

Title: Merchant Shipping (Maritime Labour Convention) (Crew Accommodation) Regulations 2013 ("the proposed Regulations") IA No: DFT00030 Lead department or agency: Maritime and Coastguard Agency Other departments or agencies: Department for Transport	Impact Assessment (IA)		
	Date: 22/05/2014		
	Stage: Final		
	Source of intervention: International		
	Type of measure: Secondary legislation		
Contact for enquiries: Matt Giacomini, Tel: 02380 329538			
Summary: Intervention and Options			RPC: GREEN

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 Two-Out?
-£117.0m	-£117.0m	£0	Yes Zero Net Cost

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

Standards of crew accommodation are inconsistent across the shipping industry. Employment conditions for seafarers vary globally, with some seafarers working under unacceptable conditions and ship operators which operate substandard ships gaining a competitive advantage. Effective international standards are therefore needed to address this. The Maritime Labour Convention 2006 (MLC) aims to provide minimum living and working conditions for seafarers that are globally applicable and uniformly enforced, including on crew accommodation. Achieving this requires the MLC to be ratified, which requires a package of new legislation in the UK. The UK ratified the MLC on 7 August 2013, so UK legislation must be fully compliant.

What are the policy objectives and the intended effects?

The purpose of the proposed Regulations is to promote decent living and working conditions for seafarers globally and a more level competitive playing field for shipping, as part of the UK's implementation of the MLC, by a) bringing existing legislation for UK ships into line with the minimum global standards for crew accommodation; b) fully complying with MLC standards under UK international obligations as a ratifying country; and c) enabling the UK to enforce these minimum global standards for crew accommodation on non-UK registered ships that call at UK ports. Specific objectives for crew accommodation can be found in the Evidence Base.

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

The Government's social partners, the British Chamber of Shipping and the seafarers' Trades Unions, supported prompt ratification of the MLC. Doing nothing is not therefore considered to be an appropriate course of action, as new legislation is required to meet the UK's obligations as a ratifying country. Furthermore, the UK is obliged to implement Directive 2009/13/EC implementing the European Social Partner's Agreement on the MLC. The preferred policy option is therefore to introduce the proposed Regulations (Policy Option 1) which it is considered would make the necessary changes to existing legislation to implement the provisions of the MLC on crew accommodation as agreed with social partners. No further measures have been deemed to be necessary, and so only one Policy Option has been considered in this impact assessment.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: March 2019						
Does implementation go beyond minimum EU requirements?				N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.		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: None

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: Stephen Hammond Date: 24/06/2014

Summary: Analysis & Evidence

Policy Option 1

Description: Introduce proposed Regulations to bring UK legislation into line with Regulation 3.1 and Standard A3.1 of the MLC

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 30	Net Benefit (Present Value (PV)) (£m)		
			Low: -£43.0m	High: -£235.1m	Best Estimate: -£117.0m

COSTS (£m)	Total (Constant Price)	Transition Years	Average (excl. Transition) (Constant Price)	Annual (Constant Price)	Total (Present Value)	Cost
Low	N/Q	N/A	£2.2m		£43.0m	
High	N/Q		£12.2m		£235.1m	
Best Estimate	N/Q		£6.2m		£117.0m	

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

The costs to owners and operators of new UK registered ships of complying with the MLC requirements by allowing more space for crew accommodation have been estimated at around £2.2 to £12.2 million per year on average, with a best estimate of around £6.2 million per year on average. These illustrative estimates are shown on this summary sheet. However, the extent that these costs represent a cost to the UK and the extent that these costs should be attributed to the proposed Regulations are uncertain.

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

1) There could potentially be additional costs associated with designing new ship layouts and sizes. 2) For the owners and operators of new UK registered ships, there could also be additional operating costs in terms of heating, lighting, air conditioning, etc. of larger crew spaces, additional tonnage tax resulting from increased vessel size, and familiarisation costs. 3) There could be some costs to the owners and operators of a) existing UK registered ships and / or b) non-UK registered ships.

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

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

Given the limitations of the available evidence base, it has not been possible to monetise any of the benefits that have been identified in this impact assessment

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

The benefits from these Regulations were largely dependent on UK ratification of the MLC, which the UK did on 7 August 2013. The key benefits of the MLC Crew Accommodation Regulations are as follows: 1) Seafarers would benefit directly from more comfortable living conditions, and there could potentially be some indirect benefits for health and welfare. 2) There could potentially be safety benefits from reduced crew fatigue. 3) Ratification of the MLC requires implementation of all the constituent Regulations (including the proposed Regulations), and would provide additional benefits as discussed in Section 3 and Annex 3.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

1) Due to the limitations of the available evidence base, a range of assumptions have had to be made, and it has not been possible to monetise some of the costs and benefits. 2) The estimates of the monetised costs are particularly sensitive to the assumptions made and the data sources used (e.g. information from industry sources) and should be treated as indicative orders of magnitude of the potential costs. 3) The extent that the estimated monetised costs to the UK registered ships would represent a cost to the UK is uncertain. 4) Further details of assumptions made are given in the Evidence Base.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: £0	Benefits: £0	Net: £0	Yes	Zero net cost

Evidence Base (for summary sheets)

Title of Proposal

The Merchant Shipping (Maritime Labour Convention) (Crew Accommodation) Regulations (“the Regulations”).

1. Consultation on the proposals

Like all Conventions of the International Labour Organisation, the Maritime Labour Convention, 2006 was drawn up on a tripartite basis in negotiations between ship owner organisations, seafarer organisations and governments, and the UK took a leading role in all three delegations. The MCA has continued to work closely with its social partners on the implementation of the Convention, through a tripartite working group – see Annex 4.

The impact assessment for these proposals, issued as part of the public consultation package, invited consultees to submit additional evidence on the costs and benefits of the proposed regulations. 176 organisations and companies were directly notified of the consultation exercise, including the UK Chamber of Shipping which represents a broad cross section of UK shipping companies in all sectors, and other trade associations such as the British Marine Federation and International Marine Contractors Association. Five written responses were received from significant players in the industry. Some consultees confirmed MCA’s view that in general the proposals reflect current good practice. The responses on specific aspects of the proposals are included in the costs section below, but in summary, there was no opposition in principle to implementation of the MLC standards, and no evidence was provided of costs or benefits arising from the requirements which MCA had not foreseen. There were some concerns raised on details of UK implementation which can be addressed through improved guidance, rather than substantive changes to the requirements. No quantified evidence of costs or benefits was provided.

2. Problem under consideration

It is considered that all seafarers should have acceptable employment conditions, including on crew accommodation. However, employment conditions for seafarers vary across the world, with some seafarers working under unacceptable conditions and shipowners operating substandard ships, thus gaining a competitive advantage. In particular, ILO (2012) suggests that “seafarers often have to work under unacceptable conditions, to the detriment of their well-being, health and safety and the safety of the ships on which they work.” In addition, ILO (2012) suggests that flag States and shipowners which provide seafarers with decent conditions of work “face unfair competition in that they pay the price of being undercut by shipowners which operate substandard ships.”

The specific problem under consideration which the proposed Regulations would directly address is how to ensure that seafarers are provided with adequate standards of crew accommodation, bearing in mind that “crew accommodation” includes not only spatial requirements of sleeping accommodation, but also sanitary facilities, heating, lighting, ventilation, etc.

