

**Alison Leighton**  
**Maritime and Coastguard Agency**  
**Bay 2/17, Spring Place**  
**105 Commercial Road**  
**Southampton**  
**SO15 1EG**

Tel: +44 (0)23 8032 9134  
Fax: +44 (0)23 8032 9252  
E-mail: Alison.Leighton@mcga.gov.uk

2 June 2014

Dear Consultee

## **STATUTORY CONSULTATION – PROPOSED REVOCATION OF FOUR SETS OF MARITIME REGULATIONS**

This consultation letter seeks your views concerning the proposed revocation of:

- The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988 (S.I. 1988/1275);
- The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Amendment) Regulations 1989 (S.I. 1989/270);
- The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Application to non-UK Ships) Regulations 1989 (S.I. 1989/568);and
- The Merchant Shipping (Emergency Equipment Lockers for Ro/Ro Passenger Ships) Regulations 1988 (S.I. 1988/2272).

### **Background**

The HERALD OF FREE ENTERPRISE (HOFE) disaster happened on 6 March 1987 and resulted in 188 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. A Formal Investigation was held from 27 April to 12 June 1987 and a number of recommendations were made for immediate implementation which related to the loading and stability of the ship, and measures for saving lives in an emergency.

Regulations introduced following the immediate recommendations included:

The Merchant Shipping (Emergency Equipment Lockers for Ro/Ro Passenger Ships) Regulations 1988 require UK Roll-On, Roll-Off (Ro-Ro) passenger ships operating as passenger ships of prescribed classes to be provided with weather-tight emergency lockers on the open deck of the ship which would open if a vessel was capsized. This robust locker must be stocked with a defined range of good quality, well-maintained emergency equipment such as axes, crowbar, lifting gear and ladders, which can be accessed in all foreseeable circumstances.

The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988 (amended by The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Amendment) Regulations 1989) apply to certain UK Ro-Ro 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

**NOT PROTECTIVELY MARKED**



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.

The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Application to non-UK Ships) Regulations 1989 apply the weighing requirements described above to non-UK Ro/Ro passenger ships while they are in a port in the UK.

### **Detail on improved safety standards**

In addition to the Regulations proposed for revocation, further amendments were made to the now revoked Merchant Shipping (Passenger Ship Construction) Regulations 1980 and the Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984<sup>1</sup>. These introduced the requirement for bow door cameras, supplementary emergency lighting and indicator lights, and required five yearly lightweight checks and inclining experiments to evaluate any increase in growth (tonnage) which would affect stability.

In 1990<sup>2</sup> and 1992<sup>3</sup>, more major changes were made. These included:

- Application of SOLAS 90<sup>4</sup> 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;
- 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.

In the longer term the Formal Investigation recommended a review of the design of ships and the calculations of stability. Ship design has advanced significantly over the years since the disaster in particular with higher safety standards concerning watertight subdivision (where the hull of the 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 now apply and ships are subject to stability tests. Specifically for Ro-Ro passenger ships, the stability of a ship is also required to be assessed and re-assessed throughout the loading of goods vehicles and cargo to ensure that the stability of the ship is not compromised.

These increased safety standards are prescribed in the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998<sup>5</sup> and the Merchant Shipping (Passenger

<sup>1</sup> The Merchant Shipping (Passenger Ship Construction) (Amendment) Regulations 1987 (S.I. 1987/1886), the Merchant Shipping (Passenger Ship Construction)(Amendment No 2) Regulations 1987 and the Merchant Shipping (Stability of Passenger Ships) Regulations 1988.

<sup>2</sup> Merchant Shipping (Passenger Ship Construction and Survey) (Amendment) Regulations 1990.

<sup>3</sup> Merchant Shipping (Passenger Ship Construction and Survey) (Amendment) Regulations 1992.

<sup>4</sup> 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.

<sup>5</sup> S.I. 1998/2514, as amended. This S.I. revoked and replaced the Merchant Shipping (Passenger Ship Construction) Regulations 1980 (S.I. 1980/525, as amended) and the Merchant Shipping (Passenger Ship Construction and Survey) Regulations 1984 (S.I. 1984/2126).

### **NOT PROTECTIVELY MARKED**



Ship Construction: Ships of Classes III to VI(A)) Regulations 1998<sup>6</sup>. In addition, the Merchant Shipping (Ro/Ro Passenger Ships) (Stability) Regulations 2004<sup>7</sup>, (“the 2004 Regulations”), implement 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 MS 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 Resolutions<sup>8</sup> 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. 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 were implemented in the UK in the Merchant Shipping (Safety of Navigation) Regulations 2002<sup>9</sup> and the Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) Regulations 2004<sup>10</sup>.

The Government’s Red Tape Challenge Initiative identified the four sets of regulations described in the opening paragraph as suitable for revocation. This was published for comment between November 2011 and July 2012, and no responses referred specifically to these provisions. With these higher standards in practice the MCA safety experts consider that the four Regulations proposed for revocation now add very little additional meaningful safety.

### **Actions requested from Consultees**

You are invited to comment on the proposed revocation of the four regulations, and in particular to provide comment on the impacts, and the costs and benefits, identified in the Impact Assessment (IA) attached.

