

Title: The Merchant Shipping (Passenger Ships on Domestic Voyages) (Amendment) Regulations 2012 IA No: DFT143 Lead department or agency: Maritime and Coastguard Agency (MCA) Other departments or agencies: Department for Transport	Impact Assessment (IA)		
	Date: 16/10/2012		
	Stage: Final		
	Source of intervention: EU		
	Type of measure: Secondary legislation		
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Summary: Intervention and Options	RPC Opinion:
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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 qualifies as One-Out?	
£-0.82m	£-0.82m	£0.1m	No	NA

What is the problem under consideration? Why is government intervention necessary?
The problem is that safety standards on seagoing domestic passenger ships have been judged inadequate by the EU. This judgement is based on the ongoing principle that “persons using passenger ships and high-speed passenger craft throughout the Community have the right to expect and rely on an appropriate level of safety on board”. Directive 2010/36/EU amends Directive 2009/45/EC on “safety rules and standards for passenger ships”. It covers various technical requirements and updates references to International Maritime Organization (IMO) conventions and codes. Government intervention is necessary to implement the Directive through legislation and avoid adverse effects of non-compliance.

What are the policy objectives and the intended effects?
The policy objective is to maintain EU-wide, harmonised, minimum safety standards for seagoing domestic passenger ships, by bringing them in line with the standards followed by international passenger ships. The intended effect is to improve safety standards and allow more flexible trading opportunities for UK ships. On entry into force, the UK transposing legislation will be used to ensure that ships comply with the revised technical standards in order to operate from: UK ports or in UK waters; and EU ports if a UK registered ship.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)
The following policy options have been considered against a baseline of doing nothing. a) Option 1: Introduce the proposed Regulations to transpose the 2010 Directive into UK law without going beyond its minimum requirements; b) Option 2: Introduce Regulations to transpose the 2010 Directive into UK law and extend its application to those domestic seagoing passenger ships that currently operate under the ‘UK equivalence arrangement’. Alternatives to regulation are not a viable option because the original domestic passenger ship Directive (1998/18/EC), and several amendments, are implemented by existing UK legislation, including penalties for infringement. This legislation must therefore be amended to reflect the 2010 Directive. Introducing the proposed Regulations to transpose the 2010 Directive in the UK without going beyond its minimum requirements (Option 1) is the preferred option. This will achieve the policy objectives of harmonised safety standards and greater trading flexibility, and fulfil the UK’s obligation as an EU Member State.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** June/2017

Does implementation go beyond minimum EU requirements?	No				
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes	< 20 Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)	Traded: N/A		Non-traded: N/A		

I have read the Impact Assessment and I am satisfied that: (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy; and (b) that the benefits justify the costs.

Signed by the responsible Minister: _____ Date: _____

Summary: Analysis & Evidence

Policy Option 1

Description: Introduce the proposed Regulations to transpose the Directive into UK law without exceeding its requirements, and allowing for the existing UK equivalence arrangement to continue for eligible ships.

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2012	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -0.98	High: -0.65	Best Estimate: -0.82

COSTS (£m)	Total (Constant Price)	Transition Years	Average (excl. Transition) (Constant Price)	Annual (Constant Price)	Total (Present Value)	Cost
Low	0.58	1	0.01			0.65
High	0.91		0.01			0.98
Best Estimate	0.74		0.01			0.82

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

There will be additional costs incurred by the owners of UK ships already in operation that are affected by the Regulations, through having to familiarise themselves and comply with the new safety standards which the Regulations introduce. Based on the available evidence, these costs are estimated at approximately £0.6-0.9 million in 2012 and approximately £8,000 per year thereafter. However, these estimates are based on a partial understanding of the likely equipment upgrade costs at this present moment, which means they could be underestimates. Consultees were invited to submit evidence to address these evidence gaps.

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

There will be additional costs related to the regulatory requirements upon UK ships constructed on or after 1 January 2012. Due to the various economic and commercial factors that affect vessel design and construction costs at any given point in time, it has not been possible to estimate the size of these costs at this stage. Nor is it clear whether costs incurred at the design/construction stage will be absorbed by the shipbuilder or passed on to the ship's purchaser. There could also be additional costs to non-UK ships.

BENEFITS (£m)	Total (Constant Price)	Transition Years	Average (excl. Transition) (Constant Price)	Annual (Constant Price)	Total (Present Value)	Benefit
Low	NQ		NQ			NQ
High	NQ		NQ			NQ
Best Estimate	NQ		NQ			NQ

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

It has not been possible to monetise any of the benefits of Option 1, which are described below.

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

The main benefits are: (1) Flexibility for UK ships that comply with the 2010 Directive to operate in domestic waters of other EU member States (who will be obliged to accept them under the terms of the Directive); and (2) The travelling public will be protected by updated and improved safety standards on EU classified domestic passenger ships in UK waters, which maintain alignment with international passenger ship standards.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
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Assumptions: (1) This analysis assumes that the start date of this policy is in 2012 (it is anticipated that this will be in September). (2) It is assumed that modifications to ships already in operation can be undertaken without the need to use drydocking facilities or replacement ships. **Sensitivities:** (1) The estimated compliance cost for ships already in operation is based on a partial picture of equipment upgrade costs (set out at Annex 2), which means it could be an underestimate; (2) The true compliance cost for each ship will differ depending on the ship's obligations under the Directive (which is determined by the ships' class, age, length, etc.) and specific cost-varying characteristics of the ship (such as its passenger carrying capacity, adaptability of its current equipment, etc.); (3) The true extent of the benefit to UK shipowners of having EU-wide harmonised passenger ship safety standards will depend on the extent to which, in practice, they choose to make use of the arrangement by operating in EU Member States' domestic waters for commercial or other benefit.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0.1	Benefits: NQ	Net: -0.1	No	NA

Summary: Analysis & Evidence

Policy Option 2

Description: Introduce regulations to transpose the Directive into UK law as Option 1, but extending the requirements to ships that currently operate under the UK equivalence arrangement.

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2012	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -2.04	High: -0.85	Best Estimate: -1.44

COSTS (£m)	Total (Constant Price)	Transition Years	Average (excl. Transition) (Constant Price)	Annual (Constant Price)	Total (Present Value)	Cost
Low	0.71	1	0.01			0.85
High	1.89		0.01			2.04
Best Estimate	1.30		0.01			1.44

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

At minimum, the costs identified under Option 1 will also apply under Option 2. However, there will also be additional costs under Option 2, which will be incurred by UK-registered ships currently operating under the 'UK equivalence arrangement' (the meaning of this arrangement is explained within the evidence base of this impact assessment). Based on the available evidence, the overall costs of Option 2 are estimated at approximately £0.7-1.9 million in 2012 and approximately £14,000 per year thereafter.

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

There will be additional costs related to the regulatory requirements upon UK ships constructed on or after 1 January 2012. Due to the various economic and commercial factors that affect vessel design and construction costs at any given point in time, it has not been possible to estimate the size of this cost. Nor is it altogether clear whether costs incurred at the design/construction stage will be absorbed by the shipbuilder or passed on to a ship's purchaser. There may also be additional costs to non-UK ships.

BENEFITS (£m)	Total (Constant Price)	Transition Years	Average (excl. Transition) (Constant Price)	Annual (Constant Price)	Total (Present Value)	Benefit
Low	NQ		NQ			NQ
High	NQ		NQ			NQ
Best Estimate	NQ		NQ			NQ

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

It has not been possible to monetise any of the benefits of Option 1, which are described below.

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

At minimum, the benefits identified under Option 1 would also apply under Option 2. However, there would also be additional benefits under Option 2, specifically that passengers travelling on ships currently operating under the 'UK equivalence arrangements' would be protected by increased passenger safety standards.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

Assumptions and sensitivities: Given that the costs and benefits identified under Option 1 would also apply under Option 2, the same set of assumptions and sensitivities apply to the estimates presented under this option. The additional costs and benefits specific to Option 2 are subject to the same set of assumptions and sensitivities, but there are also a number of additional caveats regarding these estimates. **Risks:** Given that the purpose of the UK's negotiation of the equivalence arrangement was to enable the existing fleet to continue in operation under the EU regime without the need for significant structural modification, there is a risk that if Option 2 were pursued some/much of the fleet of existing vessels would become unviable.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0.17	Benefits: NQ	Net: -0.17	Yes	IN

Evidence Base (for summary sheets)

The following table lists the relevant EU directives together with existing UK legislation and guidance.

No.	Legislation or publication
1	Commission Directive 2010/36/EU of 1 June 2010 amending Directive 2009/45/EC of the European Parliament and of the Council on safety rules and standards for passenger ships http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:162:0001:0135:EN:PDF
2	Directive 2009/45/EC of the European Parliament and of the Council on safety rules and standards for passenger ships http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:163:0001:0140:EN:PDF
3	The Merchant Shipping (Passenger ships on domestic voyages) Regulations 2000 SI 2000 No. 2687 http://www.legislation.gov.uk/uksi/2000/2687/pdfs/uksi_20002687_en.pdf
4	The Merchant Shipping (Passenger Ships on Domestic Voyages) (Amendment) Regulations 2003 SI 2003 No. 771 http://www.legislation.gov.uk/uksi/2003/771/pdfs/uksi_20030771_en.pdf
5	The Merchant Shipping (Passenger Ships on domestic voyages) (Amendment) Regulations 2004 SI 2004 No. 1107 http://www.legislation.gov.uk/uksi/2004/1107/pdfs/uksi_20041107_en.pdf
6	The Merchant Shipping (Passenger ships on domestic voyages) (Amendment) (No. 2) Regulations 2004 SI 2004 No. 2883 http://www.legislation.gov.uk/uksi/2004/2883/pdfs/uksi_20042883_en.pdf
7	Merchant Shipping Notice (MSN) 1747 – The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000 http://www.dft.gov.uk/mca/m.1747.pdf
8	Merchant Shipping Notice (MSN) 1811 – The Merchant Shipping (Passenger ships on domestic voyages) Regulations 2000 http://www.dft.gov.uk/mca/mcga-mnotice.htm?textobjid=1F5505E5D3AB2C26

Post-consultation comment

The formal consultation was launched on 18 June 2012 and concluded on 30 July. None of the 36 bodies and organisations that were invited to comment took the opportunity to do so. No opposition was therefore expressed to the approach that the UK is taking to transpose and apply Directive 2010/36/EU. Neither did consultees provide any additional evidence on the costs and benefits of the two policy options presented in this impact assessment. A subsequent request to stakeholders, for any information they hold that might help to refine cost estimates in the consultation IA, has yielded some limited results, and the IA has been amended to reflect these. It has therefore been possible to refine a little the assessment of the costs of the policy options that are presented in this impact assessment, following the consultation. The estimates presented in the summary sheets in this impact assessment have been revised since the previous version of this impact assessment to take account of the additional evidence received after the consultation ended.

Section 1. Legislative and policy context

1.1. The improvement of safety on domestic passenger ships

1.1.1. EU-wide safety rules and standards for domestic passenger ships were first introduced by Directive 1998/18/EC, following concerns within the European Community about safety, and a number of passenger ship incidents which resulted in substantial loss of life. Two major examples of such incidents were those involving the “Estonia” in 1994 and the “Express Samina” in 2000. The safety standards applied by the 1998 Directive are measures based on those developed for passenger ships on international voyages, by the International Maritime Organization (IMO), and adopted through several international Conventions and Codes. Those standards were applied to varying degrees depending on the level of risk presented by the sea area in which a given passenger ship operates, its age and other factors. As will be seen from Table 1 in section 1.3, sea area “A” is farthest from land. It consequently carries the highest safety risks and normally attracts the full international safety standards. Area D is nearest to land, has the lowest risks and consequently attracts less onerous adaptations of the international standards. The standards for areas B and C are at intermediate levels.

1.1.2. Subject to international agreement, the safety requirements contained in IMO International Conventions and Codes undergo periodic improvements and amendments to technical requirements as a consequence of compelling need and progress in technology. With some aspects (e.g. in the International Convention for the Safety of Life At Sea - SOLAS), it is left to national Administrations to determine the extent to which such requirements are made applicable to ships not engaged on international voyages. In the absence of the directive-based EU harmonised safety regime for seagoing domestic passenger vessels, the UK would need to consider developing and maintaining its own national technical standards.

1.1.3. In 2009, the EU issued Directive 2009/45/EC on safety rules and standards for passenger ships which consolidated and replaced the 1998 Directive and three amendments. The amendments contained in the 2010 Directive (which this impact assessment relates to), have aimed to keep the rules and standards updated, and linked to corresponding international measures. The purpose of these measures has been to ensure that passengers can expect and rely upon an appropriate level of safety. The 2010 Directive is the latest revision in the process of updating safety standards first introduced by the original 1998 directive. This progressive improvement of safety standards is also assisted indirectly because, over time, a greater proportion of ‘existing’ ships are being replaced by ‘new’ ships. The definitions of ‘existing’ and ‘new’ ships respectively are contained within the Directive:-

- “new ship” means a ship constructed on or after 1 July 1998; and,
- “existing ship” means a ship constructed before 1 July 1998.

These definitions were introduced by the first domestic passenger ship directive, 1998/18/EC, and remain in force.

1.2. Removing barriers to trade for passenger ships operating in EU (domestic) waters

1.2.1. Since 1986, the EU has worked to liberalise the provision of maritime passenger transport between Member States, and remove associated barriers to trade. Harmonisation of safety standards for domestic passenger ships helps to accomplish this. Direct or indirect consequences or benefits of a single market for these ships are that:

- a. a ship from one Member State, that meets the applicable requirements, has the right to operate in the waters of another Member State;
- b. EU-wide sale or charter of ships is eased; and
- c. there is growing recognition by shipbuilders and survey organisations of the EU-standards (especially as many domestic passenger ships are not now built in the UK).

1.2.2 Table 6 below defines the EU domestic passenger ship classes, and High Speed Craft (HSC). Under the Directive, Class A ships, and (HSC), are subject to the same safety standards as those undertaking international voyages, and this has been the case since the original 1998 Directive. The effect of this has been that almost all of these vessels have international certification, and are not therefore within the domestic passenger ship fleet. This response by ship owners and operators is not surprising in view of the commercial opportunities for short international voyages to destinations such as the Republic of Ireland, Isle of Man or the Channel Islands. Because they are not part of the UK, voyages from a UK port to any of these destinations are international voyages and hence are not subject to the directive.