Examples of cases where there have been inadequate standards of crew accommodation include:

- a) a foreign ship which was detained in Birkenhead. The toilets, bathrooms and galley were filthy, and there the heating was not working – a crew member was trying to keep warm using the kebab grill. There also was not enough food onboard to feed the crew; and
- b) a seafarer contacted the MCA anonymously to ask for advice. He had been told to give up his sleeping berth for two weeks while visitors were onboard the ship. During this period he had to sleep on the floor.

This suggests that, in the absence of government intervention, shipowners may not ensure that seafarers have adequate standards of crew accommodation.

Poor standards of crew accommodation can result in excess fatigue, due to cramped conditions and lack of adequate comfortable relaxation facilities, which can also increase any personal tensions which exist among the crew. This is compounded by limited opportunities for shore leave. Excess noise and vibration can also degrade the quality of rest, accelerating the onset of fatigue during the subsequent period of work. Poor sanitary facilities and ventilation can accelerate the spread of disease, as can insufficient or inadequate provision of dedicated hospital accommodation. Inoperative or inadequate

heating can lead to unhealthy and dangerous practices such as the use of cooking equipment to keep warm, as cited in the example above. All these things have the potential to undermine the safety of the ship and the well-being of the crew. The following quotes by seafarers reported in the Report of the *Nautilus International survey of seafarers' living and working conditions – September 2010*. (Nautilus International is the main seafaring officers Union.) The findings of this Report stated that accommodation standards and noise were two of the main issues highlighted by seafarers when commenting on issues at sea (*Nautilus International survey of seafarers' living and working conditions (page 10) – September 2010*).

Seafarer quote

"I work 12 hours days minimum. 7 days a week for 6 weeks. At the end of my tour I'm physically and emotionally exhausted" *page 17, Nautilus International survey of seafarers' living and working conditions - September 2010*

Seafarer quote

"Need quiet accommodation/ insulation to allow sleep" *page 18, Nautilus International survey of seafarers' living and working conditions - September 2010*

Seafarer quote

"Accommodation on my vessel is very poor – bulkheads [walls] are paper thin and it is impossible to receive a proper rest period in the cabin. Poor c**p quality ... fittings. Toilets continually blocked. Crew comfort not taken into consideration, which is terrible seeing as this is a new vessel!" *page 18, Nautilus International survey of seafarers' living and working conditions - September 2010*

Seafarer quote

"Unable to leave the ship during tour periods, so onboard facilities are very important" *page 21, Nautilus International survey of seafarers' living and working conditions - September 2010*

Seafarer quote

"I can expect to go away for 6 weeks and not have any time ashore. Work takes up all of every day – there is always more to do than time available." *page 24, Nautilus International survey of seafarers' living and working conditions - September 2010*

Seafarer quote

"Plenty of terminals have a blanket ban on seafarers going ashore ..." *page 24, Nautilus International survey of seafarers' living and working conditions - September 2010*

Seafarer quote

"Shipboard facilities have been continually removed from my ships, with the new class having no outside space or any comfortable inside recreational space. New accommodation is a distinct step backwards in comfort and relaxation." *page 25, Nautilus International survey of seafarers' living and working conditions - September 2010*

Furthermore, given that there are costs of providing seafarers with decent conditions of work in relation to standards of crew accommodation, this means that shipowners operating substandard ships can potentially undercut shipowners which provide seafarers with decent conditions of work, and can consequently potentially gain a competitive advantage.

3. Rationale for Intervention

Given the international nature of the shipping industry, it is considered that effective international standards are needed to address the issues and risks that have been raised in Section 2, and to provide decent working conditions and a level playing field for ships of different flags. This is why the MLC has been developed in the ILO by government, employer and seafarer representatives as a global instrument to address these. The MLC aims to provide minimum rights for all seafarers that are globally applicable and uniformly enforced, including on standards of crew accommodation in the categories outlined in Section 4. Improved crew accommodation standards have the potential to relieve problematic human factors like fatigue, which are known to be the cause of the vast majority of maritime accidents.

"Human error has variously been attributed to: 80% of marine casualties; 80% of offshore accidents;" *Lloyd's Register of Shipping Report - Why addressing the Human Element meets cost/benefit criteria - March 2009 v1.0 (section 3.1, page 7)*

The MLC was adopted in the ILO by a record vote of 314 in favour and none against (two countries abstained for reasons unrelated to the substance of the MLC). The ratification criteria to bring the Convention into force internationally were met on 20 August 2012, and the MLC will therefore come into force internationally on 20 August 2013. It is expected to be widely ratified. The Government's social partners, the shipping industry and the seafarer's Trades Unions (see Annex 4), strongly supported ratification of the MLC in the UK which took place on 7 August 2013.

Full compliance with the MLC in the UK requires a package of new legislation to be introduced to implement some of the provisions of the MLC in UK law, including the provisions of the MLC regarding crew accommodation. Doing nothing is therefore not considered to be an appropriate course of action.

The proposed Regulations will bring existing legislation for UK registered vessels into line with the minimum global standards for crew accommodation provided for in the MLC. The proposed Regulations would ensure that UK shipping meets these international standards which are expected to apply to the vast majority of world shipping once the MLC has been fully implemented.

In addition, the Regulations would allow the UK to enforce these minimum global standards on non-UK registered vessels visiting UK ports on a "no more favourable treatment" basis.

Furthermore, UK ratification of the MLC has avoided the costs of not ratifying the MLC. In particular, regardless of whether the UK ratified the MLC, UK registered vessels would still have been subject to the provisions of the MLC on a "no more favourable treatment" basis when operating in foreign ports in countries that had ratified the MLC. This could have resulted in UK registered vessels being delayed due to inspections to check their compliance with the MLC. The proposed Regulations will require UK registered vessels to comply with MLC standards, avoiding or reducing the likelihood of delays related to inspections in foreign ports in other countries that have ratified the MLC.

Although the primary reason for UK ratification of the MLC was the benefits it brings to UK shipping, and avoiding the risks and costs of not ratifying, it should also be noted that there is a European Social Partners Agreement which seeks to implement those aspects of the MLC which are within their "competence". Council Directive 2009/13/EC annexes the Agreement between the European Community Shipowners' Association (ECSA) and European Transport Workers' Federation (ETF) on the Maritime Labour Convention 2006 and the agreement on amendments to the Agreement on the Organisation of Working Time of Seafarers dated 30 September 1998 (set out at Annex A to the Annex). This includes some of the MLC standards on crew accommodation. The Directive requires Member States to implement the European Social Partners' Agreement on the MLC. The Directive came into force on the date on which the MLC came into force internationally. The UK has a duty to implement the Social Partners' Agreement, which in practice means that the UK is under a European legal requirement to implement some (but not all) MLC provisions in UK law. The transposition deadline for the Directive is 12 months from the coming into force date. However, as explained above, to support the UK shipping industry there was a need for the UK to ratify the MLC by the time it came into force internationally, which was earlier than the transposition deadline for the European Directive. Implementation of the minimum changes required to bring UK legislation fully into line with Title 3.1 of the MLC on crew accommodation also fully implements the provisions of the crew accommodation aspects of Directive 2009/13/EC. The Directive is not therefore considered further in this Impact Assessment.

Further details of the requirements for and benefits of UK ratification of the MLC, and the costs to the UK of not ratifying the MLC, are discussed in Annex 3 of this impact assessment.