**Responses to this consultation package are requested by 27 July 2014.** The consultation package is available on-line ([www.gov.uk](http://www.gov.uk) > Departments and Policy > Consultations) and consists of:

- Annex A Draft Impact Assessment
- Annex B List of Consultees
- Annex C Questions on the impacts and the associated costs and benefits
- Annex D Consultation Feedback Form

If you require hard copies of these documents please use the contact details below.

Comments to the consultation must be set out in writing and submitted by 27 July 2014 to:

<sup>6</sup> S.I. 1998/2515.

<sup>7</sup> S.I. 2004/2884.

<sup>8</sup> <http://www.imo.org/OurWork/Safety/Regulations/Pages/RO-ROFerries.aspx>

<sup>9</sup> S.I. 2002/1473, as amended.

<sup>10</sup> S.I. 2004/2110, as amended.

**NOT PROTECTIVELY MARKED**



Alison Leighton  
Legal Services Unit  
Maritime & Coastguard Agency  
Spring Place, 105 Commercial Road  
Southampton  
SO15 1EG

[Alison.Leighton@mcga.gov.uk](mailto:Alison.Leighton@mcga.gov.uk)

All comments on the documents are appreciated, but in particular your views would be welcomed on the questions in the Impact Assessment.

### **Next Steps**

In the light of any comments received, the draft Statutory Instrument and Impact Assessment will be reviewed with the aim of finalising and publishing them as soon as possible. The intention is for the proposed Regulations to come into force as soon as possible.

Comments on this Consultation, together with the Maritime & Coastguard Agency's (MCA) responses, will be made available on-line ([www.gov.uk](http://www.gov.uk) > Departments and Policy > Consultations) within three months of the closing date of this Consultation.

### **Freedom of Information Act**

Please be aware that information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data in accordance with the DPA and in the majority of circumstances; this will mean that your personal data will not be disclosed to third parties.

### **Consultation Criteria**

This consultation has been conducted in accordance with the Cabinet Office Consultation Principles Guidance, which is available from: [www.gov.uk/government/publications/consultation-principles-guidance](http://www.gov.uk/government/publications/consultation-principles-guidance)

This is an eight week consultation running between 2 June until 27 July 2014.

The proposed Regulations are a result of proposals identified during the Red Tape Challenge Initiative and published in March 2013.

### **Feedback**

If you have any comments regarding the conduct of this consultation please contact the Consultation Co-ordinator at [consultation.coordinator@mcga.gov.uk](mailto:consultation.coordinator@mcga.gov.uk). We are continually trying to improve the way in

**NOT PROTECTIVELY MARKED**



which we conduct consultations and appreciate your views, so we would also be grateful if you could complete and return the attached feedback form (at Annex D). These should be submitted to the Consultation Co-ordinator and are not affected by the deadline for this consultation.

Yours sincerely

Alison Leighton  
Legal Liaison Officer

**NOT PROTECTIVELY MARKED**



<b>Title:</b> The proposed revocation of four merchant shipping regulations concerning the weighing of goods vehicles and other cargo, and the carriage of emergency equipment lockers <b>IA No:</b> <b>Lead department or agency:</b> Maritime and Coastguard Agency <b>Other departments or agencies:</b> Department for Transport	<b>Impact Assessment (IA)</b>				
	<b>Date:</b> 02/04/2014				
	<b>Stage:</b> Consultation				
	<b>Source of intervention:</b> Domestic				
	<b>Type of measure:</b> Secondary legislation				
<b>Contact for enquiries:</b> Alison Leighton <b>Email:</b> <a href="mailto:Alison.Leighton@mca.gov.uk">Alison.Leighton@mca.gov.uk</a> <b>Tel:</b> 02380 329260					
<b>Summary: Intervention and Options</b>					<b>RPC Opinion:</b> Awaiting Scrutiny

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, Two-Out?	Measure qualifies as Two-Out?
£3.09m	£1.74m	£-0.16m	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 specially designed emergency equipment lockers to be placed on the open deck of certain domestic ships and the weighing of goods vehicles and other cargo on weighbridges in ports. It is viewed by 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. The intended effects of revoking this legislation are to reduce costs to business associated with providing the specific equipment that is currently mandated under this legislation and meeting the other requirements of this legislation. For example, 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 meet this requirement, 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 four measures relating to the carriage of emergency equipment lockers and the weighing of goods vehicles and other cargo which MCA experts consider could be revoked without adversely affecting ship safety:

- 1) The Merchant Shipping (Emergency Equipment Lockers for Ro/Ro Passenger Ships) Regulations 1988;
- 2) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) Regulations 1988;
- 3) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Amendment) Regulations 1989; and
- 4) The Merchant Shipping (Weighing of Goods Vehicles and other Cargo) (Application to non-UK Ships) Regulations 1989.

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

<b>Will the policy be reviewed?</b> It will not be reviewed. <b>If applicable, set review date:</b> N/A					
Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.		<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)		<b>Traded:</b> N/A		<b>Non-traded:</b> N/A	

*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: \_\_\_\_\_ Date: \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 1

**Description:** Proposed revocation of four statutory instruments

## FULL ECONOMIC ASSESSMENT

Price Base Year 2014	PV Base Year 2014	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £2.93m	High: £3.26m	Best Estimate: £3.09m

COSTS (£m)	Total Transition (Constant Price) 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 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 a) the potential costs associated with the removal of weighbridges from ports; and b) the potential costs associated with removing emergency equipment lockers from existing ships.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	£0.34m	£2.93m
High	0	£0.38m	£3.26m
Best Estimate	0	£0.36m	£3.09m

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

The total 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 around £0.34 million to £0.38 million per year on average, with a best estimate of around £0.36 million per year on average. The key monetised benefits are the estimated benefits from not requiring goods vehicles and cargo to be weighed using a weighbridge.