1.3. Incidents involving passenger ships – an EU perspective

1.3.1. The European Maritime Safety Agency (EMSA) reported in its 2009 *Maritime Accident Review* that in 2009 there were no major passenger ship accidents in and around EU waters and that 4 lives were lost (down from 6 in 2008 and 10 in 2007). However, there were, once again, several accidents where the consequences could have been much worse and this continues to be a cause for concern, because there were hundreds of passengers on the ships, and any one of the accidents could have led to a disaster. EMSA comments that whilst the spectres of the accidents involving the ferries *Estonia* and the *Herald of Free Enterprise*, on which many hundreds of people lost their lives, are now decades in the past, it is important that the fight to ensure that passenger ships are built and operated more safely in the future continues. As recognised in Article 14 and recitals of the directive, domestic passenger ships have an important contribution to make within that broader objective.

1.3.2. EMSA reports that 135 (domestic or international) passenger ships (121 ferries and 14 cruise ships) were reported as being involved in accidents in 2009, which was almost the same as the 134 in 2008 (114 ferries and 20 cruise ships). This was the second highest category for vessel accidents, representing almost 22% of the EU vessel accident total (up from 18% in 2008 and 20% in 2007). Almost 43% of passenger ship accidents involved ferries hitting infrastructure, around 22% were groundings, almost 15% involved collisions with other vessels and 8% were fires or explosions. The EMSA report provides details on some of the most serious incidents which have taken place in 2009. Some of those incidents involving passenger ships or HSC are briefly set out below. It will be seen that three took place on UK domestic seagoing voyages.

- The 6,000 GT ferry *Jonathan Swift* was holed after crashing into the dock at the port of Holyhead, Wales. There were no injuries reported.
- A heavy goods vehicle forced open the rear loading door of the 19,600GT ferry *Stena Voyager* while it was en route from Stranraer to Belfast. There were no injuries reported.
- One passenger and one crew member were injured when the 11,200GT ferry *Hrossey* was hit by gale force winds and huge waves off Sumburgh Head, Shetland Islands.
- Three passengers were injured and many others were treated for shock when the 29,700GT ferry *Gotland* hit the 6,500GT ferry *Gotlandia II* in heavy fog just outside the port of Nynashamn, Sweden.
- 153 passengers had to be evacuated after the 11,200GT ferry *Richard With* ran aground off the port of Trondheim, Norway.
- The 30,700GT ferry *Vincenzo Florio* caught fire off Sicily, Italy. As a result, 456 passengers and crew members were evacuated in life boats following which 29 were reported to have been hospitalised.
- A number of passengers panicked and jumped overboard when the 47,250GT cruise ship *Zenith* had a fire on board while it was berthed at the Frihamnen terminal, Stockholm.
- 6 passengers were taken to hospital after inhaling smoke from a fire on board the 35,736GT ferry *Athara*, which began when it was en route from Genoa, northern Italy.

As in 2008, there were no ferry sinkings in 2009 (compared with 3 in 2007), see Table 1. There were also no cruise ship sinkings. The number of cruise ships involved in accidents was down 30% in

comparison with 2008, and down almost 58% on 2007. The types of accidents were fairly evenly spread in terms of groundings (Table 2), collisions (Table 3) and fires or explosions (Table 4).

Table 1: Loss of life in the EU by ship type: 2006 to 2010*

Ship Type	2006	2007	2008	2009	2010
General Cargo Ships	14	20	21	17	17
Bulk Carriers	4	0	3	2	
Tankers	2	3	9	2	5
Container Ships	2	0	2	1	0
Cruise Ships	3	4	2	1	7
Ferries	2	6	4	3	
Fishing Vessels	42	31	30	16	20
Other Vessel Types	7	18	11	10	12
TOTAL	76	82	82	52	61

Source: European Maritime Safety Agency

Table 2: Sinkings in the EU by ship type: 2006 to 2010*

Ship Type	2006	2007	2008	2009	2010
General Cargo Ships	11	10	10	6	6
Bulk Carriers	1	1	0	0	
Tankers	3	0	1	0	0
Container Ships	0	1	0	0	0
Cruise Ships	0	1	0	0	3
Ferries	4	3	0	0	
Fishing Vessels	18	27	29	18	18
Other Vessel Types	8	12	21	4	5
TOTAL	45	55	61	28	32

Source: European Maritime Safety Agency

Table 3: Groundings in the EU by ship type: 2006 to 2010*

Ship Type	2006	2007	2008	2009	2010
General Cargo Ships	51	94	103	67	72
Bulk Carriers	12	14	12	9	
Tankers	18	23	20	28	17
Container Ships	11	10	18	10	4
Cruise Ships	2	3	5	2	22
Ferries	13	21	21	28	
Fishing Vessels	6	14	20	20	16
Other Vessel Types	4	18	18	13	12
TOTAL	117	197	217	177	143

Source: European Maritime Safety Agency

Table 4: Collisions in the EU by ship type: 2006 to 2010*

Ship Type	2006	2007	2008	2009	2010
General Cargo Ships	96	115	104	73	97
Bulk Carriers	10	17	16	20	
Tankers	37	23	31	30	34
Container Ships	18	42	31	30	23
Cruise Ships	4	12	8	5	70
Ferries	40	61	69	75	
Fishing Vessels	7	17	14	22	15
Other Vessel Types	5	17	35	37	50
TOTAL	217	304	308	292	289

Source: European Maritime Safety Agency

Table 5: Fires and explosions in the EU by ship type: 2006 to 2010*

Ship Type	2006	2007	2008	2009	2010
General Cargo Ships	18	28	22	24	17
Bulk Carriers	2	1	4	6	
Tankers	6	11	11	2	7
Container Ships	5	3	4	2	4
Cruise Ships	0	3	3	2	30
Ferries	5	14	14	9	
Fishing Vessels	6	16	14	9	15
Other Vessel Types	4	15	17	13	10
TOTAL	46	91	89	67	83
<i>Source: European Maritime Safety Agency</i>					

* Please note that, for 2010, the figure for cruise ships and ferries (plus general cargo ships and bulk carriers) are combined and no break-down is available.

1.4. Passenger ship definitions

The below table shows the definitions of EU Classes of Passenger Ships (by sea areas) and High Speed Craft (HSC).

Table 6: Definitions of EU Classes of Passenger Ships (by sea areas), and High Speed Craft (HSC)

Class A	means a passenger ship engaged on domestic voyages other than voyages covered by Classes B, C and D
Class B	means a passenger ship engaged on domestic voyages in the course of which it is at no time more than 20 miles from the line of the coast, where shipwrecked persons can land, corresponding to the medium tide height.
Class C	means a passenger ship engaged on domestic voyages in sea areas where the probability of exceeding 2.5m significant wave height is smaller than 10% over a one-year period for all-year round operation, or over a specific restricted period of the year for operation exclusively in such period (e.g. summer period operation), in the course of which it is at no time more than 15 miles from a place of refuge, nor more than 5 miles from the line of the coast, where shipwrecked persons can land, corresponding to the medium tide height.
Class D	means a passenger ship engaged on domestic voyages in sea areas where the probability of exceeding 1.5m significant wave height is smaller than 10% over a one-year period for all-year round operation, or over a specific restricted period of the year for operation exclusively in such period (e.g. summer period operation), in the course of which it is at no time more than 6 miles from a place of refuge, nor more than 3 miles from the line of the coast, where shipwrecked persons can land.
High Speed Craft (HSC)	<p>The fact that a vessel is capable of travelling fast does not necessarily mean it is a High Speed Craft (HSC). HSC are defined, internationally, according to a formula that gives a particular ratio of speed and displacement. A large number of fast vessels (such as some cruise ships) fall outside of that definition, so do not count as HSC. The formula is from Chapter X of the International Convention for the Safety Of Life At Sea (SOLAS). It is referred to in Article 1(2) of the 2010 Directive, and given below for ease of reference.</p> <p><i>“A High Speed Craft (HSC), or “high speed passenger craft” is a craft capable of a maximum speed, in knots, equal to or exceeding:</i></p> $7.1637 \Delta^{0.1667}$ <p><i>where:</i></p> <p>Δ = displacement corresponding to the design waterline (tonnes) excluding craft the hull of which is supported completely clear above the water surface in non-displacement mode by aerodynamic forces generated by ground effect.”</p> <p>Under Article 2(g) of the Directive, smaller, slower HSC that operate only in sea areas B, C and D, and:-</p> <ul style="list-style-type: none"> - whose displacement corresponding to the design waterline is less than 500m³; <u>and</u>, - whose maximum speed is less than 20 knots, <p>are treated as conventional passenger ships (B, C or D).</p> <p>A high speed craft's maximum speed is the speed achieved at the maximum continuous propulsion power for which the craft is certified at maximum operational weight and in smooth water.</p> <p><u>Note1: HSC do not fall within passenger ship classes A to D.</u></p>

Section 2. Problem under consideration

2.1 The Directive is a contributory response (in domestic shipping) to European Community concerns over passenger ship safety. These concerns are based around the ongoing principle, stated in Recital paragraph 3 of the Directive, that “persons using passenger ships and high-speed passenger craft throughout the Community have the right to expect and to rely on an appropriate level of safety on board”. Within the framework of the common transport policy, enhancements to safety measures imposed through the IMO upon international shipping are imposed via the Directive (suitably scaled-down for application to domestic ships). In this way, the Directive’s contribution is a key and coherent element towards the safety system applicable to UK passenger vessels. Directive 2010/36/EU “on safety rules and standards for passenger ships” introduces certain new requirements for construction, equipment, survey and inspection for these passenger ships and updates references and standards to relevant international maritime conventions and codes.

2.2 The original domestic passenger ship Directive, 1998/18/EC, laid down a harmonised safety regime in response to a number of safety concerns, as referred to in paragraph 1.1.1 of this impact assessment. Beyond the safety concerns mentioned in paragraph 1.1.1, no specific figures or incidents have been cited by the EU in the formation of this Directive. However, by way of background to the issue of passenger ship safety, section 1.3 of this impact assessment summarises key incidents and statistics relevant to passenger ship safety at the EU level.

Section 3. Rationale for intervention

3.1 Government intervention is needed because the Directive provides a framework for uniform and compulsory application of the safety standards laid down. New UK legislation is necessary to amend the current UK regulations on domestic passenger ships, introduced to transpose the original Directive 1998/18/EC (as amended), so that they refer to, implement and maintain alignment with, the 2010 Directive with its revised and updated EU-wide harmonised safety regime for seagoing domestic passenger ships. The statutory surveys and any inspections of ships that are carried out and are a key feature of the legislation will then ensure that the safety standards applied are in compliance with the 2010 Directive. The 2010 Directive is the first substantive amendment since 2003, and its main aim is to update and maintain the link between safety standards for domestic seagoing passenger ships and those on international voyages. This partly reflects amendments to the standards for those ships that have been developed and adopted by the International Maritime Organization (IMO).

3.2 Directive, 1998/18/EC, required Member States to provide “effective proportionate and dissuasive” penalties for infringements of the safety requirements, and that is carried through to the 2010 Directive. Such penalties were put in place by the UK when Directive 1998/18/EC was transposed, and can only be maintained, in line with the 2010 Directive, by amending legislation.

3.3 Transposing the 2010 Directive will fulfil the UK’s obligations as an EU Member State for it to be implemented via legislation. It will lessen, and hopefully remove altogether, the risk of the European Commission pursuing infraction proceedings against the UK, and substantial financial penalties being imposed by the European Court of Justice, under Article 260 of the Treaty on the Functioning of the European Union.

3.4 Transposition will also lessen a risk that owners of vessels currently in the process of being designed or built would need to be compensated for the adverse effects of non-implementation, or delayed implementation, of the Directive. Delays in implementation of the 2010 Directive increase the risk that commercial operators will order, build and operate ships not up to date with the amended technical requirements of the 2010 Directive. Should these events come about the foreseeable consequences would be:

- potential negative comments made by members of the general public and the press making comparisons between passenger safety on UK ships and those of other member States; and,
- that the ships in question will require modification and retro-fitting in order to comply with the 2010 Directive.

3.5 UK ships that do not comply fully with the applicable safety rules and standards in the Directive, including those ships covered by the UK equivalencies, may not be accepted in the domestic waters of other EU member States, and the operators of such ships will be potentially disadvantaged.

Section 4. Policy Objectives

4.1 The objectives of the policy are to:

- provide improved and updated minimum safety rules and standards for UK seagoing domestic passenger ships on domestic (non-international) voyages,
- ensure through statutory survey, certification and inspection:
 - a high minimum standard of safety is underpinned on domestic (non-international) passenger vessels in UK waters;
 - commercially, UK domestic passenger ships complying with the 2010 Directive can operate with scope and flexibility in domestic trades from the ports and in the waters of other EU Member States, if they so wish;
 - UK operators are not commercially disadvantaged against their counterparts from mainland Europe.
- ensure on the basis of the structures of regulations, surveys and certification referred to above, that single Market principles of the EU are complied with, and freedom of trade and movement thereby facilitated.

Section 5. Directive 2010/36/EU

5.1. Application of the Directive (who it affects)

5.1.1. Directive 2010/36/EU applies safety rules and standards to seagoing domestic passenger ships, and High Speed Craft (HSC), operating within EU waters. These are ships covered by all of the following criteria:-

- they carry more than 12 passengers;
- are operating at sea, but undertaking non-international “domestic” voyages, (that is from one port to another port within the same Member State, or from, and back to, the same port); and,
- fall within one of the EU domestic passenger ship classes A, B, C or D, set out in Table 6 above, or are High Speed Craft undertaking domestic voyages.

5.1.2. In the context of the Directive:-

- a “new” ship is one constructed on or after 1 July 1998; and,
- an “existing” ship is one constructed before that date.

5.1.3. The Directive applies to “new” ships of any length, and “existing ships” of 24 or more metres in length.

5.1.4. Regarding its application to domestic passenger ships other than HSC, the Directive applies to ships that are constructed of “steel or equivalent”. Other non-Directive UK requirements apply to those constructed out of alternative materials; these being generally small ships (less than 24 metres) not in commercial competition with those of steel or equivalent. Such requirements are outside the scope of the regulations covered by this Impact Assessment.

5.1.5. The Directive does not apply to ships or HSC that:-

- do not carry passengers
- carry no more than 12 passengers;
- do not go to sea; or,
- are undertaking international voyages.