4. Policy Objectives

The purpose of the proposed Regulations is to bring existing UK legislation into line with the requirements of the MLC related to crew accommodation in fulfilment of the UK's international obligations as a ratifying country, and in order to:

- secure decent working and living conditions for seafarers on UK registered ships and globally, including on crew accommodation;
- promote a more level competitive playing field for international shipping by enforcing these standards on non-UK registered vessels that call at UK ports;
- enable the MCA to impose MLC crew accommodation standards to UK registered vessels, removing the potential for UK flagged vessels to experience delays in foreign ports in countries that have ratified the MLC;
- comply with the UK's European legislative obligations in relation to the provisions in the MLC covered by Directive 2009/13/EC, thus avoiding the risk of infraction proceedings being taken against the UK.

The proposed Regulations would ensure that seafarers on UK registered ships have decent accommodation and recreational facilities onboard by bringing UK legislation into line with Regulation 3.1 and Standard A3.1 of the MLC on crew Accommodation, which covers the following areas:

- a) the size of rooms and other accommodation spaces;
- b) heating and ventilation;
- c) noise and vibration and other ambient factors;
- d) sanitary facilities;
- e) lighting; and
- f) hospital accommodation.

Table 1 shows the likely level of impact that the MCA expect the proposed Regulations would have on the standards for crew accommodation on UK registered ships compared to existing UK legislation.

Table 1 – Overview of likely impact

General area	Likely level of impact
Size of rooms and other accommodation spaces	Some additional space would be required
Heating and ventilation	No significant changes
Noise and vibration and other ambient factors	No significant changes
Sanitary facilities	No significant changes
Lighting	No significant changes
Hospital accommodation	No significant changes

A country which has ratified the MLC will be able to enforce the same standards for crew accommodation on ships of other flags calling at its ports, since the MLC provides that ships of non-ratifying countries should have "no more favourable treatment" in the ports of ratifying countries. The proposed Regulations would give the UK this power. This would remove the competitive advantage to shipowners operating into UK ports of flagging with a non-ratifying country.

5. Description of options considered

5.1 Do nothing

Existing UK legislation is not currently in compliance with the MLC in respect of crew accommodation standards. A 'Do nothing' Option would not achieve the policy objectives that are outlined above, and is not therefore considered to be an appropriate course of action. The risks of not ratifying the MLC are summarised at the end of Annex 3 of this impact assessment.

No further measures have been deemed to be necessary, and so only one Policy Option has been considered in this impact assessment.

5.2 Option 1: Introduce the proposed Regulations to make the necessary changes to implement the requirements of the Maritime Labour Convention in respect of Crew Accommodation, as agreed with social partners.

The minimum mandatory provision from Regulation 3.1 and Standard A3.1 of the MLC is that shipowners ensure that seafarers have decent accommodation and recreational facilities onboard.

Option 1 would revoke the Merchant Shipping (Crew Accommodation) Regulations 1997 for ships built after the Convention comes into force. The proposed new Regulations would bring UK law in line with the requirements of Regulation 3.1 and Standard A3.1 of the MLC.

Only ships built or substantially modified after the proposed Regulations come into force would be required to comply with the new standards, and in the case of ships built prior to these regulations coming into force but modified after, only to the extent of the modification. Existing legislation would remain valid for ships that are built/modified prior to the MLC coming into force, as applicable.

This option would achieve the main policy objectives. Introducing the proposed Regulations (Option 1) is the only policy option which would fulfil all policy objectives to the satisfaction of social partners and is therefore the preferred option.

6. Costs and benefits of proposed regulations (Option 1)

For the purposes of this impact assessment, the costs and benefits of the proposed Regulations (Option 1) have been monetised to the extent that is possible. Given the limitations of the available evidence base, it has not been possible to monetise some of the costs of the proposed Regulations (Option 1) and it has not been possible to monetise any of the benefits of the proposed Regulations (Option 1). Where it has not been possible to monetise a cost or benefit, a full qualitative description of the cost or benefit has been provided in this impact assessment. This description draws on information that has been received from the UK shipping industry. For the purposes of this impact assessment, it is assumed that the information received is representative of the current situation for UK registered ships more generally.

The impact assessment issued for public consultation invited consultees to submit additional evidence on the costs and benefits of the proposed regulations. The responses on specific aspects of the proposals are included below, but in summary no quantitative evidence was provided of costs or benefits arising from the Regulations which the MCA had not foreseen nor was quantitative evidence of costs or benefits received.

Comparison with 'Do Nothing' scenario

The 'Do Nothing' scenario represents what would happen if the Government does not take any action. Under the 'Do Nothing' scenario, the MLC will come into force in August internationally regardless of whether the UK was ready or not.

A large number of nations had ratified already the MLC when it came into force in August 2013. Being a Convention with worldwide application, and given that any UK ships visiting ports in ratifying countries (which are expected to be most countries within a fairly short timescale) will have to be compliant, its effects will be virtually impossible to escape for new ships wishing to trade internationally.

Therefore, MCA expects that a proportion of the additional costs of complying with the minimum mandatory requirements of the MLC would have been incurred anyway under the 'Do Nothing' scenario. As this proportion is uncertain, we do not know the extent to which any costs of complying with the minimum mandatory requirements of the MLC in respect of crew accommodation are truly additional costs of the proposed Regulations or whether they would have occurred anyway under the Do Nothing scenario.

Given these uncertainties, this Impact Assessment assesses the additional costs to business of complying with the minimum mandatory requirements of the MLC in respect of crew accommodation relative to the requirements of existing UK legislation or existing industry practice as applicable. These costs are discussed in Section 6.1 below, and on the 'Summary: Analysis & Evidence' sheet. In addition, where these costs have been monetised, the estimates are shown on the summary sheets. However, as discussed above, we do not know the extent to which the additional costs of complying with the minimum mandatory requirements of the MLC in respect of crew accommodation would truly be additional costs of the proposed Regulations.

6.1. Costs of the proposed Regulations (Option 1)

As the new MLC requirements would only apply to new-build ships, there would be no impact on existing ships, except if the crew accommodation was substantially modified after the coming into force of the new regulations, and then only to the extent of the modification. The MCA does not have access to any evidence on the likelihood that crew accommodation would be substantially modified on existing UK registered ships in the future, or the costs that would be incurred to meet the new MLC requirements in the event that the crew accommodation on an existing UK registered ship is substantially modified, as no central database exists on such modifications. Also, the MCA considers that such modifications would be self-limiting, as if there were significant cost involved in particular modifications this would reduce the amount of modifications as shipowners would elect not to carry them out, and if there were not significant cost then it would be disproportionate to attempt to assess it even if data were available to do so. Therefore, it has not been possible to monetise these costs in this impact assessment. However, it should be noted that no costs would arise for any existing UK registered ships where the crew accommodation is not substantially modified after the coming into the force of the new regulations.

With regard to new-build ships, a number of costs to the owners and operators of UK registered ships of complying with the MLC requirements on crew accommodation that would be introduced by the proposed Regulations have been identified. These costs have been monetised to the extent that is possible. However, as noted above, it has not been possible to monetise all of the costs identified in this impact assessment due to the limitations of the available evidence base. Full qualitative descriptions of the costs to the owners and operators of UK registered ships that it has not been possible to monetise are presented below.