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

The key non-monetised benefits that have been identified in this IA are a) the non-monetised benefits associated with ports ceasing to use weighbridges and / or removing them from ports; and b) the potential benefits associated with removing emergency equipment lockers from existing ships. It is assumed that these non-monetised benefits would be greater than the non-monetised costs.

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 of Option 1. 2.) The estimates of the benefits of Option 1 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. 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: 0	Benefits: £0.16m	Net: £0.16m	Yes	OUT

# Evidence Base

## 1. Background

The Herald of Free Enterprise (HOFE) disaster happened on 6 March 1987 and resulted in 188 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 Investigation<sup>1</sup> was held from 27 April to 12 June 1987. A number of recommendations were made for immediate undertaking which included areas relating to loading and the stability of the ship and saving of life in an emergency.

Regulations introduced following the immediate recommendations include:

### **a) The Merchant Shipping (Emergency Equipment Lockers for Ro/Ro Passenger Ships) Regulations 1988**

Regulations requiring UK Roll-On, Roll-Off (Ro-Ro) passenger ships operating as passenger ships of prescribed classes to be provided with weather-tight emergency lockers on the open deck of the ship which would open if a vessel was capsized. This robust locker must be stocked with a defined range of good quality, well-maintained emergency equipment such as axes, crowbar, lifting gear and ladders, which can be accessed in all foreseeable circumstances.

### **b) 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 Ro-Ro 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.

### **c) 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

It is viewed by the Maritime and Coastguard Agency (MCA) safety experts that the four 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, in the longer term, the Formal Investigation of the HOFE disaster recommended a review of the design of the ship and the calculations of stability. This was done and formally addressed through Regulations introduced in 1990, 1992, 1998 and 2004 which are discussed in more detail below. MCA safety experts therefore consider that the circumstances in which the specific emergency equipment lockers would be needed are much reduced.

---

<sup>1</sup> 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](http://www.maib.gov.uk/cms_resources.cfm?file=/hoffefinal.pdf)



In addition, the weighing of goods and cargo is also a requirement in other Regulations, although they don't prescribe how cargo should be weighed. There are alternative ways to weighing 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 these four Regulations discussed in Section 1, which were introduced following a major maritime disaster, could be controversial and may raise 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 emergency equipment lockers (or similar arrangements) and 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 shipping companies, ports, etc 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 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 findings collated and reported by the National Measurement Office<sup>2</sup>'. If this is the case, this may contribute to the under-weighing of goods, which the existing Regulations were trying to address.

Furthermore, in order to inform this Impact Assessment (IA), ports and ship owner / operators affected were contacted in a scoping exercise in January 2014. 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. This is discussed in more detail in Section 2.6 below.

## **2.3. Further detail on improved safety standards**

The Secretary of State initiated a research programme in July 1987 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

---

<sup>2</sup> 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>

Technology (BMT) Limited, YARD Limited (now BAE Systems) and the Admiralty Marine Technology Establishment (now QinetiQ).

In addition to the four 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 1990<sup>3</sup> and 1992<sup>4</sup>, more major changes were made. These included:

- Application of SOLAS 90<sup>5</sup> 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;
- 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 DoT 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 International Maritime Organization<sup>6</sup> (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 and emergency equipment lockers. 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

---

<sup>3</sup> Merchant Shipping (Passenger Ship Construction and Survey) (Amendment) Regulations 1990

<sup>4</sup> Merchant Shipping (Passenger Ship Construction and Survey) (Amendment) Regulations 1992

<sup>5</sup> 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.

<sup>6</sup> 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.

(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 Resolutions<sup>7</sup> 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.

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

#### **2.4. Further detail on emergency equipment lockers**

The purpose of the equipment in these lockers is to provide means in unusual circumstances for example, when a ship is severely listing to one side, to assist passengers and crew to escape from enclosed spaces within the ship when the normal escape arrangements cannot be used.

The MCA consider that the significant changes in ship design and construction have rendered the circumstances, where the equipment held in the specially designed equipment lockers may be required, less likely. In addition, the MCA consider that it could be argued that even if a situation occurred where the equipment could be used, it is unlikely that the degree of crew organisation necessary to make use of it could be maintained in the face of a catastrophic capsizing. For example, MCA experts advise that if a ship is in deep water then it will capsize and sink faster than you can use the equipment (the Estonia sank in 40 minutes); it is also considered by MCA experts that if in shallow water the ship will rest on the bottom (like the HOFE) and there would be sufficient time to helicopter the necessary equipment over from the shore if it is needed.

#### **2.5. Further detail on weighing of cargo**

The Weighing of Goods Vehicles and other Cargo Regulations place a requirement on ship owners to weigh goods vehicles before they are loaded onto any passenger Ro-Ro ships (UK and non-UK ships) leaving UK ports unless a weight certificate approved by the Trading Standards Department 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.