5.2. Impact of the Directive (what it does)

5.2.1. The 2010 Directive performs two key undertakings. Firstly, the Articles within the Directive update references to specific standards within the relevant IMO International Conventions and Codes:-

- The International Convention for the Safety of Life at Sea (SOLAS) 1974;
- The International Convention on Load Lines 1966;

- The International Code for Safety of High Speed Craft 1994;
- The International Code for the Safety of High Speed Craft 2000); and,
- The Code on Intact Stability 2008.

5.2.2. Secondly, Annex I of the Directive extends the application of certain safety requirements to ships that were not subject to them under the 2009 Directive. An example of this is the requirement under the Directive (originating in the SOLAS Convention) for all Roll-on-Roll-off (“Ro-Ro”) ferries to carry a Fast Rescue Boat (FRB). This previously applied only to Ro-Ro ferries constructed after 1 January 2003. All such amendments are identified in Annex 2 of this Impact Assessment.

5.2.3. The specific changes introduced by the Directive are numerous and diverse, and for presentational reasons have not been included within this section of this impact assessment. Instead, Annex 2 lists the individual safety requirements introduced by the Directive, for which compliance costs are likely to arise. Broadly, they relate to the following areas of passenger ship safety :-

- navigational equipment;
- emergency power supplies;
- fire protection and fire extinguishing equipment;
- communications;
- Life Saving Appliances (LSA);
- radiocommunications (for Class D ships only); and,
- survey and certification.

Section 6. Description of options considered

6.1. Do Nothing

6.1.1. A ‘do nothing’ option would in practice mean that the UK would not introduce regulations or make changes to existing domestic legislation in order to take account of the EU Directive. This would mean that the amendments introduced by the 2010 Directive were not underpinned by UK law. Such a situation would create ambiguity and confusion for those affected by the Directive. That confusion would inevitably extend to the status of statutory surveys and certification of the ships, as evidence of their compliance.

6.1.2. UK operators of non-compliant ships could also be prevented from engaging effectively in an EU single market. Without regulations to underpin and enforce the harmonised, EU-wide safety standards, fair competition and a “level playing field” would be undermined. Like its international counterpart, the domestic passenger ship industry is competitive, with owners and operators naturally seeking to minimise their commercial costs. Without a mandatory basis for the revised and updated standards introduced by the 2010 Directive, there would be little direct incentive for ships to comply.

6.1.3. Failure to remove or amend inconsistent domestic legislation and a failure to provide a mechanism to apply the EU Directive effectively would result in infraction proceedings being instigated by the European Commission.

6.1.4. For the reasons set out above the ‘do nothing’ option is considered inappropriate. The ‘do nothing’ option would confuse the courts, carriers and passengers alike and create a significant risk of infraction for the UK by the European Commission.

6.1.5. For the purposes of this impact assessment, the ‘do nothing’ option is the baseline against which the other policy options are assessed.

6.2. Option 1 – Introduce the proposed Regulations to transpose the 2010 Directive into UK law without going beyond its minimum requirements (the preferred option)

6.2.1 Transposing the 2010 Directive into UK law will accomplish the following.

a) Passengers on UK domestic passenger ships with an EU certificate, and on other domestic passenger ships with an EU certificate in UK waters, will be covered by higher, and more uniform, safety standards than those currently in force.

b) The UK will fulfil its obligations as an EU Member State.

c) In accordance with the EU Single Market, operators of domestic passenger ships that comply with the 2010 Directive will be entitled to operate in the domestic waters of other Member States. UK operators will then be on an equal footing with operators from other Member States whose ships already comply with the 2010 Directive, and who are entitled to operate in UK waters.

6.2.2. Under Option 1, the UK will be implementing the mandatory provisions of the EU Directive only. This means that those affected by the Regulations will include those groups specified in section 5.1 of this impact assessment – broadly speaking, domestic seagoing passenger ships of EU Class A, B, C or D and High Speed Craft (notwithstanding the implications of the UK Equivalence Arrangement – see section 6.4 below). The impact of the Regulations on these ships is summarised in paragraph 5.2.3 above, and set out in more detail at Annex 2 of this impact assessment.

6.3.3. By default, under Option 1, “existing” UK domestic passenger ships (those built before 1 July 1998) holding certain UK certificates will be able to take advantage of the ‘UK equivalence arrangement’. This arrangement enables certain specified ships to operate in compliance with applicable national safety regulations and restrictions without having to comply with the Regulations implementing the 2010 Directive. This arrangement is a pre-existing arrangement which would apply by default, and is explained in more detail in section 6.4 of this impact assessment.

6.3. Option 2 – Introduce Regulations to transpose the 2010 Directive into UK law while extending its application to all domestic seagoing passenger ships that meet the compliance criteria (including those ordinarily exempt under the terms of the ‘UK equivalence arrangement’)

6.3.1. Option 2 would mean doing everything under Option 1, while simultaneously applying the equivalent set of safety standards to all UK-registered domestic seagoing passenger ships that meet the Directive’s remaining compliance criteria (i.e. carry more than 12 passengers, more than 24 metres in length, etc.). The effect of this would be that ships that would ordinarily, and under Option 1, be exempt from having to comply with the Regulations under the terms of the UK equivalence arrangement would be subject to the Regulations under this policy option.

6.3.2. As such, the effect of Option 2 would be that additional ships would be required to comply with the Regulations. Under Option 2, these additional ships would therefore need to comply with the requirements summarised in paragraph 5.2.3 above, and set out in more detail in Annex 2 of this impact assessment. In addition, these additional ships would need to comply with all applicable requirements in the 2009 Directive.

6.3.3. The application of the Regulations to all domestic seagoing passenger ships would be additional to the minimum requirement of the EU Directive.

6.4. UK Equivalence Arrangement

6.4.1. In accordance with Article 9 of Directive 2009/45/EC, the UK has in place an existing arrangement with the European Commission whereby “existing” UK domestic passenger ships (those built before 1 July 1998) may operate in compliance with applicable national safety regulations and restrictions. These equivalent measures are available to “existing” UK ships of Class III, VI and VI(A) constructed of steel or an equivalent material, provided they comply with the operating restrictions appropriate to those UK classes. This equivalence arrangement has enabled many “existing” UK ships to continue in operation by complying with the safety requirements, and associated operating restrictions, of the UK ship class that corresponds most closely to their EU Class. The details of this arrangement are currently set out in Merchant Shipping Notice (MSN) 1811¹.

6.4.2. The relevant UK ship classes are set out and defined in Annex 3 of this impact assessment.

6.4.3. By default, the UK equivalence arrangement will apply under Option 1. It will be up to owners and operators of “existing” ships to take advantage of this arrangement, if they wish. Ships that operate

¹ <http://www.dft.gov.uk/mca/mcga07-home/shipsandcargoes/mcga-shipsregsandguidance/marinenotices/mcga-mnotice.htm?textobjid=1F5505E5D3AB2C26>

under it will not be subject to extra or new costs of complying with the 2010 Directive. However, it must be borne in mind that such ships:-

- are subject to the operational restrictions appropriate to the UK ship class, and applicable UK national regulations, under which they operate; and,
- may well not be accepted in the domestic waters of other EU Member States.

6.4.4 Under Option 2, ships that would ordinarily be exempt from having to comply with the Regulations under the terms of the UK equivalence arrangement would be required to comply.

6.5. Discounted option – Alternatives to regulation

6.5.1. It is not viable to transpose the 2010 Directive without regulation for the following reasons.

- There is legislation in place, which implemented the previous domestic passenger ship Directives, including the statutory requirements for survey and certification. This can only be amended and brought up to date, in respect of the current Directive, through further, amending legislation.
- The 2009 Directive requires Member States to have in place penalties for infringement of the national provisions that implement it. As the 2010 Directive is an amendment, that requirement continues. Such penalties can only be established through legislation. Although penalties are already in place under the existing legislation for domestic passenger ships, amending legislation is needed for them to have effect in respect of the 2010 Directive.

Section 7. Costs and benefits

7.1. Approach

7.1.1. Due to the limitations of the available evidence base, it has not been possible to monetise all of the costs and benefits that have been identified in this impact assessment. Where it has not been possible to monetise a particular cost or benefit, a full qualitative description of the cost or benefit has been provided in this impact assessment.

7.1.2. A consultation has been undertaken, running from 18 June to 30 July 2012. As indicated at the beginning of this Evidence Base, the consultation provided consultees with the opportunity to submit any additional evidence on the costs and benefits of the two policy options presented in this impact assessment. It included a number of questions for consultees, seeking their views and advice about various aspects of the cost estimates used in this impact assessment. However, no additional evidence was provided, nor did consultees make any comment regarding our assessment of the costs and benefits of the two policy options.

7.1.3. Following the consultation, further efforts were made to obtain evidence to help quantify the costs and benefits of the policy options presented in this impact assessment. This exercise generated some additional evidence, specifically on equipment costs (this evidence is relevant to estimating the compliance costs associated with the policy options considered) and familiarisation costs. We have revised our estimates of the costs of the policy options presented in this impact assessment. The additional evidence received relevant to compliance costs is identified in Table 7 in this impact assessment. The additional evidence received relevant to familiarisation costs is explained in paragraph 7.3.5.2.

7.1.4. Section 8 of this impact assessment, which has been prepared specifically in order to address comments made by the Regulatory Policy Committee regarding the cost-benefit approach in this impact assessment, sets out in more detail the approach taken to estimating the costs and benefits of the policy options presented in this impact assessment. Section 8 also describes the extent of monetisation of the costs and benefits of the policy options considered in this impact assessment that has been possible given the evidence it has been possible to obtain.

7.2. Assumptions

7.2.1. The following assumptions have been made in the preparation of this impact assessment.

- a. For the purposes of this impact assessment, it has been assumed that the Regulations would be introduced in 2012. (It is anticipated that this will happen in September 2012.) The 10 year appraisal period for the purposes of this impact assessment is therefore 2012 to 2021.
- b. Given the nature and extent of safety modifications required to be applied to ships currently operating, the MCA considers that these modifications can be undertaken without those ships: being taken out of service for any lengthy periods; having to use drydocking facilities; or, the use of temporary replacement ships to ensure continuity of service.
- c. We are aware of particular cases where ships are already compliant with the safety standards introduced by the 2010 Directive. For these ships it has therefore been assumed that no compliance cost would be incurred by the operator. In the absence of specific knowledge such as this, our default assumption is that ships are *not* already compliant with the new standards introduced by the Directive, and *would* therefore incur the relevant compliance costs.
- d. Under Option 1, it has been assumed that the operators of “existing” ships (those constructed before 1 July 1998) that meet the terms of exemption from the Directive under the UK equivalence arrangement, explained in section 6.4 of this impact assessment, *would* choose to take advantage of this exemption and would therefore *not* incur any of the relevant compliance costs.
- e. It appears that the few UK Class A domestic passenger ships, and domestic High Speed Craft (HSC) that exist generally have international, not domestic, certification. On the basis of the argument set out in paragraphs 7.3.2.5 to 7.3.2.11, it has been assumed that these vessels are likely to continue obtaining international certification in the future, so will not be affected by the Directive.
- f. Given the uncertainty surrounding the timing of when the costs of complying with the proposed Regulations would be incurred, it has been assumed that all one-off costs to existing UK ships would be incurred on the date the proposed Regulations come into force and that annually recurring costs to these vessels would be incurred every year from this date.

7.3. Costs of Option 1

7.3.1. The costs of Option 1 can be separated into (i) costs incurred in relation to UK ships ‘already’ constructed (i.e. pre-1 January 2012); (ii) costs incurred in relation to ‘newbuild’ UK ships (i.e. constructed on or after 1 January 2012); (iii) costs to non-UK ships; (iv) familiarisation costs; and (v) costs to Government

7.3.2. Costs incurred in relation to UK ships ‘already’ constructed (i.e. pre-1 January 2012)

7.3.2.1. The majority of domestic passenger ships already meet some of the requirements of the Directive. However, there will be further requirements for some ships to meet, and therefore some compliance costs for industry, because certain requirements will require the “retro-fitting” of equipment, machinery or electrical systems. This arises because the Directive requires ships to comply with safety rules and standards based on up-to-date versions of the relevant international requirements; introduces some new requirements for both “new” and “existing” ships; and extends certain requirements that formerly applied only to “new” ships to “existing” ones. A “new” ship is a ship built on or after 1 July 1998; an “existing” ship is one built before 1 July 1998.

7.3.2.2. Where it has been possible to estimate the per ship costs of complying with the specific safety standards introduced by the Directive, these estimates are set out in Table 7 below and at Annex 2. However, for many of the safety standards, it has not been possible to estimate the associated compliance costs. This is the case for instance where the costs associated with a particular safety standard depend on the particular characteristics of a ship (e.g. size/volume of certain on board spaces, capability/adaptability of on board electrical systems/equipment to the installation of new equipment, etc).

7.3.2.3. By combining the per ship cost estimates set out in Annex 2 with the Maritime and Coastguard Agency’s (MCA’s) record of UK-certificated vessels that will be ‘in scope’ of the regulations, it has been possible to derive an estimate of the total compliance costs that will be incurred by the industry as a

whole. In reaching this estimate we have taken into account: (i) which specific safety standards each individual ship would be need to comply with, based on its determining characteristics (i.e. length of vessel, passenger carrying capacity, whether “new” or “existing”); (ii) which ships would be effectively exempt from complying with the Regulations under the terms of the UK equivalence arrangements, and therefore incur no costs as a result of the Regulations; and (iii) where possible, existing knowledge about particular vessels that are understood to be already compliant with specific safety standards.

7.3.2.4. Based on this approach, costs to UK domestic passenger ships of EU Class B, C and D are estimated at approximately £0.6 to £0.9 million in 2012 (with a Best estimate of approximately £0.8 million) and approximately £8,000 in each year thereafter. In line with the Better Regulation Executive’s Impact Assessment Toolkit, the mid-point of the above range has been selected as the best estimate in the absence of evidence on the most likely point in the range. The following estimates in Table 7 underpin this analysis. An asterisk next to a figure in Table 7 indicates this particular equipment cost estimate was received after the consultation had ended. The headline estimates on the summary pages of this impact assessment have been revised since the previous impact assessment to take account of these new estimates.