For the purposes of this impact assessment, illustrative estimates of the costs to the owners and operators of UK registered ships that it has been possible to monetise are presented in section 6.1.5, section 6.1.6 and section 6.1.8 of this impact assessment. These illustrative estimates are also shown on the 'Summary: Analysis and Evidence' sheet in this impact assessment. However, it should be noted that the extent that the costs to the owners and operators of UK registered ships represent a cost to the UK and the extent that these costs should be attributed to the proposed Regulations are uncertain.

1. These costs would only represent a cost to the UK if they fall on UK entities (e.g. UK businesses or consumers). However, UK registered ships are not necessarily UK owned, and UK registered ships do not necessarily operate to and from UK ports.
2. As noted above, it is expected that the MLC would be widely adopted internationally. Given that new ships would be required to comply with the standards of the MLC on a 'no more favourable treatment' basis when they call in ports in countries that have ratified the MLC, there could be commercial incentives for shipowners to purchase MLC compliant ships regardless of whether the proposed Regulations are introduced. The extent that the costs to the owners and operators of UK registered ships would arise as a result of the proposed Regulations is therefore uncertain.

Furthermore, it should be noted that these illustrative estimates are very sensitive to the data sources that have been used in this impact assessment (e.g. information received from industry sources) and the assumptions that have had to be made due to the limitations of the available evidence base. These illustrative estimates should therefore be treated as indicative orders of magnitude of the potential costs.

The following points should also be noted when considering this analysis.

- a. The MLC applies to large commercially operated yachts and MCA does not have the option to exempt them. However, separate equivalent standards have been developed and have been included in the Large Yacht Code (that will be dealt with in a separate IA). Hence, this Impact Assessment does not include the impact of the MLC on the crew accommodation of commercially operated large yachts, given that this subject matter is being dealt with separately in its own Impact Assessment. A sub-group of the UK MLC Tripartite Working Group (TWG) was formed in 2009 to consider the impact of the MLC standards on large yachts (ie. over 24m in length, and carrying no more than 12 passengers). The yacht building and designing industry, represented by Super Yacht Builders Association (SYBAss) and British Marine Federation (BMF) demonstrated that the minimum crew cabin sizes in particular would increase the proportion of the yacht space taken up by crew accommodation to such an extent that guest accommodation (which provides the earning power of the yacht) would be drastically reduced. Consequently the industry suggests that application of the MLC crew accommodation standards per se to large yachts is non-viable from a cost point of view and impractical from a design point of view. The MCA has therefore produced a tailored approach to the application of these standards to large yachts which has

been welcomed by industry internationally and which warrants a separate Impact Assessment to fully analyse it.

- b. It is proposed that the UK take advantage of the flexibility afforded by Article II paragraph 6 of the Convention, which allows the application of substantial equivalence to vessels under 200GT. To such end, the UK is progressing an amendment to the Small Commercial Vessels Code to make use of this flexibility. However, this does not fall within the scope of these regulations, and will therefore be dealt with in a separate Impact Assessment.

6.1.1. Key Assumptions

The key assumptions that have been made for the purposes of this impact assessment are as follows. Consultees were invited to comment on these assumptions at consultation, but no such comments were received.

1. It is assumed that the number of UK registered ships would remain constant in future years. This analysis has been updated following the consultation to use data extracted from the UK Ship Register in April 2013. In particular, it is assumed that there would continue to be 118 UK registered tugs (see Table 4). The number of tugs on the UK flag since 2001 has remained constant, supporting this assumption that the number of tugs on the UK flag is expected to remain stable, and tugs would simply be replaced at the end of their useful operation life. Out of the 4 UK registered passenger ships detailed in Table 4 in this Impact Assessment, 3 of these are considered large passenger ships (based on data extracted from the UK Ship Register in April 2013). However, it should be noted that the number of UK registered ships is likely to change in the future. This would depend on a range of factors, including economic conditions and government policy. The direction of bias arising as a result of this assumption is uncertain.¹

2. It is assumed that all current UK registered ships would no longer be used when they reach the end of their assumed operating life, and that they would then be replaced with new MLC compliant ships that would be registered in the UK.

3. Based on information received from industry sources, it is assumed that the operating life of UK registered ships is between 20 and 30 years. It is assumed that the age profile of UK registered ships is distributed between 0 and this age as follows. This assumption is a key determinant of the number of new UK registered ships that are estimated to be introduced in each year for the purposes of this impact assessment. However, it should be noted that the number of new UK registered ships that would be introduced in each year in practice is highly uncertain. The direction of bias arising as a result of this assumption is uncertain.

- For Tugs, the age profile is assumed to be uniformly distributed. For example, assuming a 30 year operating life, 1/30 of the total are assumed to be aged 29-30 years old, 1/30 of the total are assumed to be aged 28-29 years old, etc, and 1/30 of the total are assumed to be aged 0-1 years old.
- For Large Passenger Ships, it is assumed that the age profile of the 3 UK registered ships is such that a) the first ship has less than 1 year of its operating life remaining; b) the second ship is aged less than 1 year old; and c) the third ship has 50% of its operating life remaining. For example, assuming a 30 year ship operating life expectancy then a) 1 ship is assumed to be aged 29-30 years old, b) 1 ship is assumed to be aged 0-1 years old and c) 1 ship is assumed to be aged 15 years old.

4) For the purposes of estimating the costs for all UK registered ships, it is assumed that the costs per ship that are presented in this impact assessment are representative of the costs for typical UK registered ships. However, it should be noted that the assumed costs per ship of MLC compliance that are presented in this impact assessment are very sensitive to the assumptions that have been made and the data sources that have been used (e.g. the information that has been received from industry sources). For example, based on information that has been received from industry sources, it is

¹ There has been an exodus of large cruise passenger ships from the UK flag over the last year or so, leaving only 3 cruise ships out of the total of only 4 large passenger ships and there is not an expectation that they will return. As there are currently only three large cruise passenger ships on the UK flag, and new builds are unlikely to reverse recent historic trends by flagging into the UK (other than, perhaps, for the replacement of the three existing ships when they reach the end of their useful operating life) any general historic flag in/out data is not expected to be accurate or representative of passenger ships trends. Best estimates suggest that the number will remain constant at three.

assumed that a number of vessel types would be able to incorporate additional crew accommodation space at no extra cost. In addition, it should also be noted that it is highly likely that the costs per ship would vary significantly between different ships in practice. The direction of bias arising as a result of this assumption is uncertain.

5) It is assumed that MLC compliance would be achieved as follows for tugs and large passenger ships. For tugs, it is assumed that MLC compliance would be achieved by building larger replacement tugs when the current fleet of UK registered tugs is replaced. For larger passenger ships, it is assumed that MLC compliance would be achieved by either a) building larger replacement ships or b) foregoing passenger accommodation space to maintain the same overall size, when the current fleet of UK registered large passenger ships is replaced; the Best estimate presented on the 'Summary: Analysis and Evidence' sheet averages the Best estimates of the costs of the two approaches. The direction of bias arising as a result of this assumption is uncertain.

6) Given the uncertainty over how the shipping and shipbuilding industries will develop in the future, and the uncertainty over how the regulatory regime for shipping will evolve, it is assumed that the assumed costs per ship that are presented in this impact assessment would not apply when MLC compliant ships come to be replaced at the end of their operating life. Therefore, it should be noted that the illustrative estimates presented below only represent the additional costs of replacing UK registered ships with MLC compliant ships once (and not the additional costs of replacing these MLC compliant ships with other MLC compliant ships in the future). Should there be additional costs when these MLC compliant ships are replaced, the illustrative estimates presented below would be underestimating the costs to the owners and operators of UK registered ships of complying with the crew accommodation aspects of the MLC.