---

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

It should be noted however that at this time there are no reciprocal international requirements on those same vessels setting sail from non-UK ports and therefore the UK is alone on insisting that this is undertaken.

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 Regulations was intended to address this under reporting.

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. The Merchant Shipping (Carriage of Cargoes) Regulations 1999 places an offence on shippers who provide incorrect information.

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.

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.

## **2.6. Further details on responses to the scoping exercise**

A two week scoping exercise was held in January 2014 to gain further thoughts from the industry regarding the proposed revocation of the four Regulations and to establish an early indication as to any potential costs and benefits of doing so. Only five responses were obtained, three regarding the revocation of the use of weighbridges in ports requirements and two for the revocation of the emergency equipment lockers requirements. The information received has informed the analysis in Section 5 below.

## **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 four 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 the 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, which could potentially reduce their costs.

It is not the intention to say that the arrangements are considered unnecessary rather that ports and shipping companies should identify the needs weighed against the perceived risks to safety of their individual operations.

## **4. Description of options considered**

Revocation of these four 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 2.5. Although it is proposed to remove the requirement to have cargo specifically weighed on a weighbridge, this 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. In line with the Better Regulation Framework Manual, a 10 year appraisal period has been used in this Impact Assessment. For the purpose of this IA, it is assumed that this begins on 1 June 2014 and ends on 31 May 2024. 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 emergency equipment lockers (Section 5.4);
- Benefits of Option 1 regarding the revocation of the requirements on the use of weighbridges (Section 5.5); and
- Summary of monetised benefits of Option 1 (Section 5.6).

For the purposes of this Impact Assessment, the additional costs and benefits of the proposed Regulations (Option 1) during the appraisal period have been monetised to the extent that is possible. Given the limitations of the available evidence base, 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 full qualitative description of the cost or benefit is provided. Furthermore, the assumptions have been made are outlined below. It should be noted that the conclusions of this cost-benefit analysis are sensitive to these assumptions. In particular, it is assumed that this policy would have no impacts on safety based on the expert judgement of MCA safety experts.

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.

Following the consultation, we will consider whether further analysis could be undertaken to improve the extent to which the additional costs and benefits of the proposed Regulations (Option 1) are monetised and whether any other improvements can be made to this analysis. To assist with this, we have included a number of specific questions for consultees below. All responses to the consultation will be taken into account when the Impact Assessment is finalised after the consultation.

#### **Questions for all consultees**

Q1. Consultees are invited to submit any additional evidence or other relevant information on the costs and benefits of the proposed Regulations (Option 1) that are identified in this Impact Assessment.

Q2. Consultees are invited to provide details of any additional costs and benefits of the proposed Regulations (Option 1) that have not been identified in this Impact Assessment, and provide any additional evidence or other relevant information that is available on these costs and benefits.

Q3. Consultees are invited to comment on any of the assumptions that have been made in this Impact Assessment, and are invited to propose alternative assumptions and provide supporting evidence or other relevant information.

## **5.2. Groups Affected**

The requirement for emergency equipment lockers apply to UK Ro-Ro passenger ships when operating as passenger ships of Classes I, II, II(A) and IV<sup>8</sup>.

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) from a UK port. The analysis in this IA is based on UK registered ships as the number of non-UK ships is difficult to quantify.

The UK CSM Database<sup>9</sup> shows 84 UK Ro-Ro passenger ships registered under the UK flag in February 2014. These are broken down as follows:

<b>Class of Ship</b>	<b>Currently on the UK flag Feb 2014</b>	<b>Joined the UK flag in the last 10 years 2005 -2014</b>
<b>Class I</b>	2	2
<b>Class II</b>	24	10
<b>Class II(A)</b>	19	3
<b>Class IV</b>	37	6
<b>Multi</b>	2	0
<b>Total</b>	84	21

Weighbridges can be either self-operated or manned. MCA research has identified 12 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 and Portsmouth. The split between self-operated and manned weighbridges is unclear and the scoping study did not provide substantial information to base an assumption. Furthermore, comprehensive data on the number of weighbridges at each port is not available.

### **Question for Ports**

Q4. Please can you advise whether your port would be affected by the proposed revocation of the regulations and if there are any additional ports which should also be noted.

Q5. Please can you advise as to the number of non-UK ships of Class II and II(A) operate from your port.

## **5.3. Costs of Option 1**

### **5.3.1 Potential costs of removing emergency equipment lockers from existing ships (Non-monetised)**

Emergency equipment lockers are currently required on UK Ro-Ro passenger ships when operating as passenger ships of Classes I, II, II(A) and IV.

If emergency equipment lockers would be removed from these ships as a result of the proposed Regulations under Option 1, there could be some costs associated with this.

However, the proposed Regulations would not require owner/operators of these ships to remove the emergency equipment lockers and it would be their decision should they wish to.

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

- the respondents would not remove the emergency equipment lockers from existing ships; and
- the respondents would continue replace existing emergency equipment lockers with new emergency equipment lockers when required to do so.

<sup>8</sup> 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.

<sup>9</sup> 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.

On this basis of this information, it is assumed that no emergency equipment lockers would be removed from existing ships under Option 1 and that these potential costs would not arise. However, it should be noted that this is subject to uncertainty. Nevertheless, it is assumed that emergency equipment lockers would only be removed from existing ships if the benefits were greater than the costs.

