetise this potential cost saving.

Training

Unless SIs 2000/932 and 2000/3236 are extended to cover ports, it would not be necessary to maintain specifically certificated weighing managers under Option 1 regardless of whether a port continues to use its weighbridges. However, it may be considered within the ports best interest to maintain trained staff if weighbridges remain in place. Given this uncertainty, it has not been possible to monetise this potential cost saving.

In any case, this potential cost saving is unlikely to be significant. One response received from industry indicated that the full cost of training a person to operate a weighbridge is £750 and another response received from industry indicated that the cost of apply for a certificate of competence is £20.

5.4.5 Potential benefits from removing weighbridges from ports (Non-monetised)

There are potential benefits from removing weighbridges from ports as the space could be put to an alternative use. However, there is no evidence available on these benefits. Therefore, it has not been possible to monetise these benefits in this IA.

Office of National Statistics, Annual Survey of Hours and Earnings, 2013 Provisional results. http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2013-provisional-results/index.html

¹¹ Better Regulation Executive, Measuring Administrative Costs: UK Standard Cost Model Manual http://www.berr.gov.uk/files/file44503.pdf

¹²HM Treasury (2014) GDP deflators at market prices, and money GDP: December 2013 https://www.gov.uk/government/publications/gdp-deflators-at-market-prices-and-money-gdp-march-2013

5.5 Summary of monetised Benefits of Option 1

The benefits to the owners and operators of UK registered ships, UK ports, other businesses and workers, which it has been possible to monetise, are estimated at a total of around £0.3 million to £0.4 million per year on average.

Most of the monetised benefits are from the time savings from not requiring UK and non-UK goods vehicles and cargo to be weighed using a weighbridge, and the value of this benefit is estimated at around £0.3 million per year.

Over the 10 year appraisal period, the present value of the total benefits is estimated at around £2.93 million to £3.27 million, with a Best estimate of around £3.10 million.

6. Rationale and evidence that justify the level of analysis used in the IA

As there is the potential for the revocation of these Regulations to be controversial, an informal consultation was undertaken in June 2012. This only sought industries initial reaction and little response was received as discussed in section 2. Further approaches have been made to key stakeholders to establish the potential impacts of removing the requirements and the consultation was used to substantiate that information and address any evidence gaps.

7. Risks

The main risk is the potential perception that Government is removing Regulations stemming from recommendations of a Formal Investigation into a maritime disaster which incurred a great number of losses to life. The MCA recognises this risk and determines that the improvements to ship design and stability standards implemented since the HOFE disaster mitigates this.

8. One-In, Two-out (OITO)

This proposed revocation is within scope of the One-In, Two-Out methodology as the three Regulations discussed in Section 1 are domestic in origin. The Best estimate of the Net Benefit to business (Present Value) over the 10 year appraisal period is around $\mathfrak{L}3.10$ million. On the basis of the OITO methodology, the Best estimate of the Net Cost to business per year (EANCB) is therefore estimated at around - $\mathfrak{L}0.27$ million per year.

9. Wider impacts

9.1. Equalities Impact Assessment

The MCA has identified no effect, positive or negative, on outcomes for persons in relation to their age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

9.2. Small and micro business Assessment

The revocation of the three Regulations discussed in Section 1 would have the potential benefit on affected businesses irrespective of size. It is recognised that this may include small and micro businesses. It has not been possible to identify exactly how many such businesses would be impacted. However, given the available evidence on the impacts of this policy, it is considered that it would not be proportionate to do so.

There may be a further indirect impact on hauliers, including small businesses, who may rely upon the port weighbridge to determine their load for other purposes or requirements. If there were no weighbridge provision and they were required to provide a weighbridge certificate not associated with port or ship operations, they might have to seek a public weighbridge elsewhere. The Trading Standards Institute noted in the formal consultation that in more remote places, the port weighbridge may be the only facility in the area. However, the revocation of these Regulations does not require Ports to remove their weighbridges and it is considered that where a weighbridge is providing an additional income through the

weighing of other vehicles not associated with the port or ship-owners/operators, ports would continue to use them. This impact is therefore considered to be minimal.

9.3. Competition Assessment

The three Regulations discussed in Section 1 are domestic requirements stemming from a disaster on a UK Ro-Ro passenger ship. These requirements are applicable to UK domestic ships and non-UK ships operating from UK port only with regards to the weighing of goods Regulations, which are different to requirements on other non-UK ships which don't operate from UK ports. Given the costs and benefits that have been identified in this IA, it is considered unlikely that the revocation of these three Regulations would have a significant impact on competition.

9.4. Health Impact Assessment

The three Regulations provide for safety equipment for specific use and the weighing of goods. As it is considered by MCA safety experts that the revocation of these Regulations would not adversely affect ship safety, the revocation of the Regulations is not expected to have any impact on health.

9.5. Human Rights

Since revocation of the Regulations is not expected to have any impact on persons, there are no Human Rights compatibility issues arising from these Regulations.

9.6. Justice System

Revocation of the Regulations would remove one potential offences for shipowners, two for masters, two for weighing managers and four for other persons.

The main enforcement mechanism for ships would be through the inspection and certification of UK ships by MCA surveyors. However, revocation of the three Weighing of Goods Vehicles and Other Cargo Regulations would remove the requirement for weighbridges in ports to maintain the equipment to Weighing Equipment (Non-automatic Weighing Machines) Regulations 1988 because these do not naturally cover weighbridges in ports.

9.7. Greenhouse Gas Emissions

As the Regulations only affect the weighing of goods, it is not expected to affect maritime transport volumes. Therefore, no change in greenhouse gas emissions is expected.

10. Summary and preferred option with description of implementation plan

Revocation of the three Regulations is the only considered option which was identified during the Red Tape Challenge. The MCA considers that the perceived safety risks from the removal of the requirements are adequately addressed by the increased safety standards in the design and construction of ships, as discussed in Section 2.3. That does not mean to say that use of the equipment is totally redundant rather that individual ports and shipping companies etc should assess the risks and identify the needs of their own particular operation.

The present value of the Net Benefit over the 10 year appraisal period is estimated to be around £2.93m to £3.27 million, with a Best estimate of around £3.10 million.

The MCA regularly engages with the UK passenger ship industry through its stakeholder liaison group, the Domestic Passenger Ship Steering Group. This includes a sub-group which specifically looks at Ro-Ro passenger ship safety. Any consequences from the revocation of these specific regulations will be identified and addressed within this group.