6.1.2. Details of the impacts of the proposed Regulations on the owners and operators of UK registered ships

The current Merchant Shipping (Crew Accommodation) Regulations 1997 (SI 1997/1508), which are based on ILO Conventions 92 and 133, set down in a very prescriptive way the crew accommodation requirements for UK registered ships.

In the main, implementing the MLC requirements on crew accommodation would simplify the prescriptive crew accommodation requirements, with much of the further detail included as guidance. However, there would be a few areas where existing provisions would be increased. The main area which has the potential to increase costs for ship operators and shipowners is the minimum requirements for living space in the MLC, as the differences between the requirements of existing legislation and the MLC requirements are more significant. Under the MLC, there would be an increase in the required headroom to be provided in crew accommodation of 5cm, but the MLC would allow flexibility where the competent authority is satisfied that it is reasonable and would not cause discomfort to the seafarer. In addition, under the MLC, an increased minimum floor area would need to be provided in cabins. This is detailed in Table 2.

Implementing the MLC requirements would also introduce more formal requirements to consider safety and comfort of accommodation, including adequate heating and ventilation, adequate protection from noise (by soundproofing and/or appropriate location), and separation of living compartments from spaces allocated to purposes which are incompatible with daily living. This last requirement should normally be in place already due to broadly similar requirements in existing legislation, but the other requirements could increase costs for certain ship types.

6.1.2.1. Implementation of mandatory requirements from Regulation 3.1 of the MLC on Crew Accommodation

Table 2 compares existing mandatory spatial minima with the mandatory spatial minima under Standard A3.1 of the MLC. It is considered that the response to the increased floor space requirements constitutes the primary source of additional cost that would arise from the proposed Regulations.

The requirement for headroom in seafarer's accommodation under the MLC is 203cm compared with 198cm under current UK law. The MLC does, however, allow scope in limited circumstances (which may not be applicable in the UK) for slight relaxation of this requirement in accordance with MLC Standard A3.1.6(a), i.e., provided the competent authority considers it is reasonable and does not cause discomfort to seafarers. Industry feedback suggests that the increased headroom requirements could create a need to approach deckhead construction in a different way, as construction beams may in some

cases have to be shallower to allow this, but would therefore have to be heavier, more robust and of a non-standard design. This could be significant, potentially resulting in stability issues and increased costs. However, it has not been possible to monetise this cost in this impact assessment because of the limitations of the available evidence base.

MLC Regulation A3.1.9(a) requires individual sleeping accommodation to be provided for each seafarer (other than on passenger ships). Traditionally, cadets under training have shared cabins. MCA's current position is that single cabins should be provided for cadets as for other seafarers. This could potentially mean some cost would be incurred through the space lost in having to provide separate cabins for the two cadets who previously shared a cabin. However, this requirement would only apply to new ships (keel laid after the coming into force of the MLC). In addition, there are discussions underway at an international level on how to safeguard the number of training berths on ships, to stem the decline in the number of seafarers in the UK shipping industry. There is an obvious tension between the number of training berths available and the requirements for space imposed by the MLC. We will monitor any development and take them into account in finalising our policy. However, in the meantime, we have agreed a Substantial Equivalence with our social partners on cadet cabin sharing which addresses the issue, taking into account the gender of cadets, their watchkeeping patterns (if watchkeepers), the amount of floor space in the accommodation and study facilities afforded.

The MLC requirements relating to the location of accommodation are similar to existing UK criteria (i.e. above the loadline, amidships or aft, or when this is impractical, forward; but in no case forward of the collision bulkhead). There is a requirement on non-passenger ships for individual sleeping rooms for each seafarer, with exemptions possible for ships of less than 3,000 Gross Tonnes. In addition, the minimum required dimensions of a berth under MLC are 198cm x 80cm.

Table 2 – Comparison between mandatory crew accommodation spatial requirements under current UK law and under Standard A3.1 of the MLC

Type of Accommodation	Existing requirements	MLC requirements	Approximate % Differences
Cadets (single) <3000GT	6.5 m ²	-	
Cadets (single) 3000GT or over	7.5 m ²	-	
Cadets (2 persons) <3000GT	10 m ²	Not permitted	
Cadets (2 persons) 3000GT or over	12 m ²	Not permitted	
Non-Passenger ship officers sleeping room (single) <3000GT	6.5 m ²	7.5 m ²	15%
Non-Passenger ship officers sleeping room (single) 3000-10000GT	7.5 m ²	8.5 m ²	13%
Non-Passenger ship officers sleeping room (single) 10000GT or over		10 m ²	
Passenger & Special Purpose ships junior officers (operational level) where no private sitting/day room provided		7.5 m ²	
Passenger & Special Purpose ships senior officers (management level) where no private sitting/day room provided		8.5 m ²	
Master Chief Engineer & Navigating Officer must have adjoining sitting, day room or equivalent space (ships <3000GT may be exempted by competent authority)		Floor area not specified	
Non-Passenger ship ratings sleeping room (single) <3000GT	3.7 m ²	4.5 m ²	21%
Non-Passenger ship ratings sleeping room (single) 3000-10000GT	4.25 m ²	5.5 m ²	29%
Non-Passenger ship ratings sleeping room (single) 10000GT or over	4.75 m ²	7.0 m ²	47%
Non-Passenger ship ratings sleeping room (2 persons) <3000GT	2.75 m ²	7.0 m ²	77%
Non-Passenger ship ratings sleeping room (2 persons) 3000-10000GT	3.25 m ²	Not permitted	
Non-Passenger ship ratings sleeping room (2 persons) 10000GT or over	3.75 m ²	Not permitted	

Type of Accommodation	Existing requirements	MLC requirements	Approximate % Differences
persons) 10000GT or over			
Special purpose ships (more than 4 persons permitted)		3.6 m ² (per person)	
Passenger ship ratings sleeping room (single)	3.75 m ²	-	
Passenger ship ratings sleeping room (4 persons) <3000GT	2.35 m ²	-	
Passenger ship ratings sleeping room (4 persons) 3000GT or over	3.00 m ²	-	
Passenger ship ratings sleeping room (2 persons)		7.5 m ²	
Passenger ship ratings sleeping room (3 persons)		11.5 m ²	
Passenger ship ratings sleeping room (4 persons)		14.5 m ²	
Headroom in accommodation	198cm	203cm	+ 5cm but with scope to allow limited reduction under certain circumstances

6.1.2.2. Implementation of non-mandatory Guidelines from Regulation 3.1 of the MLC on Crew Accommodation

Provisions in Part B of the MLC 2006 are “non-mandatory” Guidelines. Each implementing nation must consider whether to give effect to these Guidelines – in the words of the Convention, Article VI, paragraph 2, “... *the member shall give due consideration to implementing its responsibilities in the manner provided for in Part B ...*”. But the extent to which these Guidelines are implemented is up to each ratifying nation. However, the standards of many of the non-mandatory MLC 2006 Guidelines are already mandatory in UK statute. ILO Conventions generally are minimum standards. It is therefore assumed that the implementation of any Convention will not be used to lower existing domestic standards (paragraph 8 of Article 19 of the ILO Constitution refers) After the Guidelines which mirror domestic standards have been discounted, some Guidelines which are “non-mandatory” for implementation remain. Member states are obliged by the Convention to consider these when implementing the Regulations and Standards.