#### **Questions for Ship Owners / Operators**

Q6. If the proposed revocation of the Regulations was approved, how would you respond? In particular, would you continue to use the emergency equipment lockers on your existing Ro-Ro passenger ships until they need to be replaced? If so, would you replace these emergency equipment lockers with new emergency equipment lockers when required to do so? Alternatively, would you remove the emergency equipment lockers from your existing Ro-Ro passenger ships at an earlier date? If so, when would you do this?

Q7. If you would remove the emergency equipment lockers from your existing Ro-Ro passenger ships, how much would it cost to remove the emergency equipment lockers?

#### **5.3.2. Potential costs of the removal of weighbridges (Non-monetised)**

MCA research has identified 11 ports that are currently required to have weighbridges due to their Ro-Ro passenger ship trade.

If weighbridges would be 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 it would be down to individual ports should they wish to.

The MCA considers that it is potentially unlikely that ports would remove all 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 when required to do so and the other respondent would hold a public consultation before a decision was made.

The respondent that would cease using five of their existing weighbridges immediately noted that it would form part of a wider project within the Port and therefore the potential costs are difficult to quantify. 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 weighbridges would only be removed from ports if the benefits were greater than the costs.

#### **Questions for Ports**

Q8. If the proposed revocation of the Regulations was approved, how would you respond? In particular, would you continue to use these weighbridges to weigh goods vehicles/cargo until they needed to be replaced? If so, would you replace them with new weighbridges when required to do so? If not, what alternative technology would you use to weigh goods vehicles/cargo? Alternatively, would you remove the weighbridges from within the port grounds at an earlier date? If so, when would you do this? In addition, what alternative technology would you use to weigh goods vehicles/cargo?

Q9. If you would remove the weighbridges from within the port grounds and / or move to using an alternative technology to weigh goods vehicles/cargo, what would be the benefits of doing so? In particular, how much would the costs of using the alternative technology differ from the costs of using the weighbridges? In addition, how much would it cost to remove a weighbridge?

Q10. How often does a weighbridge need to be replaced?

### 5.3.3. Safety impacts (Non-monetised)

As MCA safety experts consider that the revocation of these requirements would not adversely affect safety because they have been superseded by more modern regulations which more appropriately address the root causes of the Herald of Free Enterprise disaster, it is assumed that this policy would have no impacts on safety.

## **5.4. Benefits of Option 1 regarding the revocation of the requirements on the use emergency equipment lockers**

### 5.4.1. Introduction

Each ship is currently required to have at least one emergency equipment locker located on either side of the open deck of the ship (i.e. a minimum of two emergency equipment lockers are required per ship).

Individual ship owner/operators may decide to have more than the mandatory number of emergency equipment lockers, but as this would be outside of the statutory obligations, this analysis assumes that all ships have two emergency equipment lockers.

Based on the data on the number of ships which have joined the UK flag over the last 10 years shown in Section 5.2, it is assumed that around 2.1 new ships would join the UK flag each year over the next 10 years. These ships would be either new builds or existing ships changing flags.

The two responses relating to these requirements that were received from industry as part of the two week scoping exercise were not consistent. One respondent indicated that they would continue to install emergency equipment lockers on new ships under Option 1 but the other respondent indicated that they would not install emergency equipment lockers on new ships under Option 1.

Given this uncertainty, the low scenario of these benefits assumes that all operators would continue to install emergency equipment lockers on new ships under Option 1; the high scenario of these benefits assumes that no operators would install emergency equipment lockers on new ships under Option 1; and the Best estimates of the benefits assume the mid-point of this range (i.e. that 50% would).

### **Question for Ship Owners / Operators**

Q11. If you plan on registering a new ship onto the UK flag in the next 10 years, would you fit the emergency equipment lockers even if the Regulations were revoked?

### 5.4.2. Potential cost savings from not installing emergency equipment lockers on new ships (Monetised)

One response received from industry as part of the two week scoping exercise indicated that the initial cost of an emergency equipment locker is £3,000 per equipment locker. Therefore, on the basis of this information, it is assumed that the initial cost of two emergency equipment lockers is around £6,000 per ship during the appraisal period (2014 prices).

On the basis of the assumption regarding the number of new ships that would join the UK flag each year over the next 10 years and the other assumptions discussed in Section 5.4.1, the total benefits are estimated at around £0 to £12,600 per year, with a best estimate of around £6,300 per year.



### **Question for Ship Owners / Operators**

Q12. Is our assumption regarding the initial cost of two equipment lockers reasonable? If not, what is the initial cost per new emergency equipment locker?

#### **5.4.3. Potential cost savings from not requiring the maintenance of emergency equipment lockers on new ships (Monetised)**

##### **5.4.3.1. Financial costs of maintaining emergency equipment lockers**

Emergency equipment lockers are required to be regularly maintained as per Merchant Shipping Notice 1359, Emergency Equipment Lockers for Ro-Ro Passenger Ships. Owner/operators are required to ensure that the equipment in the lockers remain in working order and are subject to survey during the survey of the whole ship for the issue of a passenger ship safety certificate which occurs once a year.