Table 7: Underpinning estimates

	High cost	Low cost
Electronic Charts (ECDIS)	£25,987	£8,000*
Bridge Navigation Watch System (BNWAS)	£5,000*	£1,400
Fuel Tank Cock/Valve	£580	£270
Separate Public Address System	£5,000*	£1,000
Infant Lifejackets for 2.5% of passengers on board	£42 per required Lifejacket	£33 per required Lifejacket
Oversize Lifejackets for 10% of passengers on board	£100* per required Lifejacket	£23 per required Lifejacket
Embarkation Ladder (for survival craft)	£120 per Ladder	£35 per Ladder
Carriage of Radar Transponders in liferafts	£741	£510
Fast Rescue Boats	£174,435	£1,071
Means Of Rescue (Personnel Recovery Device)	£1,476	£1,170
Independent Power Bilge Pump		£6,000*
Equivalent water-based fire extinguishing system		£5,000*
Fixed water-based or equivalent fire fighting system for Category A machinery spaces over 500m ³		£15,000*
Yearly servicing costs for life saving appliances (LSA)	Variable depending upon number of passengers and ship type (for a list of servicing costs for LSA equipment please see Annex 2, pages 33 – 34).	Variable depending upon number of passengers and ship type (for a list of servicing costs for LSA equipment please see Annex 2, pages 33 – 34).
ECDIS annual maintenance costs and licensing renewals for electronic charts (Indicative average figure)		£317
*Estimate received after the consultation had ended. The headline estimates on the summary pages of this impact assessment have been revised since the previously published version of this impact assessment to take account of these new estimates.		

7.3.2.5. The following caveats should be noted in relation to the above estimates. Foremost, they are based on the per ship compliance cost estimates set out in Table 7 and Annex 2, which as previously stated present only a partial understanding of the likely compliance costs due to gaps in evidence. Some information about compliance costs is missing from the Evidence Base because it is unavailable, and the questions to consultees within the consultation stage impact assessment were intended to help address

this but elicited no responses. For this reason, the above estimates could be underestimates. Secondly, in the absence of knowledge to the contrary, we have assumed that ships affected by the regulations are currently not compliant with the safety standards introduced by the Directive. To the extent that some of these ships *are* already compliant with any of the new standards, these estimates will be overestimates (notwithstanding other caveats pointed out which imply possible underestimation). Thirdly, these estimates are based on the MCA's record of UK-registered ships. Accordingly, it should be noted that the UK domestic passenger ship industry is diverse and the types and sizes of ships vary in accordance with the demand for passenger services at a particular port, island, or region; season; and whether they are intended to serve particular surges in demand due to local or even national events.

Impacts on Class A passenger ships and HSC

7.3.2.6. There are currently 3 Class A passenger ships recorded as engaged (likely) exclusively on domestic voyages, but which have International Passenger Ship Safety Certificates and so fall outside the Directive's application. In line with Paragraph 7.2.1, it is assumed that these vessels will continue to have International Passenger Ship Safety Certificates in the future. There is one other Class A ship, that does not have international certification, and which is covered in paragraph 7.3.2.10.

7.3.2.7. The one UK HSC that carries out domestic voyages also has international certification, so is also outside the scope of the 2010 Directive. In line with Paragraph 7.2.1, it is assumed that this vessel will continue to have international certification in the future.

7.3.2.8. As specified in the Directive, Class A ships, and High Speed Craft, are subject to the full international SOLAS requirements. Class A ships operate under similar safety requirements and under similar operational sea conditions to ships engaged on international voyages, and are therefore subject to the same international safety requirements. This addresses a potential operational anomaly by making the safety standards of Class A ships and High Speed Craft (the latter in areas A, B or C), equivalent to similar types of ships/craft operating internationally. For example, a ship operating between Liverpool and Belfast would be non-international/domestic and encompassed by the Directive; while one operating between Liverpool and the Isle of Man (though over a shorter distance along a similar route) is international and non-Directive as the Island is not a part of the UK or the EU.

7.3.2.9. Class A ships, and HSC, have to comply fully with applicable international safety standards of the SOLAS Convention, in accordance with the Directive. However, they almost invariably hold international, not domestic, certification.

7.3.2.10. It is therefore the case (and to be expected) that the owners of such ships opt for them to be surveyed, and carry certificates for, international voyages even if the ships are exclusively engaged on non-international/domestic voyages. There is unlikely to be any commercial benefit or advantage in limiting a Class A ship to non-international voyages when it has to meet international safety standards anyway. This is notwithstanding that such ships' owners or operators would need to check other safety requirements that are beyond direct influence of the Directive, such as manning, were they to decide such ships should undertake an international voyage.

7.3.2.11. The UK being island-based, has a number of domestic trades in Class A areas, that are supported by a several ships with international certification, as mentioned in paragraph 7.3.2.5. Only some of these ship's voyages have been exclusively non-international/domestic. The one exception is an existing Class A ship which operates entirely under the UK equivalence arrangement, on an established fixed route. This ship will continue to operate in compliance with national safety standards, with appropriate restrictions. It has not been affected by previous domestic passenger ship directives, and will not be affected by the 2010 Directive on the assumption that it continues to operate under the UK equivalence arrangement in line with Paragraph 7.2.1.

7.3.2.12. On the assumption that these vessels will continue to have international certification or continue to operate under the UK equivalence arrangement in the future, these Class A ships, and HSC, therefore lie beyond the application of the 2010 Directive (and its predecessors), and the proposed Regulations will not have any impacts on these vessels.

7.3.3. Additional costs to UK domestic passenger ships constructed on or after 1 January 2012

7.3.3.1 Certain requirements in the Directive apply only to ships constructed on or after 1 January 2012. These “newbuilds” may be considered as a special category of “new” ship. The compliance costs for such requirements will be incorporated into the total overall cost of building the ship, in contrast to the costs of having to modify or replace existing arrangements or equipment.

7.3.3.2. Any costs related to the requirements upon ships constructed on or after 1 January 2012 will therefore arise at the design and construction stage. Such costs are virtually impossible to quantify due to the multitude of factors that affect the overall costs involved in the design and construction of a new vessel. For instance, the bidding price quoted by a shipyard and timing of building a ship are both subject to external commercial considerations, such as the availability of services and shipyard capacity. Furthermore, shipyard construction costs do not necessarily correspond directly to the design characteristics or size of a vessel. Rather, they tend to fluctuate according to supply and demand within the shipbuilding industry, and reflect the general economic conditions prevalent at the time. It is also not possible to know whether costs incurred at the design and construction stage would be absorbed by the ship builder or passed on to the ship’s purchaser.

7.3.3.3. In summary, the costs of having a ship built depend to a large extent on market forces prevalent at any given time and for this reason it has not been possible to estimate the additional costs to UK domestic passenger ships constructed on or after 1 January 2012.

7.3.3.4. The new requirements that apply to ships constructed on or after 1 January 2012 are set out at Annex 2, Table 3 of this Impact Assessment.

7.3.3.5. It is not possible to specify the number of such ships since their construction and entry into service will be driven by demand, and also the need to replace ageing ships, particularly ferries. It is understood that between five and ten new Scottish ferries are likely to be constructed over the next ten years, chiefly to replace others that have reached, or are nearing, the end of their service.²

7.3.4. Costs to non-UK registered ships

7.3.4.1. The costs for ships from other EU Member States coming to operate in UK domestic waters would be:-

- zero for ships that already comply with the Directive, which is likely be the case, as a majority of members States have already implemented it; or
- for ships that do not comply with the Directive, dependent on the level the national standards to which they have been built and equipped, and how those compare with the standards in the Directive. For that reason, it is not possible to monetise these costs.

7.3.4.2. The costs for non-EU ships coming to operate in UK domestic waters would depend on the standards for construction and equipment that have applied in their home country, and how far that falls short (if at all) on the standards imposed by the Directive. For that reason, it is not possible to monetise such costs.

7.3.4.3. The position for an EU, or non-EU, ship that joined the UK flag would be the same as outlined in the above two paragraphs except that, if such a ship was constructed before 1 July 1998 (an “existing” ship), it could opt to operate under the UK equivalence arrangement. The attractiveness of this will depend on the owner/operator’s intentions, and the level of standards with which it already complied. A ship from another EU member State which complies with the Directive will face no compliance costs, and will derive no benefit from the equivalence arrangement. The owners/operators of a flagging-in EU ship which did not comply, or a non-EU ship, that was eligible for equivalence might find it beneficial provided they were content with the associated operating restrictions. We are not however currently aware of any such ships. Again, monetisation of the possible costs for such ships is not possible because both the ships, and the national safety regimes that have previously applied to them will vary considerably.

7.3.5. Familiarisation costs

7.3.5.1 Businesses may incur familiarisation costs due to the need for operators to familiarise themselves with the proposed Regulations.

² Source:- Scottish Government Ferry Review, Work Package 6 – Vessels

7.3.5.2. Having approached industry before, during and after the consultation to invite them to submit estimates of the likely familiarisation costs associated with the proposed Regulations, we received one response in this regard, which was received after the consultation. This response indicated that familiarisation costs could be in the region of £3,600 per affected ship³. Combining this estimate with our assumption that the ships for which familiarisation costs would be incurred would be those ships which are in scope of the Regulations but which are not already known by the MCA to be compliant with the Regulations, we have estimated total familiarisation costs of policy option 1 to be in the region of £51,300 to £85,500 for the industry as a whole, with a central or 'best' estimate of £68,400. The upper and lower bounds of this range have been estimated by increasing and decreasing respectively the per ship familiarisation cost estimate of £3,600 by 25 per cent, to reflect the uncertainty surrounding this estimate due to the assumptions on which it is based (see footnote 3).

7.3.6. Costs to Government

7.3.6.1 It is considered that the costs to Government of administration relating to the Directive will be insignificant. This is because they will arise only from certain amendments to the existing safety regime for domestic passenger ships. There are no fundamental changes, and the MCA does not have to install new systems or equipment, or adopt new work patterns, in order to comply with the 2010 Directive. These limited costs will concern:-

- production of a short set of amending regulations;
- producing and publishing a Marine Guidance Note (MGN);
- amending statutory certification documents;
- amending and promulgating internal guidance documents for MCA surveyors; and,
- the assimilation of that information by MCA surveyors.

7.4. Benefits of Option 1

The benefits of Option 1 can be separated into (i) benefits to the shipping industry; and (ii) benefits to passengers travelling on board ships affected by the Regulations. Due to gaps in evidence it has not been possible to monetise the benefits of Option 1. Instead, a full qualitative description of these benefits is provided in the following paragraphs.

7.4.1. Benefits to the shipping industry

7.4.1.1. Implementation of the 2010 Directive will mean that UK domestic passenger ships will be required to meet amended safety rules and standards laid down in it. Once UK ships have met those standards, a "level playing field" will be created with their counterparts from other EU Member States. At the moment, UK operators whose ships do not comply with the 2010 Directive are at a potential disadvantage because they do not have the right to operate in other Member States' domestic waters. UK operators whose ships comply with the 2010 Directive will have the option of operating in the domestic waters of other EU States, just as similar ships from other Member States can operate in UK waters. The size of this benefit will depend on the extent to which there is a commercial benefit to ship operators of operating in other Member States' domestic waters/ports, and the extent to which ship operators choose to take advantage of any such benefit.

7.4.1.2. The scope for mobility and flexibility of domestic passenger ship transport services will be therefore be improved, in accordance with EU Single Market principles. In the consultation, consultees were asked whether they envisaged operating from other Member States in the foreseeable future, but there were no responses. We currently have no evidence of UK operators either operating out of another EU member States, or wishing to do so in the near future.

7.4.1.3. It is envisaged that, in the longer term, compliance with the Directive across the EU, including the UK, will facilitate industry competition, within the EU single market, in the construction, sale, purchase and charter of domestic passenger ships throughout the EU and European Economic Area

³ The estimate received was £4,050. This estimate was said to be based on the following assumptions : (1) the cost to each shipowner per day spend on familiarisation is £150; (2) understanding the requirements would require 1 day; (3) surveying a vessel would require 1 day; (4) design and approval would require 5 days; (5) procurement would require 3 days; (6) implementation would require 14 days. It appears therefore that an error has been made in the respondent's calculation, as the figure of £4,050 implies a total of 27 days would be required for familiarisation, whereas the above assumptions indicate a total of 24 days would be required for familiarisation purposes. We have therefore adjusted the respondent's estimate in line with the assumptions presented alongside it.

(EEA). This is because the same safety standards will apply to similar ships wherever they operate in the EU or EEA.

7.4.2. Safety benefits to passengers

7.4.2.1. Passengers on domestic passenger ships will be protected by a higher level of safety requirements. This is because the 2010 Directive takes account of recent developments, improvements and updates to the safety requirements for international passenger ships, and applies or adapts them for domestic passenger ships. These international requirements have been adopted and developed by the International Maritime Organization (IMO), with the combined expertise and experience of its 170 member States. They therefore provide a sound basis for the safety rules and standards laid down in the Directive, for domestic passenger ships of each class.

7.5. Costs of Option 2

7.5.1. Under Option 2, the safety standards introduced by the Directive would be extended to those domestic seagoing passenger ships that currently operate under the UK equivalence arrangement (described at paragraph 6.4). Since this option goes above and beyond Option 1, by definition all of the costs identified under Option 1 would automatically apply under Option 2.

7.5.2. Under this option however, there would be additional costs to those incurred under Option 1 in relation to those ships (i.e. constructed pre-1 July 1998) that currently operate under the equivalence arrangement. These additional costs would result from these ships not previously having had to comply with previous EU directives on domestic passenger ship safety, and thereby being subject to a step-change in construction and/or equipment requirements. There would also be familiarisation costs associated with these additional ships.

7.5.3. Following the same approach as set out in Section 7.3.2 of this impact assessment for estimating the compliance costs to the shipping industry and Section 7.5.2 of this impact assessment for estimating the familiarisation costs to the shipping industry, except for including the costs falling on ships that would be excluded under Option 1 under the terms of the UK equivalence arrangements, the total costs to (already constructed) UK domestic passenger ships of complying with the Regulations under Option 2 are estimated at approximately £0.7 to £1.9 million in 2012 (with a Best estimate of approximately £1.3 million) and approximately £14,000 per year thereafter. In line with the analysis for Option 1, it should be noted that this analysis only covers the costs of complying with the new requirements introduced by the 2010 Directive for Class B, C and D ships. This approach has been taken due to the limitations of the available evidence base. For example, for those vessels that currently operate under the UK equivalence arrangement, detailed information about each affected vessel would need to be obtained to ascertain the extent to which a given vessel would need to comply with the requirements of the 2009 Directive and the costs involved.