The Tri-Partite Working Group on MLC 2006 implementation, comprising representatives from government, industry and the Trade Unions (see Annex 4), has discussed which aspects of the “non-mandatory” Guidelines they consider should be implemented. The table below shows the Guidelines from Regulation 3.1 of the MLC (Crew Accommodation) which the UK is not under obligation to implement, but which it is proposed be implemented as part of this exercise via the associated Merchant Shipping Notice.

The comments in the Remarks column of Table 3 explain the implementation of B3.1.6.1. Although this may, at first, appear to be a lowering of existing standards, there are so many exemptions issued in the UK fleet in respect of r22(2) Merchant Shipping (Crew Accommodation) Regulations 1997 that in reality there is equivalence, so implementing the Guideline B3.1.6.1 is not a lowering of standards. However, neither is it a raising of standards so there is no suggestion of this being “gold plating”.

It is the unanimous view of government experts and the social partners (who represent the industry and the Unions), that Guideline B3.1.6.3, which prescribes a minimum floor area of 1.5m² per person likely to be using the space at any one time, for mess rooms on ships other than passenger ships, be implemented in Regulations. Part A of the Convention does not prescribe an amount of floor area per person, but an earlier ILO Convention, C133, prescribes 1m² per person, and this was implemented via s22(9) of the Merchant Shipping (Crew Accommodation) Regulations 1997, so a minimum of 1m² already exists in UK legislation.

The reasoning for implementing Guideline B3.1.6.3 is as follows:

- the MLC updates and consolidates previous Conventions, including ILO Convention 133, which cites a 1m². Other floor areas (eg., in sleeping rooms) have been increased in Standard A3.1 over earlier Conventions. It is therefore natural to use 1.5m² per person for mess rooms instead;
- the UK government and social partners are committed to a continuous improvement in maritime safety. The MCA’s publication “The Human Element” (version 1.0), on page 47 and 48 highlights the link between a seafarer’s environment, and them getting tired, stressed and fatigued. The same

publication, on page 33, identifies “Inadequate rest or high stress levels” as one of the three individual influences on mistake-making. The International Union of Marine Insurance (IUMI) reported that 60% of incidents involving serious or total loss of vessels over 500GT during 2008 were due to human error. The implementation of Guideline B3.1.6.3 will further contribute to the reducing stress and fatigue which results from cramped conditions, which in turn, and alongside other factors, has the potential to reduce accidents;

- the cost of providing the additional 0.5m² per person in a mess room during a ship’s build is considered social partners within the Tripartite Working Group to be negligible; and
- any marginal cost of the additional 0.5m² per person is also mitigated by the fact that existing UK legislation requires officers and ratings to be provided with separate mess rooms (r22(3) Merchant Shipping (Crew Accommodation) Regulations 1997) while the Convention makes no such stipulation – in fact, the Convention requires that member states satisfy themselves that “ ... provisions of its laws and regulations respect ... the fundamental rights to ... the elimination of discrimination in respect of employment and occupation” (Article III(d)); and
- ratifying states are required to “give due consideration to implementing its responsibilities in the manner provided for in Part B ... “ (ie., the Guidelines) *MLC Article VI, paragraph 2*. However, this means the Guidelines are not strictly mandatory, so the implementation of a Guideline standard can be described as exceeding the minimum requirement, thus bringing the measure in the scope of OITO. It is the Part B Guideline which specifies the minimum of 1.5m² per person for mess rooms, whereas the existing UK standard is only 1m².

The number of persons using the mess room varies considerably from vessel to vessel, and the proportion of the crew accommodation area which is used for the mess room will therefore also vary from ship to ship. It is therefore not possible to determine costs associated with this. The vessels affected would be all types covered by this impact assessment.

On a ship with a small crew, it is expected that, even on existing ships, the mess area would exceed 1.5m per person. On ships with large crews, operating around the clock, it is unlikely that all of the crew members would be able to use the mess at the same time, because some will always be on duty.

In any case, the social partners (industry and unions) and the MCA consider the marginal cost of adding 0.5m² per person to the mess room area during the build process would be so insignificant that it would not be possible to estimate this cost even if evidence on the number of personnel likely to be using the mess room at any one time were obtainable. Only ships built or substantially modified (and the latter only to the extent of that modification) after the proposed Regulations come into force would be required to comply with the new standards.

At public consultation, consultees were invited to offer costs of building mess rooms to provide 1.5m² per person as opposed to 1m² per person. No evidence was provided by consultees.

Although the initial decision about the size of mess rooms was taken by social partners prior to the introduction of the OIOO or OITO policy for legislation, the MCA re-presented the issue to social partners subsequently, and asked them if they were still of this same view. They confirmed in very strong terms that they still wished to use 1.5m² per person as the spatial minimum for mess rooms covered by these regulations.

Table 3 – Comparison between MLC Guidelines and existing requirements regarding floor space in accommodation

Existing requirements under MS (Crew Accommodation) Regulations 1997	MLC 2006 Guideline	MSN Paragraph	Remarks
r22(2) Mess rooms shall be separate from sleeping rooms, provided that in ships of under 300 tons a mess room, if not combined with a galley, may be combined with sleeping accommodation if it is impracticable to provide a separate mess room.	B3.1.6.1 Mess room facilities may be either common or separate. The decision in this respect should be taken after consultation with seafarers' and shipowners' representatives and subject to the approval of the competent authority. Account should be taken of factors such as the size of the ship and the distinctive cultural, religious and social needs of the seafarers.	14.4	The MLC permits mess rooms to be common or separate. The MS (Crew Accom) Regs 1997 contains a prima facie requirement for separate rooms, so on paper this may appear to be a reduction in existing standards. In practice there are a large number of exemptions issued by the MCA for this, so conforming with the MLC standard is not considered a reduction in standards. However, neither is this an increase in standards, so it does NOT exceed the minimum requirements of the MLC.
r22(9) The floor area of every mess room shall be not less than 1 square metre per person for as many persons as are likely to use the room at any one time for messing.	B3.1.6.3 On ships other than passenger ships, the floor area of mess rooms for seafarers should be not less than 1.5 square metres per person of the planned seating capacity.	14.6	It is proposed to implement the MLC Guidance for 1.5 m ² as a mandatory provision, but with provision for exceptions where this is impractical. This strictly exceeds the minimum requirements of the MLC, but industry and unions have requested it, and consider any associated costs to be very small. The MCA also supports this view.

6.1.3. Ship Design Costs

Although some additional design costs may be incurred in order to comply with MLC requirements for new ships, ship designs change on a regular basis. Therefore, it is not expected that new designs would have to be specially commissioned to accommodate the MLC requirements. Whilst it is considered that the requirements would influence the new designs which occur in the normal course of business, it is not expected that additional costs would be significant in most cases. The sector in which the increased cost could be of some significance is the cruise industry. This is discussed in section 6.1.5 of this impact assessment.

In addition, it should be noted that the MLC requirements for additional crew accommodation space may have a greater impact on smaller ships than on larger ones, as the increase in the percentage of total tonnage used as accommodation would be much greater on smaller ships. The costs of re-designing the vessel to incorporate the cabin sizes required by the MLC could therefore potentially be proportionately higher for smaller ships.

Given the limitations of the available evidence base, it has not been possible to monetise the additional ship design costs that would arise from the proposed Regulations. Design related costs do not exist on this, and designers have not offered detailed costs on this at consultation.