One response received from industry as part of the two weeks scoping exercise indicated that the annual financial cost of maintaining two emergency equipment lockers and the equipment held inside is around £300 per ship per year. For the purposes of this IA, it is assumed that the financial costs of maintaining emergency equipment lockers would £300 per ship per year during the appraisal period (2014 prices).

### **Question for Ship Owners / Operators**

Q13. Is our assumption regarding the annual cost per ship of maintaining two emergency equipment lockers and the equipment held inside reasonable? If not, what is the cost of maintaining one emergency equipment locker and the equipment held inside?

#### **5.4.3.2. Time costs of checking the emergency equipment lockers**

Checks of the emergency equipment lockers are undertaken regularly. The two responses received from industry as part of the two weeks scoping exercise indicated the time taken for checks can range from half an hour every three months (i.e. 2 hours per year) to one hour per month (i.e. 12 hours per year), and that the Chief Mate (second in command) normally undertakes these checks. However, the Chief Mate may appoint this job to another seafarer so there is some uncertainty around who may undertake these checks.

It is estimated that the mean gross hourly pay in the water transport sector was around £15.69 per hour in 2013<sup>10</sup>. This has been uplifted by 30% to account for overheads in line with the Standard Cost Model<sup>11</sup> and has been converted to 2014 prices using the latest HM Treasury GDP deflators<sup>12</sup>. Therefore, for this IA, it is assumed that the value of workers' time is around £20.85 per hour in the absence of better evidence.

Therefore, for the purposes of this IA, it is assumed that the time costs of checking the emergency equipment lockers would be around £42 to £250 per vessel per year, with a Best estimate of around £146 per vessel per year (the mid-point of the range) (2014 prices).

### **Question for Ship Owners / Operators**

Q14. Is our assumption regarding the annual cost per ship of checking the two emergency equipment lockers reasonable? If not, how long does it take a member of crew to check the lockers each year? Which crew member would be responsible for this role and what is the average hourly pay of that seafarer?

<sup>10</sup> 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>

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

<sup>12</sup> HM 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>

#### 5.4.3.3. Total costs of maintenance of emergency equipment lockers

On the basis of the above assumptions, for the purposes of this IA, it is assumed that the total cost of maintaining two emergency equipment lockers is around £342 to £550 per ship per year, with a Best estimate of £446 (2014 prices).

#### 5.4.3.4. Estimated potential cost savings

On the basis of the assumptions described in Section 5.4.1 and Section 5.4.3.3, the total potential cost savings from not requiring the maintenance of emergency equipment lockers on new ships are estimated at around £0 to £6,400 per year on average, with a best estimate of around £2,600 per year on average.<sup>13</sup>

#### 5.4.4. Potential cost savings from not requiring drills on new ships (Monetised)

Ships can vary substantially in size and the numbers of crew required operating them. Therefore it is difficult to quantify the numbers of seafarers who will be involved in drills.

The scoping study estimated that anywhere from two to eleven members of crew may be involved for between 30 and 45 minutes every three months (i.e. 2 to 3 hours per year). For the purposes of this IA, it is assumed that two members of crew would be involved on all vessels to be conservative and that this would therefore take 4 to 6 hours of workers' time per ship per year. As in Section 5.4.3.2, it is assumed that the value of workers' time is around £20.85 per hour (2014 prices). Therefore, for the purposes of this IA, it is assumed that the total costs of undertaking drills would be around £83 to £125 per ship per year, with a Best estimate of around £104 per ship per year (the mid-point of the range) (2014 prices).

On the basis of the above assumptions and the assumptions described in Section 5.4.1, the total potential cost savings from not requiring drills on new ships are estimated at around £0 to £1,400 per year on average, with a best estimate of around £600 per year on average.<sup>14</sup>

#### **Question for Ship Owners / Operators**

Q15. Is our assumption regarding the annual cost of holding drills reasonable? If not, how long for and how often is does it take to undertake a drill? In addition, how many crew are involved and what is their average hourly pay?

#### 5.4.5. Potential cost savings from not needing to replace, maintain and hold drills for emergency equipment lockers on existing ships (Non-monetised)

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

- the respondents would not remove the emergency equipment lockers from existing ships; and
- the respondents would continue replace existing emergency equipment lockers with new emergency equipment lockers when required to do so.

On this basis of this information, it is assumed that no emergency lockers would be removed from existing ships under Option 1 and that these potential benefits would not arise. However, it should be noted that this is subject to uncertainty.

#### 5.4.6. Potential cost saving from not requiring surveys of emergency equipment lockers (Non-monetised)

All safety equipment on board ships is subject to annual surveys undertaken by MCA surveyors. The emergency equipment lockers will be included in this annual survey and should ships continue to carry these lockers, they will also continue to be subject to survey.

<sup>13</sup> These estimates have been rounded to the nearest £1,000.

<sup>14</sup> These estimates have been rounded to the nearest £100.

The hourly rate of a MCA surveyor is £94 as per the Merchant Shipping (Fees) Regulations 2006, SI 2006/2055. It is difficult to quantify how long this aspect of the overall survey would take. However, MCA surveyors estimate it would take approximately 15 minutes per locker.

Given the negligible time saving estimated by MCA surveyors, it is considered disproportionate to monetise this potential benefit.