7.5.4. The same caveats as described in paragraph 7.3.2.4 apply to these estimates. In addition, there are several additional caveats regarding these estimates. Firstly, as this analysis only covers Class B, C and D ships, it should be noted that the above estimates exclude any costs that would be incurred by the existing Class A ship which currently operates entirely under the UK equivalence arrangement that is described in Paragraph 7.3.2.11. Secondly, as the analysis only covers the costs of complying with the new standards introduced by the 2010 Directive, it should be noted that the above estimates exclude the costs to these vessels of complying with applicable requirements of the 2009 Directive. For these reasons, the above estimates could be underestimates.

7.5.5 In addition, it should be noted that there are some non-specific relaxations of the standards for 'existing' ships in all classes, potentially resulting in reduced compliance costs, compared to those for "new" ships. These relaxations are reflected in the 2010 Directive at Recitals 12 and 13, and Annex I, Chapter 1, paragraph 8. There is no data to indicate the extent to which these provisions are likely to be taken up by operators of existing ships, and the advantages of doing so will depend upon individual ships and operations. This factor is therefore not reflected in the above estimates, but may affect the actual costs incurred in practice.

Costs to Government

7.5.6 The costs to Government would be greater under Option 2 because ships that currently operate under the UK equivalence arrangement would have to be surveyed to ensure they satisfied the standards laid down in the Directive.

7.6. Benefits of Option 2

7.6.1. Under Option 2, the safety standards introduced by the Directive would be extended to all UK domestic seagoing passenger ships that meet the compliance criteria. Since this option goes above and beyond Option 1, by definition all of the benefits identified under Option 1 would automatically apply under Option 2.

7.6.2. Under this option there would be potential additional business benefits to those incurred under Option 1, as a greater number of ships would meet the required EU-wide passenger ship safety standards and would thus be able to operate in Member States' domestic waters, should they wish to. In practice, it is not clear to what extent operators would choose to do this.

7.6.3. Under this option there would be greater consistency and harmonisation because all UK domestic passenger ships would operate strictly under the safety rules and standards laid down in the Directive.

7.7. Conclusion

7.7.1. The 'do nothing' option has been discounted for the reasons stated in paragraphs 6.1.1 to 6.1.3 of this impact assessment.

7.7.2. The key difference between Options 1 and 2 is that the latter extends the application of the Regulations which transpose the 2010 Directive to ships that would ordinarily, and under Option 1, be exempt under the terms of the 'UK equivalence arrangement' (this arrangement is explained in detail in section 6.4 of this impact assessment). As a result of this key difference, it is estimated in this impact assessment that the costs of Option 2 would be approximately £0.6 greater in 2012 and approximately £5,000 greater in the years thereafter (Best estimate). However, the benefits under Option 2 would also be greater than under Option 1 (although it has not been possible to monetise the benefits of either policy option).

7.7.3. In any case, given that the costs and benefits estimated in this impact assessment are based on a partial understanding of the likely equipment upgrade costs, and on the Maritime and Coastguard Agency's (MCA's) record of UK-certified ships 'in scope' of the Regulations (of which they may be additional ships unaccounted for), these estimates could be underestimates of the true costs and benefits of the respective policy options. With this in mind it is appropriate to bear in mind other factors when reaching a policy conclusion.

7.7.4. Given that the main purpose of the UK's negotiation of the equivalence arrangement was to enable the "existing" UK fleet to continue in operation under the EU regime without the need for significant structural modification, there is a considerable risk that if Option 2 were pursued some or much of the fleet of existing vessels would become economically unviable.

7.7.5 An example from many existing ships that would be adversely affected we shall refer to as ship "X", which was constructed in 1935, currently providing tourist excursions off the coast of Northern England. Though operated safely for many years it does not, and could not, comply with the standards set out in the Directive. Instead, it operates under the UK equivalence arrangement agreed with the European Commission in 2001; complying with largely (grandfathered) pre-existing UK national statutory requirements, which also incorporate operating restrictions (eg limited distance from coast, daylight hours and favourable weather) associated with those pre-existing requirements and additional to those imposed by the Directive. By reason of these additional operating restrictions, equivalent and acceptable levels of safety are achieved compared to those required in the Directive. Due to the comparatively extreme direct and consequential demands for modification of the ship X's original construction that would be required through introduction of all of the stability, subdivision, life-saving appliances and fire protection etc. technical standards, it would not be remotely viable to modify the ship in order to comply with the Directive in accordance with Option 2. Doing so would involve complicated and costly constructional changes to her hull and framework, as well as the re-siting of her engine, and re-configuration of the engine room and other interior spaces. Furthermore, ship X was built using older techniques (riveted construction), raising additional technical challenges and costs for any major

reconstruction using more contemporary techniques or by replicating older ones, e.g. incompatibility and additional stresses introduced by mixing original and new steel, corrosion problems, training and equipping shore labour in use of, or adaption to, older construction techniques etc.

7.7.6 A further adverse effect of Option 2 would be the creation of local economic market distortions within the UK domestic passenger ship industry. This is because owners of a substantial proportion of smaller (under 24 metre) have chosen to construct their ships out of Glass Reinforced Plastic (GRP), while a number of older such ships are of timber. Neither group of ships is subject to the Directive which applies only to ships constructed of steel (or equivalent). Option 2 would therefore impose the more onerous Directive requirements on steel ships whilst non-steel ones would be able to continue operating under the existing national measures that apply to them. This would obviously amount to a distinctly un-level playing field.

7.7.7 For these reasons, Option 1, which does not carry these considerable risks, is preferable to Option 2 and is therefore the preferred policy option for transposing the 2010 Directive into UK law.

Section 8. Explanation for partial monetisation of the costs and benefits of policy options presented in this impact assessment (by way of addressing comments made by the Regulatory Policy Committee on this aspect of the impact assessment)

8.1 Result of the Regulatory Policy Committee review process

8.1.1 The Regulatory Policy Committee (RPC) reviews and comments on all impact assessments supporting new regulatory proposals prior to their submission to the Home Affairs Committee and Reducing Regulation Committee (RRC). The RPC assessed the consultation-stage version of this impact assessment as fit for purpose.

8.1.2 However, the RPC assessed the final, post-consultation stage version of this impact assessment as not fit for purpose and requested that the impact assessment did more to verify the costs estimates or provided an explanation as to why it is not possible to do so. Since we consider it is not possible to do anything further to verify the cost estimates in this impact assessment, this section provides an explanation as to why this is the case.

8.1.3 The RPC also requested that the final stage version of the impact assessment monetises the benefits of the policy options presented in the impact assessment or provides an explanation as to the reasons for the gaps in evidence. Since we consider it not possible to monetise the benefits of the policy options presented in this impact assessment, this section also provides an explanation as to why this is the case.

8.1.4 This section considers in turn each of the various costs and benefits associated with the policy options considered in this impact assessment. These are:

- Compliance costs to the shipping industry;
- Familiarisation costs to the shipping industry;
- Administrative costs to Government;
- Commercial benefits to the shipping industry; and
- Safety benefits to passengers

8.2 Compliance costs to shipping industry

Background on lack of compliance costs data

8.2.1 The compliance costs associated with the safety standards contained in Directive 2010/36/EU will differ between ships and ship owners. For many of the safety standards introduced by the Directive, the associated compliance costs will depend on the particular characteristics of a ship, including for instance the size/volume of on board spaces; capability of on board electrical systems/equipment and adaptability of electrical systems/equipment to the installation of new equipment, etc. These factors are in addition to the more obvious characteristics, such as a ship's length and passenger carrying capacity.

Ultimately it is possible, indeed likely, that individual ship owners will incur uniquely different compliance costs as a result of the transposition of the Directive.

8.2.2 In relation to certain safety standards introduced by the Directive which affect 'newbuild' ships, ultimately it is not possible to ascertain whether the costs associated with these standards, which would be incurred at a ship's design and construction stage, would be absorbed by the ship builder or passed on to the ship's purchaser. In any case, such costs are virtually impossible to quantify due to the multitude of factors that affect the overall costs involved in the design and construction of a newbuild vessel. As mentioned in Section 7, shipyard bidding price quotes and timings are subject to external commercial considerations, including availability of services and shipyard capacity. Instead of corresponding directly to the design characteristics or size of a vessel, shipbuilding costs tend to fluctuate according to supply and demand within the industry, and the general economic conditions prevalent.

8.2.3 For these reasons, the Government is dependent on the shipping industry to help it estimate the compliance costs associated with safety regulations facing the industry.

8.3 Efforts made to obtain compliance costs data pre-consultation

8.3.1 Ever since the original 1998 directive was introduced, industry stakeholders have routinely been kept informed of, and encouraged to comment upon, any proposed improvements, amendments and progress of negotiations in Brussels, through the Domestic Passenger Ship Steering Group (DPSSG). Meeting biannually, the DPSSG is the principle forum for liaison between this sector of the shipping industry and the Maritime and Coastguard Agency (MCA). In February 2012, members of the DPSSG's Ro-Ro Ferry Sub-Group were issued with a preliminary version of Annex 2 of this IA, and asked if they could forward any information that would help to affirm or revise the cost estimates shown. The Ro-Ro sub-group, which represents operators of those ships that are most affected by the 2010 Directive, agreed to respond, but no information was forthcoming.

8.3.2 In order to produce a consultation-stage impact assessment the following exercise was undertaken to estimate the compliance costs associated with the policy options considered in the impact assessment. A gap analysis was undertaken to determine:-

- those amendments in the 2010 Directive likely to generate compliance costs; and,
- how those amended requirements differed from those in force under current UK domestic passenger ship regulations (reflecting the previous EU standards).

8.3.4 Where changes to safety requirements introduced by the 2010 Directive involve ships' equipment, the websites and product literature of shipping equipment manufacturers were trawled and the relevant equipment costs were identified as far as possible. Certain manufacturers, or their agents, were also contacted by phone or letter, though this produced no useable results.

8.3.5 This enabled us to produce an estimated range for some, but not all, compliance costs associated with the Directive. In particular, it has not been possible to obtain estimates of compliance costs where the costs associated with a particular safety standard depend on the particular characteristics of a ship (e.g. size/volume of certain on board spaces, capability/adaptability of on board electrical systems/equipment to the installation of new equipment, etc).

8.4 Efforts made to obtain compliance costs data via the consultation and the results thereof

8.4.1 A targeted consultation ran from 18 June to 30 July 2012. Compliance cost estimates – reflecting the results of the research exercise to obtain the estimated ranges of prices offered by established equipment suppliers, and limited advice during conversations with the industry – were presented in the consultation stage impact assessment. Consultees were invited to submit any additional evidence on the costs and benefits of the two policy options presented. Explicit questions were also put to consultees, seeking their views and advice about various aspects of the cost estimates used in the IA.

8.4.2 However, no additional evidence was provided, nor did consultees make any comment regarding the assessment of the costs and benefits of the two policy options presented in the consultation stage impact assessment.

8.5 Efforts made to obtain compliance costs data following the consultation

8.5.1 Following consultation, the MCA wrote and spoke again to consultees explaining the need for information to refine and revise cost estimates given in the impact assessment. A further request was made to industry at a September meeting of the DPSSG Ro-Ro sub-group. We have to date received one substantive reply, from an operators' association, with responses to some of the IA questions, and broad figures in answer to nine of the explicit questions on costs. This is considered fortunate since there were anecdotal indications that the industry simply did not hold such information, or that they hold limited information but consider it too difficult, costly or time consuming to compile in a useable format.

8.5.2 The MCA values the strong links, lines of communication and discussions it has with industry stakeholders and representatives, but ultimately, industry cannot be compelled to undertake the task and costs of providing the information requested. We consider that, were it viable and reasonable for stakeholders to provide such, they would by the time of drafting this revised IA, have endeavoured to do so. The Government also recognises the implications of increased competition for market share between ship operators, including potentially those affected by the Directive, may make those operators increasingly reluctant to release information on detailed costs which they consider commercially sensitive.

8.6 Extent of monetization of compliance costs possible

UK ships already in operation

8.6.1 The MCA has identified 109 UK seagoing passenger ships on domestic voyages, of which 83 are "existing" ships⁴, and able to operate under the UK equivalence arrangement, which would exempt them from having to comply with the requirements of the Directive. It is assumed that these ships would operate under the UK equivalence arrangement and would therefore not incur any additional costs.

8.6.2 The remaining 26 ships are "new ships"⁵, and subject to the Directive. Taking account of the MCA's knowledge about particular vessels that are understood to be already compliant with specific safety standards, seven "new ships" were considered to be compliant with the new requirements. This was because the operator of those ships has a policy of meeting the relevant international standards.

8.6.3 A total of 14 requirements were identified as likely to result in additional costs to at least some of remaining 19 "new ships". Of these, it was possible to produce indicative estimates of the costs of 8 requirements using the results of MCA research into the prices charged by established equipment suppliers.

8.6.4 The additional costs for the 19 "new ships" of complying with these 8 requirements were estimated at approximately £0.3 million in total over the 10 year appraisal period (Present Value), and the Equivalent Annual Net Cost (EANCB) was consequently estimated at approximately £0.03 million per year.

8.6.5 However, the impact assessment identifies that these estimates only present a partial picture of equipment upgrade costs. In particular, we have been unable to quantify any of the costs of the remaining 6⁶ requirements as these costs would depend on the characteristics and configuration of individual ships, and would often have to be individually purpose-built. The recent response to the post-consultation letter, referred to above, has provided limited evidence of the indicative compliance costs of some of these requirements. These are now reflected in Annex 2 of this IA.

8.6.6 Examples of these characteristics include: whether structural modifications may be necessary in order to enlarge muster stations on certain ships; whether the existing ships' fittings, spaces, structures and on board power supplies are suitably adaptable for fitting the new required equipment; and whether

⁴ In the context of the Directive, "existing ships" means ships constructed before 1 July 1998, the adoption date of the original domestic passenger ship Directive 98/18/EC, of which the 2010 Directive is the latest amendment.

⁵ In the context of the Directive, "new ships" means ships constructed on or after 1 July 1998, the adoption date of the original domestic passenger ship Directive 98/18/EC, of which the 2010 Directive is the latest amendment.

⁶ Emergency power source required to run an independent bilge pump; Emergency lighting at embarkation to run on emergency power; Equivalent water-based fire extinguishing system; Fixed water-based or equivalent fire fighting system for cat A machinery spaces over 500m³; Modification of muster stations; and, Purchase and installation of Fast Rescue Boats (on Ro-Ro ferries).

the volume of engine spaces are above the size required to have additional fire extinguishing arrangements.