At public consultation, consultees were invited to provide any additional evidence on these costs. No evidence was provided by consultees.

6.1.4. Tonnage Tax Costs

Gross Tonnage (GT) is a measure of volume (not weight) which purports to take into account the useful capacity of a ship. Tonnage of UK ships is calculated under the International Tonnage Convention 1969 (ITC69). Tonnage tax is imposed by the UK government according to the amount of tonnage for a

particular vessel, and crew accommodation is included in the volume chargeable for Tonnage Tax. Therefore, two possible outcomes are envisaged in response to the requirements for increased floor space being available for crew accommodation: either build larger ships or reduce commercial capacity. The preferred approach would vary depending on the type of ship. In the case of passenger cruise ships, for example, indications from industry are that companies would order ships of the same size and take additional space needed for crew accommodation from existing passenger space. The main reason for choosing this approach would appear to be restrictions on the ports which can be visited. In addition, the passenger facilities that are available on board cruise ships are considered to be an essential part of the service, suggesting passenger accommodation space, in terms of the number of cabins, would be more likely to be reduced.

Should the average tonnage of UK registered ships increase as a result of the proposed Regulations, the level of tonnage tax that would be payable by the owners and operators of UK registered ships would increase. Given the limitations of the available evidence base, it has not been possible to monetise the potential costs to the shipping industry as a result of how the proposed Regulations would impact on the level of tonnage tax that would be payable.

At public consultation, consultees were invited to provide additional evidence on these costs. No such evidence was provided.

6.1.5. Additional costs to the owners and operators of UK registered ships of purchasing larger ships in the future, including the additional annual operating costs)

Indications from industry are that, in cases where the size of ships built would be affected by the implementation of the MLC, any increases in materials used, such as the steel for construction or materials and cladding for pipework, and additional resources used in the manufacturing process, would be small in most cases.

Data received from industry and industry organisations indicates that no additional build costs would be expected for most of the vessel types presented in Table 4. This is because the additional space could be incorporated within the existing vessel design without compromising on the useful capacity of the ship. The notable exceptions to this analysis are Tugs and Large Passenger Ships operating internationally.

The amount of commercial tonnage built in the UK is now negligible. However, there would still be a cost to UK companies sourcing new tonnage from abroad.

At public consultation, consultees were invited to provide additional evidence on these costs. No such evidence was provided.

Therefore, following the public consultation, the only changes that it has been possible to make to this analysis are to update the assumptions and analysis regarding the number of ships on the flag and hence the number which will need to be replaced on the basis of data extracted from the UK Ship Register in April 2013 (see Table 4); and to update the price base year from 2010 to 2012 using the GDP deflator².

² <https://www.gov.uk/government/publications/gdp-deflators-at-market-prices-and-money-gdp-march-2013>

Table 4 – Breakdown of Ships over 200 Gross Tonnes on the UK Flag (These figures were extracted from the UK Ship Register in April 2013)

	Apr 13 data		Apr 13 data
a) Ro-Ro Ferries (Cargo)	22	e) Ro-Ro Ferries (Passenger) operating internationally (Class II passenger ships)	27
b) Tugs, Barges, offshore vessels, etc.	396 (of which 118 are tugs)	f) Passenger Ships operating internationally (Class I passenger ships)	4 (3 of which are large cruise ships)
c) Cargo	171	g) Container	149
d) Bulk Carriers	38	h) Tanker/Combi	102

Table 4 shows the numbers of ships on the UK Ship Register which fall under the scope of these regulations, by category. Since the public consultation, this table has been updated using data extracted from the UK Ship Register in April 2013 in order to show a more up to date position. The number of affected ships on the register has decreased in most categories since this impact assessment was presented at consultation. This has the effect that the overall costs assessed in this revision of the impact assessment are lower than they were at consultation.

a) Tugs

Build Costs

Data received from industry prior to the public consultation has identified an increase in the cost of a new tug of approximately £0.5 million to £1.0 million per ship against a total build cost of £5.2 million to £8.3 million per ship (2012 prices). This data has not changed since consultation and therefore continues to be used in this analysis. However, the price base year has been updated from 2010 to 2012³ following the consultation. For the purpose of this impact assessment, it is assumed that the data on the costs per ship received from industry is representative of typical UK register tugs and that these costs per ship would apply to all UK registered tugs. However, it should be noted that the cost per ship would be highly likely to vary between different types of tugs, and that consequently the assumed costs per ship may not apply to all tugs. The direction of bias as a result of this assumption is uncertain.

The data on the number of ships on the UK flag and the consequently the assumptions regarding the number of ships which will need to be replaced each year have been updated following the consultation on the basis of data extracted from the UK Ship Register in April 2013 (see Table 4). Table 4 indicates that there are 118 UK registered tugs of over 200 gross tonnes. On the basis of the assumptions outlined in section 6.1 of this impact assessment (e.g. it is assumed that the number of tugs on the UK flag will remain constant over time), it is assumed that around 4 tugs⁴ would be replaced each year in the future in the Low Scenario (assuming a 30 year operating life) and around 6 tugs⁵ would be replaced each year in the High Scenario (assuming a 20 year operating life), with a Best estimate that around 5 tugs⁶ would be replaced each year (assuming a 25 year operating life, the mid-point of the range).

Based on the data received from industry prior to the public consultation, a cost of £0.5 million (2012 prices per ship is assumed in the Low Scenario and a cost of £1.0 million (2012 prices) per ship is assumed in the High Scenario, with a Best estimate of around £0.8 million (2012 prices) per ship (the mid-point of the range). Therefore, the average annual costs are estimated to be approximately £2.0 million⁷ (2012 prices) in the Low scenario (over a period of 30 years) and approximately £6.1 million per

³ The data received from industry has been converted from 2010 prices to 2012 prices using the GDP deflator.

⁴ Approximately 1/30 of 118

⁵ Approximately 1/20 of 118

⁶ Approximately 1/25 of 118

⁷ £0.5 million multiplied by 4

year⁸ (2012) in the High scenario (over a period of 20 years), with a Best estimate of approximately £3.7 million per year⁹ (2012 prices) (over a period of 25 years).

On this basis, the present value of the total costs over the thirty year appraisal period is estimated to lie in the range of around £38.9 million (2012 prices) in the Low Scenario to around £90.1 million (2012 prices) in the High Scenario, with a Best estimate of around £62.7 million (2012 prices).

These estimates are presented in Table 5.

Annual Operating Costs

The above excludes any additional annual operating costs. However, the additional space would need to be lit and heated or air conditioned for the lifetime of the ship. This is not expected to be significant for smaller ships. However, given the limitations of the available evidence base (e.g. no evidence is available on heating costs would change with no evidence received from industry), it has not been possible to monetise this cost in this impact assessment.

b) Large Passenger Ships

Build Costs

Although it is accepted that additional crew accommodation requirements should have less impact on larger ships than on smaller ships in general, it is considered that large passenger ships nevertheless are very sensitive to changes in crew accommodation size as this has an impact on the amount of space left for passenger accommodation. Industry sources have indicated that there would be no flexibility to reduce the size of communal passenger areas, engines rooms, etc, and so any increase in the size of crew accommodation would either be achieved through building a larger vessel or by reducing the amount of space available for passenger accommodation.