## **5.5. Benefits of Option 1 regarding the revocation of the requirements on the use of weighbridges**

### **5.5.1. Introduction**

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

As 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 takes a conservative approach to monetising these potential cost savings.

In particular, this IA only seeks to monetise the potential cost savings for the port that would cease using the five of their existing weighbridges immediately.

The respondent that would cease using five of their existing weighbridges immediately 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 to be conservative.

### **5.5.2. Potential cost savings to ports from not requiring weighbridges to be replaced (Non-monetised)**

On the basis of the three responses received from industry that estimated these costs, this IA assumes that the costs of replacing a weighbridge are around £32,000 to £54,000 per weighbridge, with a Best estimate of around £44,000 per weighbridge (the average of the three responses received from industry)<sup>15</sup>.

Therefore, on the basis of the above assumptions and the assumptions described in Section 5.5.1, the potential cost savings from not requiring weighbridges to be replaced have been estimated at around £96,000 to £162,000, with a Best estimate of around £131,000 in Year 1; and around £64,000 to £108,000, with a Best estimate of around £87,000 in Year 10<sup>15</sup>.

#### **Question for Ports**

Q16. Is our assumption regarding the cost of replacing a weighbridge reasonable? If not, what is the cost of purchasing a new weighbridge?

### **5.5.3. Potential cost savings ports from not requiring maintenance of weighbridges (Monetised)**

On the basis of the two responses received from industry that estimated these costs, this IA assumes that the costs of maintaining a weighbridge are around £1,800 to £3,300 per weighbridge per year, with a Best estimate of around £2,600 per weighbridge per year (the average the two responses received from industry).<sup>13</sup>

Therefore, on the basis of the above assumptions and the assumptions described in Section 5.5.1, the potential cost savings from not requiring maintenance of weighbridges have been estimated at around £9,000 to £17,000 per year, with a Best estimate of around £13,000 per year.<sup>13</sup>

<sup>15</sup> This estimate has been rounded to the nearest £1,000.

### **Question for Ports**

Q17. Is our assumption regarding the average annual cost of maintaining a weighbridge reasonable? If not, what is the average annual cost of maintaining a weighbridge?

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

The respondent that would cease using five of their existing weighbridges immediately indicated that they weighted 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 that these values remain constant during the appraisal period as a simplifying assumption. However, it is recognised that that these may potentially change during the appraisal period. As in Section 5.4.3.2, it is assumed that the value of workers' time is around £20.85 per hour (2014 prices). Therefore, the potential benefits from not requiring goods vehicles and cargo to be weighed using a weighbridge have been estimated at around £314,000 per year<sup>15</sup>. However, there is uncertainty regarding whether these time savings represent a benefits to businesses or workers. Given this uncertainty, it is assumed that between 0% and 100% of these benefits would represent a benefit to businesses, with a Best estimate of 50% (the mid-point of this range).

### **Questions for all consultees**

Q18. How long does it take to weight goods vehicles and cargo using a weighbridge?

Q19. Is our assumption regarding the value of workers' time reasonable?

Q20. Would the time savings from not requiring goods vehicles and cargo to be weighed using a weighbridge represent a benefit to business or workers?

#### **5.5.5. 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. These are therefore 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.

#### 5.5.6. 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.

### **5.6. 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 around £0.34 million to £0.38 million per year on average, with a Best estimate of around £0.36 million per year on average. Over the 10 year appraisal period, the present value of the total benefits is estimated at around £2.93 million to £3.26 million, with a Best estimate of around £3.09 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 is being 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 four 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 £1.74m. On the basis of the OITO methodology, the Best estimate of the Net Cost to business per year (EANCB) is therefore estimated at around £-0.16 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 four 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.

### **Question for all consultees**

Q21. Consultees are invited to submit any additional evidence or relevant information on the impact of the revocation of the four Regulations discussed in Section 1 would have on small and micro businesses.

#### **9.3. Competition Assessment**

The four 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 four Regulations would have a significant impact on competition.

### **Question for all consultees**

Q22. Consultees are invited to submit any additional evidence or relevant information on the impact of the revocation of the four Regulations discussed in Section 1 would have on competition.

#### **9.4. Health Impact Assessment**

The four 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 two potential offences for shipowners, three for masters, two for weighing managers and three for other persons.

The main enforcement mechanism for ships would be through the inspection and certification of UK ships by MCA surveyors. The same methods of enforcement would be used for breach of the existing Regulations noted in Section 2.5. 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 carriage of safety equipment for specific use and 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 four 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 than 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 to business over the 10 year appraisal period is estimated to be around £2.93m to £3.26 million, with a Best estimate of around £3.09 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.