'Newbuild' UK ships

8.6.7 The requirements of Directive 2010/36/EU also apply to "newbuild"⁷ ships and an additional 5 requirements apply to such ships. We have been unable to quantify the costs for "newbuild" ships as we lack the necessary evidence on the "newbuild" ships that will be constructed during the appraisal period, including on the extent that the costs of these ships will increase as a result of the requirements of the Directive.

8.6.8 The costs of the requirements that apply to "newbuild" ships will arise at the design and construction stage and will depend on the multitude of factors that affect the overall costs involved in the design and construction of a new vessel. As stated above, the costs of building a ship are heavily affected by a number of external commercial considerations on the one hand, and individual ship characteristics on the other. It is not possible to consider a "standard" or "average" newbuild ship because, in the domestic passenger ship sector, no such benchmark exists.

8.6.9 Furthermore, it is not possible to specify the number of "newbuild" UK ships that will be affected since their construction and entry into service will be driven by demand, and also the need to replace ageing ships, particularly ferries. However, the 26 "new ships" referred to above were constructed between 1 July 1998 and the present day, which equates to approximately 2 ships per year on average.

Non-UK registered ships

8.6.10 There would be no additional costs to any non-UK registered ships coming to operate in UK domestic waters where they are already compliant with the Directive, such as those ships registered in member states that have already implemented the Directive. The additional costs to any non-UK registered ships that are not compliant with the Directive would depend on the level of the standards to which they have been built and equipped, and how those compare with the standards in the Directive. The MCA does not hold this information, and consequently we have been unable to quantify these costs. However, the MCA is not currently aware of any non-UK registered ships operating in UK domestic waters.

8.7 Familiarisation costs to shipping industry

8.7.1 Businesses may incur familiarisation costs due to the need for operators to familiarise themselves with the proposed Regulations. Having approached industry before, during and after the consultation to invite them to submit estimates of the likely familiarisation costs associated with the proposed Regulations, we received one response in this regard, which was submitted by an operators' association after the consultation had ended. We have combined this estimate with our estimate of the total number of ships for which familiarisation costs would be incurred in order to obtain an estimate of familiarisation costs for the industry as a whole. Given that our estimate of familiarisation costs for the industry as a whole is based on a single respondent's estimate of per ship familiarisation costs, to reflect the uncertainty surrounding our estimate we have increased and decreased the per ship familiarisation cost estimate used in the calculation by 25 per cent in order to derive high and low estimates respectively of familiarisation costs to the shipping industry.

8.8 Administrative costs to Government

8.8.1 As mentioned in paragraph 7.3.6, the costs to Government, of complying with the 2010 Directive, administration relating to the Directive, relate to the administration required to reflect its amendments in the existing safety regime, which was established following the original domestic passenger ship directive, 98/18.EC. The costs are therefore considered to be insignificant.

8.9 Benefits to shipping industry

8.9.1 Implementation of the 2010 Directive will mean that affected UK domestic passenger ships will be required to meet its standards. Such ships will enjoy a "level playing field" with their counterparts from

⁷ 'Newbuild' in the context of this document refers to ships built on or after 1 January 2012.

other EU Member States. UK operators are currently at a potential disadvantage because they do not have the right to operate in other Member States' domestic waters. When the 2010 Directive is transposed, UK operators whose ships comply will have the option of operating in the domestic waters of other EU States in accordance with EU Single Market principles. It is not known what the size of this potential benefit might be, nor the extent to which ship operators choose to take advantage of it.

8.9.2 In an effort to address these gaps in evidence, the consultation invited ship operators whether they envisaged operating from other Member States in the foreseeable future, but there were no responses. There is therefore no current evidence of them wishing to do so.

8.10 Safety benefits to passengers

8.10.1 Passengers on domestic passenger ships will be protected by a higher level of safety requirements because the 2010 Directive applies or adapts recent developments to the safety standards for international passenger ships. Having been developed and adopted with the combined expertise and experience of the IMO's 170 member States, these standards provide a sound basis for those laid down in the Directive, for domestic passenger ships.

8.10.2 Estimating the benefits to passengers associated with the improvements to passenger safety introduced by Directive 2010/36/EU is inherently difficult. Passengers travelling on seagoing domestic passenger ships are already protected to some extent by safety standards in place prior to the introduction of Directive 2010/36/EU. It is therefore difficult to estimate the precise impact (for example in terms the number of lives saved) that the safety standards introduced by the Directive would have on overall passengers' safety, because the Directive in effect makes an incremental improvement to existing protection of passengers' safety.

Section 9. Risks

9.1 Some smaller UK operators may have difficulty in meeting the costs of complying with certain amended safety requirements that their ships must meet under the 2010 Directive. This applies particularly to certain new structural requirements that apply to ships constructed on or after 1 January 2012. Such requirements need to be incorporated into the ship at the design and construction stages, to avoid subsequent retro-fitting and modification measures which are likely to prove costly, in some cases prohibitively so, and difficult to carry out.

9.2 The costs of amended requirements are indicated in Annex 2 of this Impact Assessment.

9.3 Until the UK has implemented the Directive, there is a high risk of infraction proceedings being pursued by the European Commission, which may result in substantial fines being imposed on the UK by the European Court of Justice.

9.4 If the UK's policy comes into force, and is promulgated, later than expected, there is also an increasing risk that ships may be built that do not comply with the safety rules and standards laid down in the Directive. This could result in the owners of such ships seeking redress against Government for the costs of retrofitting or modifying them in order to comply, in accordance with "Francovich⁸" principles.

Section 10. One-in, One-Out (OIOO)

10.1 As this is an EU measure and the preferred policy option (Option 1) involves no "gold plating", it is out of scope of OIOO. The term "gold-plating" describes UK regulations that go beyond the requirements of the EU Directive, or international provision, that they are implementing. Therefore, the summary sheet for Option 1 presents the full direct costs and benefits to business of Option 1 (even though none of them are in scope of OIOO).

10.2 Option 2 would go beyond the minimum requirements of the EU Directive and is thus in scope of OIOO. Therefore, the summary sheet for Option 2 only presents the direct costs and benefits to business of Option 2 that result from this gold-plating (i.e. only those that are in scope of OIOO). On the basis of the estimates of the monetised costs presented in this impact assessment, it is estimated that Option 2 would result in an IN of approximately £0.1 million per year from 2012 (in equivalent annual terms) (Price

⁸ Named after a legal case in Italy, which involved similar redress being sought against the Italian Government.

Base Year 2009, Present Value Base Year 2012). This cost derives specifically from the inclusion of ships that would be 'out of scope' of the Regulations under Option 1 under the terms of the 'UK equivalence arrangement'.

Section 11. Wider impacts

11.1 The Directive, and therefore the regulations that transpose it, will apply to the whole of the UK. They are expected to come into force during the first half of 2012.

11.2 The regulations will be enforced by the MCA representing the UK flag and/or Port State, in accordance with Hampton principles.

11.3 The proposed Regulations will have no impact on:

- environmental issues;
- health and wellbeing;
- human rights; or
- rural proofing.

11.4 Directive 2009/45/EC lays down an expectation that EU member States will do their utmost to ensure that the IMO undertakes expeditious (further) development of the international measures applied by the Directive. Whilst those developments will be aimed at ships on international voyages, there is likely to be a "knock-on" effect to future amendments of the Directive, in which such measures may be considered for incorporation.

Section 12. Equality Issues

12.1 The Directive has no negative effects on equality. It continues an existing requirement for domestic passenger ships to provide safe access for persons of reduced mobility, where practicable.

Section 13. Justice Impact Assessment

13.1 The proposed Regulations for transposing the Directive do not change any of the offences or penalties set out in the existing regulations on domestic passenger ships. No assessment is therefore necessary.

Section 14. Small Firms Impact Test

14.1 As the Directive concerns safety rules and standards, it applies as much to smaller firms as to larger ones. The level of standards applicable to a particular ship, and therefore potential cost of complying with them, reflect the level of safety risks it presents. These depend on the ship's operating area (its Class), age, size and passenger capacity. As this is an EU Directive, and the UK transposing regulations are not applying any gold-plating of the requirements, the Government moratorium on micro-businesses will not apply.

14.2 Therefore the impact on small firms will depend on the extent to which those firms own ships which will be affected by the regulations, and the classes and characteristics of such ships. These factors will determine the extent of compliance necessary as a result of the regulations.

Section 15. Competition Assessment

15.1 The proposed Regulations will help maintain a vibrant level of competition because all domestic passenger ships in the EU, to which the Directive applies, will be subject to the same harmonised safety rules and standards. It should be noted however that UK domestic passenger ships that choose to operate under the terms of the UK equivalence arrangement, described in section 6.4 are unlikely to be accepted in the waters of other EU member States. This is because UK ships that operate under the UK equivalence arrangement cannot be certificated as complying fully with the Directive, so are not entitled to be accepted by other EU Member States. That situation will not be of concern to operators who wish to operate only in UK waters.

15.2 It is not anticipated that the regulations will have any marked effect on competition at the domestic level; between UK operators in UK waters.

Section 16. Summary of preferred option and implementation plan

16.1 The Government's policy is for UK domestic passenger ship operators to meet the requirements of the Directive, and allow for certain ships to make use of equivalent UK measures agreed with the European Commission, should they wish. This equivalence arrangement is explained in paragraphs 5.6 to 5.8.

16.2 In general, meeting the requirements of the Directive will have the following benefits:-

- it will further improve and harmonise safety standards;
- it will prevent UK industry from being disadvantaged because all domestic passenger ships in the EU (notwithstanding those ships which meet the terms of exemption under the UK equivalence arrangement) will be subject to the same harmonised safety rules and standards;
- it will give potential commercial benefits to UK ship owners and operators due to increased scope to operate their ships in the domestic waters of other EU Member States;
- it will facilitate the market for sale or purchase of domestic passenger ships throughout the EU (and EEA); and
- it will facilitate commercial competition within the EU single market, for the construction of domestic passenger ships and the manufacture of equipment for them.

16.3 Apart from the risk of infraction proceedings by the European Commission, non-transposition and non-implementation, or a further delay in implementation of the Directive (and any future amendments) will potentially result in the following.

- a. Loss of broad alignment with updated international safety standards (the condition first achieved with implementation of Directive 98/18/EC).
- b. Legal and commercial efforts spent in implementation of the 1998 Directive and its amendments would be wasted because the UK would not be party to the current harmonised EU safety rules and standards.
- c. Complaints of unfair advantage from other (European) Directive-compliant ship operators competing commercially on similar, or parallel, routes.
- d. New ships not built or equipped to the standards of the Directive would be difficult or commercially impossible to modify for later compliance.
- e. New or existing ships not built or equipped to the standards of the Directive, and their certification, would not be accepted by other EU States for operation in their waters.

16.4 In relation to the specific policy options presented in this impact assessment, Option 1 is the preferred option. The Government's official guidance on the transposition of European Directives⁹ requires that the practice of "gold-plating" (i.e. going beyond the minimum requirements of European Directives) be avoided unless there are exceptional circumstances, justified by a cost-benefit analysis and consultation with stakeholders. Since Option 2 amounts to gold-plating but lacks a clear cost-benefit justification (as explained in paragraph 7.7.4) it has been discounted. Do nothing is not a viable option for the same reasons as set out in paragraph 17.3.

16.5 There will be a statutory 5-year review (see Annex 1).

⁹ <http://www.bis.gov.uk/assets/biscore/better-regulation/docs/t/11-775-transposition-guidance.pdf>

Annexes

Annex 1: Post Implementation Review (PIR) Plan

Basis of the review:

- Statutory 5-year review.
- The Directive is subject to ongoing review and amendment at European Commission level. This work takes place under the auspices of the Committee for Safe Seas (COSS).

Review objective:

- To ensure that the transposing SI is applying the amended safety rules and standards in the 2010 Directive effectively.
- To ensure that proposals for future amendments are justified by safety needs, and subject to effective cost and benefit analysis at the proposal and negotiation stages.
- To ensure that there is not any way that the requirements could be implemented in a less burdensome way.

Review approach and rationale:

- Scope review to make sure the 2010 Directive amendments are implemented by the 2012 transposing SI and consider whether there is any way the requirements could be implemented in a less burdensome way.

Baseline:

- N/A

Success criteria:

The following criteria may be used to ascertain the effect of the Directive on the UK domestic passenger ship fleet, and whether the regulations are meeting the stated aims of the Directive.

- Assessment of how many domestic passenger ships have been surveyed or inspected, and found not to comply with the Directive.
 - Monitoring information sources: MCA survey, certification and inspection records.
 - Any parallel information drawn up by the European Commission or other Member States.
- Reduction of safety-related incidents involving UK domestic passenger ships or HSC.
 - Monitoring information sources: statistics and reports of such incidents.

Annex 2

Estimates of the additional compliance costs for ‘new’ and ‘existing’ ships as a result of the proposed Regulations

The two tables in this Annex show the changes to safety requirements introduced by the 2010 Directive, which have an effect on the construction, equipment and operational compliance costs for affected ships, “new” and “existing”. These costs have been obtained from the websites and literature of ship equipment manufacturers, and are indicative of the range of costs likely to be encountered for a given item of equipment. However, it should be noted that these costs may have changed by the time a ship owner or operator chooses and orders equipment required under the Directive. In addition, it should be noted that it has been assumed that the costs obtained are in 2012 prices for the purposes of this impact assessment.

The following definitions are used in this section

- Class A, B, C, and D ships are as defined in Section 3;
- “New ships” means ships constructed on or after 01/07/1998; and
- “Existing ships” means ships constructed before 01/07/1998.

(Note: These terms were established by, and have continued in use since, the first Directive (98/18/EC) entered into force, first introducing an EU-wide regime of safety rules and standards for passenger ships on domestic voyages. The same terminology necessarily continues to be used to differentiate between ‘existing’ ships constructed/built before and ‘new’ ships built after; entry into force of that first 1998 directive when the safety regime was first established. Additional cut-off dates for application of are specified within those two groupings, as referred to in the second column of the following table.)

Table 1 - New requirements for Class B, C and D ships for which costs may arise – resulting from Articles 6(1)(b) and 6(1)(c) of the Directive and hence through application of SOLAS requirements

The internet addresses for the sources of costing information are shown in column 4.