## Annex B: List of Consultees

Families of the victims of the disaster  
American Bureau of Shipping  
Associated British Ports  
ABP Southampton  
British Ports Association  
Bureau Veritas  
Calmac Ferries  
Chamber of Shipping  
Condor Ferries  
Det Norske Veritas  
DFDS Seaways  
Domestic Passenger Ship Steering Group  
Germanischer Lloyd  
Harwich International Port  
Heysham Ferry Port  
Holyhead Port Authority  
Interislander  
Lancashire County Trading Standards  
Lloyds Register of Shipping  
Mann Lines Ltd  
National Assembly for Wales  
National Measurement Office  
Nautilus  
Newhaven Port  
Northern Ireland Assembly  
Northern Marine Ferries Ltd  
Northern Marine Management Ltd  
Northlink Ferries  
Orkney Ferries  
P and O Ferries Holdings Ltd  
Passenger Shipping Association  
Peel Port Group  
Pentland Ferries Ltd  
Poole Port  
Port of Birkenhead  
Port of Dover  
Port of Fishguard  
Port of Glasgow  
Port of Ramsgate  
Portsmouth International Port  
Red Ensign Group  
Red Funnel Group  
Registro Italiano Navale  
Royal Fleet Auxilliary

**NOT PROTECTIVELY MARKED**





RMT  
Scottish Executive  
Serco Northlink Ferries  
Shetland Islands Ferry Services  
Stena Line  
Trading Standards Institute  
Transnautic Ship Management  
UK Major Ports Group  
Wightlink  
Zodiac Maritime Agency

**NOT PROTECTIVELY MARKED**



## **Annex C: Questions on the impacts and the associated costs and benefits**

The IA, annex A attached separately to this document, covers the revocation of the emergency equipment lockers and the weighbridge requirements separately, with questions posed to ship owner/operators regarding the emergency equipment lockers and to ports regarding the use of weighbridges.

The specific questions in the IA are as follows:

### To all Consultees

Q1. Consultees are invited to submit any additional evidence or other relevant information on the costs and benefits of the proposed Regulations (Option 1) that are identified in this Impact Assessment.

Q2. Consultees are invited to provide details of any additional costs and benefits of the proposed Regulations (Option 1) that have not been identified in this Impact Assessment, and provide any additional evidence or other relevant information that is available on these costs and benefits.

Q3. Consultees are invited to comment on any of the assumptions that have been made in this Impact Assessment, and are invited to propose alternative assumptions and provide supporting evidence or other relevant information.

Q21. Consultees are invited to submit any additional evidence or relevant information on the impact of the revocation of the four Regulations discussed in Section 1 would have on small and micro businesses.

Q22. Consultees are invited to submit any additional evidence or relevant information on the impact of the revocation of the four Regulations discussed in Section 1 would have on competition.

### To ports

Q4. Please can you advise whether your port would be affected by the proposed revocation of the regulations and if there are any additional ports which should also be noted.

Q5. Please can you advise as to the number of non-UK ships of Class II and II(A) operate from your port.

Q8. If the proposed revocation of the Regulations was approved, how would you respond? In particular, would you continue to use these weighbridges to weigh goods vehicles/cargo until they needed to be replaced? If so, would you replace them with new weighbridges when required to do so? If not, what alternative technology would you use to weigh goods vehicles/cargo? Alternatively, would you remove the weighbridges from within the port grounds at an earlier date? If so, when would you do this? In addition, what alternative technology would you use to weigh goods vehicles/cargo?

Q9. If you would remove the weighbridges from within the port grounds and / or move to using an alternative technology to weigh goods vehicles/cargo, what would be the benefits of doing so? In particular, how much would the costs of using the alternative technology differ from the costs of using the weighbridges? In addition, how much would it cost to remove a weighbridge?

Q10. How often does a weighbridge need to be replaced?

Q16. Is our assumption regarding the cost of replacing a weighbridge reasonable? If not, what is the cost of purchasing a new weighbridge?

Q17. Is our assumption regarding the average annual cost of maintaining a weighbridge reasonable? If not, what is the average annual cost of maintaining a weighbridge?

**NOT PROTECTIVELY MARKED**



Q18. How long does it take to weight goods vehicles and cargo using a weighbridge?

Q19. Is our assumption regarding the value of workers' time reasonable?

Q20. Would the time savings from not requiring goods vehicles and cargo to be weighed using a weighbridge represent a benefit to business or workers?

To ship owner/operators

Q6. If the proposed revocation of the Regulations was approved, how would you respond? In particular, would you continue to use the emergency equipment lockers on your existing Ro-Ro passenger ships until they need to be replaced? If so, would you replace these emergency equipment lockers with new emergency equipment lockers when required to do so? Alternatively, would you remove the emergency equipment lockers from your existing Ro-Ro passenger ships at an earlier date? If so, when would you do this?

Q7. If you would remove the emergency equipment lockers from your existing Ro-Ro passenger ships, how much would it cost to remove the emergency equipment lockers?

Q11. If you plan on registering a new ship onto the UK flag in the next 10 years, would you fit the emergency equipment lockers even if the Regulations were revoked?

Q12. Is our assumption regarding the initial cost of two equipment lockers reasonable? If not, what is the initial cost per new emergency equipment locker?

Q13. Is our assumption regarding the annual cost per ship of maintaining two emergency equipment lockers and the equipment held inside reasonable? If not, what is the cost of maintaining one emergency equipment locker and the equipment held inside?

Q14. Is our assumption regarding the annual cost per ship of checking the two emergency equipment lockers reasonable? If not, how long does it take a member of crew to check the lockers each year? Which crew member would be responsible for this role and what is the average hourly pay of that seafarer?

Q15. Is our assumption regarding the annual cost of holding drills reasonable? If not, how long for and how often is does it take to undertake a drill? In addition, how many crew are involved and what is their average hourly pay?

**NOT PROTECTIVELY MARKED**