Articles of the Directive & SOLAS Regulation	- ‘New’ or ‘existing’ ship - Additional construction cut-off dates - Other criteria	Requirement	Estimated costs £
6(1)(b) SOLAS IV/C, 15 (Amendment Res.MSC 152(78))	From 1 July 2006 Where Emergency Position Indicating Radio Beacons EPIRBs are already required to be fitted.	Annual testing of EPIRBs. From July 2002, all EPIRBs already required annual testing in ref:- IMO MSC/Circ.1040.	Circa £380 per year But no change from the previous requirements. The Guidelines have been revised and incorporated into SOLAS. References: http://www.sartech.co.uk/servicequote/10
6(1)(c) SOLAS V/19.2.2.3 (Amendment Res.MSC.282(86))	From 1 January 2011. Ships constructed on or after 1 July 2011. Ships constructed before 1 July 2011 – by first survey after 1 July 2012 Exemption available for ships already fitted.	To be fitted with Bridge Navigational Watch alarm System (BNWAS).	£1400 one-off Some owners may have anticipated this requirement. References: http://www.seashop.eu/22-bnwas Post-consultation industry estimate: £5000
6(1)(c) SOLAS V/19.2.10 (Amendment Res.MSC.282(86))	From 1 January 2011. Ships of 500 gt and over constructed on or after 1 July 2012 – As built Ships of 500 gt and over constructed before 1 July 2012 – by first survey on or after 1 July 2016	To be fitted with Electronic Chart Display and Information System (ECDIS) equipment and relevant electronic charts.	£18,381 to £25,987 for initial equipment and fitting. Differences depend upon choice of: a. equipment and b. levels of integration. £317 annually for maintenance and updates on limited chart folio for the British Isles and near Continent. References: Det Norske Veritas Joint Industry project: Formal Safety Assessment Large Passenger Ships Navigation (including ECDIS) submitted to the IMO in June 2005. Note: It is suspected that lower cost equipment has subsequently become available. http://research.dnv.com/skj/F5ALPS/FSA-LPS-NAV.htm http://www.chartroom-online.com/cart/navtical_charts/admiralty_charts

Table 2 – New requirements for Class B, C and D ships for which costs may arise – resulting from amended requirements in Annex I of the 2010 Directive

The internet addresses for the sources of costing information are shown in column 4.

References to Annex I of Directive 2010/36/EU (Annex I) Regulation	- 'New' or 'existing' ship - Class - Additional construction cut-off dates - Other criteria	Requirement/s	- Estimated cost/s £ per item - Details on which ships are affected
Chapter II-1 – Sub-Division and stability, machinery and electrical installations			
Part D – Electrical Installations Regulation 3.5.2 (a) & (b)	New B, C and D Existing B	Regulation D/3.5.2 now requires the ship's emergency power source to run:- (a) one <u>independent bilge power pump</u> and one of the fire pumps; (b) emergency lighting at every assembly or embarkation station and over the sides <u>as provided in Regulation III/5.3</u> (page 116 of Directive 2010/36/EU).	Cost will be for installation or/and alteration of the ship's electrical system. They will vary widely according to ships' individual designs and characteristics. Post-consultation industry estimate: £6000
Chapter II-2 – Fire Protection, Fire Detection and Fire extinction Part A – General			
Regulation 6.1.1 (page 61)	New B, C and D 24m or more in length	Equivalent water-based fire extinguishing system for machinery space must comply with MSC/Circ.1165 (June 2005) – "Revised guidelines for the approval of equivalent water-based fire-extinguishing systems for machinery spaces and cargo pump-rooms".	Cheapest solution seems to be a Water Mist Suppression system as these can be up to 40% cheaper than a Gas system. But exact costings are difficult to predict as these depend on the characteristics of individual vessels. e.g. A Forgem High-Pressure Water Mist system is built to meet the individual requirements of each vessel References: http://www.kaminco.com/KamincoOverseas/partners/fogtec.htm http://www.lpgfire.co.uk/Products/HighPressureWatermist/tabid/69/Default.aspx Some owners may have anticipated this requirement. Post-consultation industry estimate: £5000
Regulation 6.8.1 (page 62)	- New B, C and D constructed on or after 1 January 2003 24m or more in length; - New Class B, C and D constructed before 1 January 2003 and certificated to carry more than 400 passengers. - Existing Class B certificated to carry more than 400 passengers. This requirement now extended to:- - B, C and D ships built before 1 January 2003 carrying more than 400 passengers, and - B ships built before 1 January 1998 carrying more than 400 passengers.	Machinery spaces of category A above 500 m ³ in volume shall, in addition to the fixed fire-extinguishing system required in this Regulation, be protected by an approved type of fixed water-based or equivalent local application fire-fighting system, based on the guidelines in IMO MSC/Circ.913 "Guidelines for the approval of fixed water-based local application fire-fighting systems for use in category A machinery spaces"	It is considered that few UK ships will have category A machinery spaces of above 500m ³ . Cheapest solution seems to be a Water Mist Suppression system as these can be up to 40% cheaper than a Gas system. But exact costings are difficult to predict. e.g. A Forgem High-Pressure Water Mist system is built to meet the individual requirements of each vessel Some owners have anticipated this requirement. Post-consultation industry estimate: £15000
Regulation 10.2.5 (page 69)	New B, C and D Existing B	Cock or valve to be fitted to fuel tanks operable externally to the space	£20 to £80 + labour costs of £250 to £500 one-off. Total £270 to £580.

			<p>This indicative estimate was based on average labour rates for installation work on ships. It was calculated as 1 – 2 days work depending on the complexity of the system worked on and how difficult the fitment might be to carry out. The actual cost will vary widely according to the configuration of each ship affected.</p> <p>Existing ships were previously compliant – Reference UK Passenger Ships Construction Regs 114(14); new ships from class society (RO) rules</p> <p>References:</p> <p>http://www.discountmarinesupplies.com/FUEL_SYSTEM-Fuel_Valves.html</p>
Chapter II-2, Part B – Fire Safety Measures			
Chapter II-2, Part B Regulation 15.4 (page 109)	New B, C and D	<p>Separate public address system to comply with SOLAS Chapter III, Regulation 6.5 as amended. Ships may previously have had a general emergency alarm system combined with the public address system.</p>	<p>Up to £1000 one-off (Some owners may have anticipated this requirement.)</p> <p>This again is an indicative estimate. The costs of installation will depend on individual ships' configuration, and, to obtain a more accurate estimate, a ship's plans need to be submitted to a manufacturing/installation company in order for them to produce one.</p> <p>References:</p> <p>http://www.amazon.com/MR20PA-Marine-Public-Address-System/dp/B0014LDOCA</p> <p>http://www.outdoorspeakerstore.com/home.php?cat=301</p> <p>http://reviews.cnet.com/speakers-speaker-systems/boss-audio-mr20pa-marine/4014-6467-7-33578489.html</p> <p>http://www.hose-mccann.com/marine.cfm</p> <p>Post-consultation industry estimate: £5000</p>
Regulation 17 (page 111) Special arrangements for ships carrying dangerous goods	- New B, C and D constructed before 1 January 2003 - Existing Class B	Must comply with the version of SOLAS II-2/54 in force on 17 March 1998.	No substantive change
Chapter III Part B – Life Saving Appliances			
Regulation 2.3 (page 112)	New and existing B, C, and D	Three immersion suits for each lifeboat (except closed lifeboats)	<p><u>£348 to £385 one-off</u></p> <p>References:</p> <p>Intrepid MK 1 £290 (+VAT £58) = £348 http://www.lifejackets.co.uk/products/394/solas-abandonment-mk1-immersion-suit-insulated-cold-water</p> <p>Mullion Smart SOLAS Suit 1A - £320.32 (+VAT £64.07) = £384.39 http://www.rhtltd.co.uk/catalogue/Solas-Immersion-Suits.html</p>

		Thermal protective aid for each person accommodated	<p><u>£12 to £15 one-off</u></p> <p>References:</p> <p>Safety Marine Thermal Protective Aid £12 (INC VAT) http://marinestore.co.uk/ocSUR0140.html</p> <p>Ocean Safety Thermal Protective Aid £14.99 (INCL VAT) http://www.marinescene.co.uk/category/430/safety-items/</p> <p>Not applicable as UK ships are not fitted with lifeboats.</p>
Regulation 2.5 (page 112)	New and existing B, C and D	Immersion suit or anti-exposure suit for every person assigned to crew rescue boats or marine evacuation party.	<p><u>Immersion suit £294 to £385 one-off</u></p> <p>References:</p> <p>http://zqzjrongsheg.en.alibaba.com/search/product?IndexArea=product_en&SearchText=solas+immersion&fl=y&d_pid=489845704&d_type=sp</p> <p>Intrepid MK 1 £245 (+VAT £49) = £294 http://www.lifejackets.co.uk/products/394/solas-abandonment-mk1-immersion-suit-insulated-cold-water</p> <p>Mullion Smart SOLAS Suit 1A - £320.32 (+VAT £64.07) = £384.39 http://www.rhlttd.co.uk/catalogue/Solas-Immersion-Suits.html</p> <p><u>Anti-exposure suit £222 to £383</u></p> <p>References:</p> <p>Intrepid Mk 8 £184.50 (+VAT £36.90) = £222 http://www.lifejackets.co.uk/products/395/solas-abandonment-mk8-immersion-suit-non-insulated-lightweight</p> <p>Regatta Immersion Suit £319.01 (+VAT £63.81) = £383 http://www.donmor.co.uk/flotation.immersion.suits.immersion%20suit.page9g.html</p> <p>All such ships affected</p>
Table to Regulation 2.1, notes 10 and 13 (page 113)	New and existing B, C and D	Infant lifejackets for 2.5% of the number of passengers carried. All to be fitted with light.	<p><u>£33 to £42 one-off</u></p> <p>References:</p> <p>Bluewave Baby Lifejacket £33 (inc VAT) http://www.lifejackets.co.uk/products/265/bluewave-baby-lifejacket-100n</p> <p>Crewsaver Baby Lifejacket £42 (inc VAT) http://www.watersportwarehouse.co.uk/shop/sailing-boating/buoyancy-aids/junior-buoyancy-aids/crewsaver-euro-100n-lifejacket-547744.html</p> <p>All such ships affected</p>
Table to Regulation 2.1, note 3	New and existing B, C and D	<p>- Survival craft for new ships to be provided for 125% of the number of persons carried.</p> <p>- Survival craft for existing ships to be provided for 110% of the number of persons carried.</p> <p>(NB The number of persons carried includes crew)</p>	<p>Most of these examples are converted from US dollars so the costs will vary depending on the exchange rate from US dollars to sterling.</p> <p>4 man liferaft from £1031 to £2,373.</p>

	<p>for eligible ships.</p>	<p>New provision allowing additional liferafts to be required where Chapter III, Regulation 7.5, regarding throw-overboard liferafts, is not complied with.</p>	<p>References:</p> <p>Seasafe standard 4 man with SOLAS B pack £859.26 (+ VAT £171.86) = £1031.12 http://www.norwestmarine.co.uk/shop/Standard_Life_Rafts_SOLAS_B_Pack.html</p> <p>Ocean Master 4 man £1976.76 (+VAT £395.4) = £2373 http://www.life-raft.com/11248/572788/SOLAS-Life-Rafts/Revere-Oceanmaster-4-Person-USCG-Approved-Offshore-Liferaft.html</p> <p>6 man liferaft from £1,182 to £2,892.</p> <p>References:</p> <p>Seasafe standard 6 man with SOLAS B pack £984.70 (+ VAT £196.94) = £1181.64 http://www.norwestmarine.co.uk/shop/Standard_Life_Rafts_SOLAS_B_Pack.html</p> <p>Revere Ocean Master 6 man £2409.76 (+VAT £481.96) = £2892 http://www.navshack.com/category-s/119.htm</p> <p>8 man liferaft from £1,355 to £3,163.</p> <p>References:</p> <p>Seasafe standard 8 man with SOLAS B pack £1,128.96 (+ VAT £225.80) = £1354.76 http://www.norwestmarine.co.uk/shop/Standard_Life_Rafts_SOLAS_B_Pack.html</p> <p>Revere Ocean Master 8 man £2635.67 (+VAT £527.14) = £3163 http://www.navshack.com/category-s/119.htm</p> <p>10 man liferaft from £1,445 to £3535.</p> <p>References:</p> <p>Seasafe standard 10 man with SOLAS B pack £1,204.22 (+ VAT £240.85) = £1445.07 http://www.norwestmarine.co.uk/shop/Standard_Life_Rafts_SOLAS_B_Pack.html</p> <p>Revere Ocean Master 10 man £2936.89 (+VAT£587.38) = £3535 http://www.navshack.com/category-s/119.htm</p> <p>12 man liferaft from £1,536 to £3,705.</p> <p>References:</p> <p>Seasafe standard 12 man with SOLAS B pack £1,279.49 (+ VAT £255.90) = £1535.39 http://www.norwestmarine.co.uk/shop/Standard_Life_Rafts_SOLAS_B_Pack.html</p> <p>Revere Ocean Master 12 man £3087.50 (+VAT£617.50) = £3705</p>
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			<p>http://www.navshack.com/category-s/119.htm</p> <p>16 man liferaft £4,671 + cost of davit launch £ 692. Total £ 5,363.</p> <p>References:</p> <p>Ocean Master 16 man liferaft £3,892.15 (+ VAT £778.43) = £4670.58 http://www.navshack.com/Revere-50-R-R-8M-A-8-Man-Liferaft-p/ns50-r-fslash-r-8m-a.htm</p> <p>20 man liferaft £5042 + cost of davit launch £720. Total £ 5,762.</p> <p>References:</p> <p>Ocean Master 20 man liferaft £4,201.08 (+ VAT £840.22) = £5041.30 http://www.navshack.com/Revere-50-R-R-8M-A-8-Man-Liferaft-p/ns50-r-fslash-r-8m-a.htm</p> <p>25 man liferaft £5,250 + cost of davit launch £728. Total £5,978.</p> <p>References:</p> <p>Ocean Master 25 man liferaft £4,374.70 (+ VAT £874.94) = £5249.64 http://www.navshack.com/Revere-50-R-R-8M-A-8-Man-Liferaft-p/ns50-r-fslash-r-8m-a.htm</p> <p>37 man liferaft £9206 + cost of davit launch £728. Total £9934.</p> <p>References:</p> <p>Zodiac 37 person liferaft with SOLAS A equipment pack £7,671.42 (+ VAT £1,534.29) = £9205.71 http://www.westpacmarine.com/db/Display/itemDisplay.asp?varItem=ZOD0737</p> <p><i>New ships affected individually in accordance with numbers and distribution of survival craft on each ship</i></p> <p><i>Existing ships may be covered by the UK equivalence arrangement described in MSN 1811</i></p>
Regulation 2.1, table, note 12 (page 113)	New and existing B, C and D	New requirements for sufficient number of lifejackets to fit persons weighing up to 140kg/chest girth up to 1750mm, or accessories allowing other lifejackets to be adapted.	<p>Cost of adaptors for proportion of existing lifejackets, or equal number of new lifejackets with built-in oversize capability (now a requirement for SOLAS or MED approved lifejackets).</p> <p>Single emergency 100N one-size (to XL) £18.75 (+ VAT £3.75) = £22.50</p> <p>Adult foam SOLAS to XXXL £39.90 (+VAT £7.98) = £47.88</p> <p>http://www.lifejackets.co.uk/categories/55/foam-solas-and-ce-approved-ferry-type-lifejacket</p> <p><i>NB. New SOLAS or MED approved lifejackets are designed so that they can expand to fit the larger girth under new international requirements. The cost of adaptors</i></p>

			<p>is as great as the cost of a new lifejacket.</p> <p>Post-consultation industry estimate: £100 per passenger</p>
Regulation 3.3a.1 (page 115)	New and existing B, C and D	New requirement for radiocommunications personnel to be suitable qualified	<p>Cost of GMDSS short range certificate course £84 one-off. http://www.marineradio.co.uk/src.html</p> <p>Exam fee and handbook £37 one-off. http://www.marineradio.co.uk/src.html</p> <p>Cost of GMDSS long range certificate course £340 one-off. http://www.yachtcom.co.uk/lrc/</p> <p>Exam fee £95. Handbook £20. http://www.yachtcom.co.uk/lrc/</p> <p>All ships previously compliant under Radio Regulations.</p>
Regulation 5.2.1 (page 116)	New and existing B, C and D	New requirement for muster stations on existing ships to have sufficient space to accommodate all persons assigned to them. (Previously applied only to "new" ships.)	Potential cost of modification of muster station. Not possible to quantify as the cost will depend on size, age and configuration of the ship. However, this requirement may result in the need to clear space at a muster station in order for the space to be large enough to fit all persons assigned to muster at the station. This could mean the removal of passenger seating and therefore passenger numbers on some vessels.
Regulation 5.8 (page 116)	New and existing B, C and D	Requirement for embarkation ladder is now extended to cover existing ships	<p>Most of these examples are converted from US dollars so the costs will vary depending on the exchange rate from US dollars to sterling.</p> <p>Embarkation ladder £35 to £120 one-off.</p> <p>References:</p> <p>Large embarkation ladder £63.33 (+ VAT £12.67) = £76. http://www.exporters.sg/product-embarkation-ladder/page1.html</p> <p>http://www.seacontractor.com/ladder.htm</p> <p>http://www.alibaba.com/showroom/aluminum-pilot-ladder.html</p> <p>Already a requirement of existing UK ships already compliant by virtue of Regulation 13 of SI 1999/2723 (The Merchant Shipping (Life Saving Appliances for ships of Class III to VI(A)) Regulations 1999).</p>
Ro-ro passenger ships - Life saving appliances			
Regulation 5-1.1.3 (page 117)	All B, C and D Ro-ro ships (Previously applied only to those constructed before 01/01/2003)	Extended requirement for every liferaft to be provided with float-free stowage arrangements	<p>Cost of hydrostatic release unit for liferaft from £45 to £72.</p> <p>References:</p> <p>Hammar 4 man £42.50 (+ VAT £8.50) = £51 http://www.norwestmarine.co.uk/shop/Hydrostatic Release Units.html</p> <p>Hammar 6 + man £37.50 (+ VAT £7.50) = £45</p>

			<p>http://www.norwestmarine.co.uk/shop/Hydrostatic Release Units.html</p> <p>Thanner 4 man £60 (+ VAT £12) = £72 http://www.norwestmarine.co.uk/shop/Hydrostatic Release Units.html</p> <p>Hammar hydrostatic release unit large liferaft model £39.50 (+ VAT £7.90) = £47.40 http://www.cmimariningsafety.com/hydrostatic-releases.html</p> <p>Hammar hydrostatic release unit small liferaft model £39.50 (+ VAT £7.90) = £47.40 https://www.aerosafe.co.uk/acatalog/copy_of Marine Liferaft Accessories.html#a172</p> <p>It is believed that the majority of UK domestic passenger ships already comply with this requirement</p>
Regulation 5-1.2.1 (page 117)	All B Ro-ro ships by 1 January 2012	New requirement for carriage of radar transponders on (1 in 4) liferafts on Class B Ro-ro passenger ships	<p><u>Cost of radar transponders from £510 to £741 one-off.</u></p> <p>References:</p> <p>McMurdo S% Smartfind AIS SART£425 (+VAT£85) = £510 http://www.selexmarine.com/sale/</p> <p>Tron SART 20 MED approved GMDSS Radar Transponder £617.15 (+ VAT £123.43) = £740.58 http://www.outdoorgb.com/p/tron_sart_gmdss_9_ghz_radar_transponder/</p> <p>Tron 9 GHz GMDSS SART £598.32 (+ VAT £119.67) = £717.99 http://www.capitalstores.co.uk/jotron-tron-9ghz-gmdss-sart</p> <p>All such ships affected</p>
Regulation 5-1.3 (page 117)	All B, C and D Ro-ro ships (Previously applied only to those constructed after 1 January 2003.)	Extended requirements for fast rescue boats (FRBs)	<p><u>Cost of fast rescue craft from £1,071 to £174,435, according to size and specification. One-off cost.</u></p> <p>References:</p> <p>Fehmernaelt (ex. Elsa Golje) Type of vessel £145,362.08 (+ VAT £29,072.42) = £174434.50 http://commercial.apolloduck.com/listings.phtml?view=1&layout=1&cid=46&fx=GBP&min=0&type=&minv=&maxl=0&limit=10</p> <p>http://commercial.apolloduck.co.uk/print.phtml?id=217969</p> <p>Saturn Inflatable Boat SD430 £892.21 (+ VAT £178.43) = £1070.64 http://www.boatstogo.com/inflatable_boat_sd430.asp</p> <p>Delta 6.75mtr Rigid Inflatable (RIB) X-Range Fast Rescue Craft http://www.sara-rescue.org.uk/about/fleet/rescue-boat/sara-1/</p>

			(Note: The higher cost given above is for a large FRB suitable for a ship on international voyages.)
Regulation 5-1.4 (page 118)	All Class B, C and D ro-ro ships (Previously applied only to those constructed after 01/01/2003)	Extended requirements for means of rescue.	One-off cost. COSALT Personnel Recovery Device – rescue stretcher configuration - £1,230 (+ VAT £246) = £1476 http://www.cosalt.com/products-services/products/marinesafety.as hx?node=C620832C-B433-4FC7-A07B-A2D41CA01502&pr_id=53 Jasons Cradle FRC Kit for craft length < 5m £975 (+ VAT £195) = £1170 http://www.jasonscradle.co.uk/downloads/JCPL.408.pdf Jasons Cradle FRC Kit for craft length > 5m £975 (+ VAT £195) = £1170 http://www.jasonscradle.co.uk/downloads/JCPL.408.pdf All such ships affected
Servicing costs for LSA equipment	New and Existing ships	25 Person Davit Launch Self-Righting Liferaft Single chamber lifejacket Twin chamber lifejacket Immersion suit inspection fee Portable extinguisher service Pyrotechnic – Para red rocket Pyrotechnic – red hand flare Flare – Lifesmoke Man overboard 360 Lifebuoy Marker EPIRB – battery change SART – battery change	£230 (+ VAT £46) = £276 http://www.cosalt.com/products-services/products/marinesafety.as hx £14 (+ VAT £2.80) = £16.80 http://www.cosalt.com/products-services/products/marinesafety.as hx £15 (+ VAT £3) = £18 http://www.cosalt.com/products-services/products/marinesafety.as hx £49 (+ VAT £9.80) = £58.80 http://www.cosalt.com/products-services/products/marinesafety.as hx £19 (+ VAT £3.80) = £22.80 http://www.cosalt.com/products-services/products/marinesafety.as hx £19 (+ VAT £3.80) = 22.80 http://www.cosalt.com/products-services/products/marinesafety.as hx £7 (+ VAT £1.40) = 8.40 http://www.cosalt.com/products-services/products/marinesafety.as hx £21 (+ VAT £4.20) = 25.20 http://www.cosalt.com/products-services/products/marinesafety.as hx £2001 (+ VAT £400.20) = 2401.20 http://www.cosalt.com/products-services/products/marinesafety.as hx £320 (+ VAT £64) = 384 http://www.cosalt.com/products-services/products/marinesafety.as hx £274 (+ VAT £54.80) = 328.80 http://www.cosalt.com/products-services/products/marinesafety.as hx

		<p>Lifebuoy light</p> <p>Lifejacket light</p> <p>Inflatable – 6 man - service</p>	<p>£55 (+ VAT £11) = 66 http://www.cosalt.com/products-services/products/marinesafety.aspx</p> <p>£1 5.02 Incl VAT http://www.cosalt.com/products-services/products/marinesafety.aspx</p> <p>£230 (+ VAT £46) = 276 http://www.cosalt.com/products-services/products/marinesafety.aspx</p> <p>The above are applicable as new annual costs where a new carriage requirement for the equipment concerned is shown earlier in this table.</p>
Chapter IV Radiocommunications	-		
Regulation 1 (page 123)	New and existing D	<p>Requirements for VHF radio capable of:</p> <ul style="list-style-type: none"> - DSC on channel 70; - radiotelephony on channels 6, 13 and 16; - general radiotelephony capabilities. 	<p>From £142 to £380</p> <p>References:</p> <p>Lowrance LVR88OE DSC £142 http://www.mesltd.co.uk/lowrance-lvr880e-radio-p-11278.html</p> <p>ICOM M505 DSC £380 Incl VAT http://www.force4.co.uk/9787/icom-M505-VHF---HM162-2nd-Station-Package.html</p> <p>UK Class ships are already fitted or have anticipated this requirement. They may also have superior equipment.</p> <p>Post-consultation industry estimate: £2000</p>

Table 3 - New Safety Requirements for ships constructed on or after 1 January 2012

This table relates to paragraphs 6.16 to 6.19 in the Evidence Base of this Impact Assessment. These requirements would be incorporated at the design stage of the ship, and the compliance costs incurred at the construction stage.


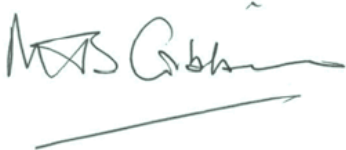
References to Annex I of Directive 2010/36/EU (Annex I) Regulation	- Class - Other criteria	Requirement/s
Chapter II-1, Part A -1 – Structure of ships Regulation 2 (page 10)	B, C and D	A set of construction drawings/plans to be kept on the ship, and by the company ashore.
Chapter II-1, Part C – Machinery controls Regulation 12.9 (page 39)	B, C and D over 24m in length	Automation systems must include early warning of slowdown or shutdown of the propulsion system.
Chapter II-1, Part D – Electrical installations Regulation 2.4 (page 40)	B, C and D	Supplementary lighting to be provided in all cabins to enable occupants to find their way to the door.
Chapter II-1, Part D – Electrical installations Regulation 5.10 (page 43)	B, C and D	No electrical equipment to be installed in any space where flammable mixtures are liable to collect.
Chapter II-2, Part A – General Regulation 10.2.5.2 (page 69)	B, C and D less than 500gt	Fuel tanks above the double bottom to be fitted with a cock or valve.

Annex 3

UK Ship Classes that cover domestic passenger ships

The table below shows the UK ship classes that are applicable to “existing” UK domestic passenger ships. These classes are purely a UK measure, and are not relevant or recognised in other EU member States. They do not correspond to any of the EU ship classes, but the nearest ones that correspond with them are shown in column three. They form the basis and alternate (pre-existing) regulatory structure for negotiated easements (equivalences or derogations administered under Directive Article 9) agreed with the European Commission, by which “existing” UK domestic passenger ships are permitted to continue in operation.

UK Class	Definition	Nearest corresponding EU Class
II(A)	Ships engaged on voyages of any kind other than international voyages, which are not ships of Classes III to VI(A) as defined in the Merchant Shipping (Passenger Ship Construction: Ships of Classes III to VI(A)) Regulations 1998	A & B
III	Ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their point of departure and not more than 18 miles from the coast of the United Kingdom, and which are at sea only in favourable weather and during restricted periods;	A and B (with restricted operations)
VI	Ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C or D waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any Category A, B, C or D waters, from their point of departure nor more than 3 miles from land;	C (with restricted operations)
VI(A)	Ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated communities on the islands or coast of the United Kingdom and which do not proceed for a distance of more than 3 miles from land; subject to any conditions which the Secretary of State may impose.	B, C or D (all with restricted operations)

 Regulatory Policy Committee	OPINION	
Impact Assessment (IA)	The Merchant Shipping (Passenger Ships on Domestic Voyages) (amendment) Regulations 2012	
Lead Department/Agency	Department for Transport	
Stage	Final	
Origin	European	
IA number	DfT143	
Date submitted to RPC	16/10/2012	
RPC Opinion date and reference	30/11/2012	RPC12-DfT-1321(3)
OIOO Assessment	GREEN	
<p>As this proposal is of European origin, with no evidence of going beyond minimum requirements, it is out of scope of 'One-in, One-out' in accordance with the current One-in, One-out Methodology (paragraph 16; ii).</p>		
<p>Overall quality of the analysis and evidence presented in the IA</p> <p>The issues raised in our previous opinion (6 September 2012) have been addressed. In particular, the Department has undertaken a further consultation so that the supporting evidence base could be strengthened, and the IA includes a fuller explanation as to why some costs could not be monetised.</p> <p>In addition, the IA also now provides evidence to support the conclusion that if option 2 was pursued, transposing the 2010 directive into UK law and extending its application to those domestic seagoing vessels, then some or much of the fleet would become economically unviable.</p>		
Signed 	Michael Gibbons, Chairman	