The response of industry is uncertain. Reduced passenger cabin space could have an adverse affect on profitability, and it is believed this will be a greater consideration for cruise companies than any extra costs associated with additional build size. However, it is considered that building bigger is frequently not an option, as passenger ships are particularly constrained by the ports they visit in terms of draught and beam (entering harbour) and height (by the need to pass under certain bridges, and also because an increase in height has significant stability implications for the vessel).

Prior to the public consultation, industry sources indicated if larger ships were to be ordered as a result of the MLC requirements, the costs could be estimated to be as follows. No additional evidence was submitted by consultees. Therefore, these estimates continue to be used in this analysis. However, the price base year has been updated from 2010 to 2012¹⁰ following the consultation.

Information from industry indicates a typical cruise ship costs approximately £415 million to £467 million per vessel to build (2012 prices)¹¹. Any potential increase in size would be mitigated by the fact that not all of the internal ship space is accommodation – inspection of typical cruise ship plans show that crew accommodation on cruise ships is typically in the region of 10% of the ship's deck space. Also, most cruise ships provide crew accommodation in excess of the current minimum requirements for senior members of the crew (although this may not be as much as the MLC requirements), which further reduces the effect of the MLC. Industry design sources indicate that if a company were to order a vessel built larger to accommodate MLC crew accommodation requirements, the overall increase in size is likely to be in the region of only 0.5% as a result of the provisions in the proposed Regulations. For the purpose of this impact assessment, it is assumed that this percentage is representative of typical UK register cruise ships and that all new MLC compliant cruise ships would need to be 0.5% larger. It is assumed that the cost of new MLC complaint cruise ships would increase by the same percentage. Therefore, assuming that a cruise ship costs between £415 million and £467 million per vessel (2012 prices), an increase in the build cost of a cruise ship of around £2.1 million¹² (2012 prices) in the Low scenario is assumed and an increase of around £2.3 million¹³ (2012 prices) in the High scenario is assumed, with a Best estimate of around £2.2 million (2012 prices) (the mid-point of the range).

⁸ £1.04 million multiplied by 5.9

⁹ £0.8 million multiplied by 4.7

¹⁰ The estimates received from industry have been converted from 2010 prices to 2012 prices using the GDP deflator.

¹¹ Industry quotes £400-£450m (2010 prices), but adjusted to 2012 prices using HMT's GDP deflator index $\text{£400m} \times (100/96.347) = \text{£415.2m}$ and $\text{£450m} \times (100/96.347) = \text{£467.1m}$, where generally £value_{2012} is equal to: $\text{£2010value} \times (\text{index}_{2012} / \text{index}_{2010}) = \text{£value}_{2012}$. Ref. <https://www.gov.uk/government/publications/gdp-deflators-at-market-prices-and-money-gdp-march-2013>

¹² 0.5% multiplied by £415 million.

¹³ 0.5% multiplied by £467 million.

However, it should be noted that the additional cost per ship would be highly likely to vary between different types of cruise ships, and that consequently the assumed costs per ship may not apply to all cruise ships. The direction of bias as a result of these assumptions is therefore uncertain.

The data on the number of ships on the UK flag and the consequently the assumptions regarding the number of ships which will need to be replaced each year have been updated following the consultation on the basis of data extracted from the UK Ship Register in April 2013 (see Table 4). Of the 4 internationally operating passenger ships shown in Table 4, there are 3 large passenger ships, i.e. cruise ships of significant size. On the basis of the assumptions outlined in section 6.1 of this impact assessment, it is assumed that 3 new MLC compliant cruise ships would need to be introduced to replace the existing 3 UK registered large cruise ships. The assumed operating life is 20 years in the High Scenario and 30 years in the Low scenario, with a Best estimate of 25 years (the mid-point of the range). It is assumed that new ships would be introduced in line with the assumptions outlined in section 6.1 of this impact assessment. Therefore, it is assumed that one new ship would be introduced in Year 1, Year 10 and Year 20 in the High scenario (over a 20 year period) and that one new ship would be introduced in Year 1, Year 15 and Year 30 in the Low scenario (over a 30 year period), with a Best estimate that one new ship would be introduced in Year 1, Year 13 and Year 26 (over a 25 year period). However, it should be noted that the timing of when new ships would be introduced is very uncertain. The direction of bias arising as a result of these assumptions is uncertain.

Annual Operating Costs

The additional space would need to be lit and heated or air conditioned for the lifetime of the ship. This could be fairly significant for larger ships with larger human populations such as cruise ships. However, there are very few ships of this type on the UK flag and nonetheless, given the limitations of the available evidence base, it has not been possible to monetise this cost in this impact assessment.

In addition, industry sources indicate additional light dues and canal charges would be incurred and have suggested these costs would be around £0.5 million per vessel per year (2012 prices)¹⁴. However, the basis of this estimate is very uncertain. For the purposes of this impact assessment, it is assumed that these costs would apply in the High scenario only. Consequently, it should be noted that the estimates for the Low scenario and the Best estimates exclude any additional light dues and canal charges that would be incurred. In the High scenario, it is assumed that the data received from industry is representative of UK registered ships and that it would apply to all new MLC compliant cruise ships that would be introduced in this scenario.

Therefore, for the High scenario, it is assumed that additional light dues and canal charges of around £0.5 million (2012 prices) per ship per year would be incurred during the 20-year operating life of each ship that it is assumed would be introduced during the 30-year appraisal period. This means that:

- for the new ship that is assumed to be introduced in Year 1, it is assumed that these costs would be incurred each year from Year 1 to Year 20 of the 30-year appraisal period;
- for the new ship that is assumed to be introduced in Year 10, it is assumed that these costs would be incurred each year from Year 10 to Year 29 of the 30-year appraisal period; and
- for the new ship that is assumed to be introduced in Year 20, it is assumed that these costs would be incurred each year from Year 20 to Year 30 of the 30-year appraisal period).

The direction of bias arising as a result of the above assumptions is uncertain.

Total Costs

On the build costs and annual operating costs identified above, the present value of the total costs over the thirty year appraisal period is estimated to lie in the range of around £4.1 million in the Low Scenario to around £21.0 million in the High Scenario, with a Best estimate of around £4.6 million.

These estimates are presented in Table 6. However, as previously indicated, it is considered that it is very likely in many cases that cruise companies would opt to order a ship of the same size as at present, but with reduced passenger accommodation. This is examined more closely later in this impact assessment, but a crucial factor is that an increase in size would rule out many ships being able to use ports at some important passenger destinations.

Potential Design Costs

¹⁴ The estimate received from industry has been converted from 2010 prices to 2012 prices using the GDP deflator.

There could also be design costs. If a company chooses to build large ships, they would also have to meet an additional cost for the first ship in a new series of ship design. Industry expect this to be around 15-20% of the build cost of a ship for the first ship in each series, payable immediately, so on the figures already quoted for typical ship build costs (£415 million and £467 million in 2012 prices), this would produce a range of £62.3 million¹⁵ to £93.4 million¹⁶ of additional costs for the first vessel in any new series (2012 prices). Industry sources indicate a typical series runs for about 15 ships, so this would mean that the additional cost would occur for about 1 in every 15 ships. However, as mentioned above, industry would still commission new vessel designs under business as usual. Although the additional space requirements for crew accommodation could influence shipowners to bring forward design spending, this is uncertain. Consequently, it would be an overestimate to suggest that new design costs would be incurred solely as a result of the MLC requirements for crew accommodation. As such, any additional costs related to vessel design are not included in the estimates of the monetised costs on the 'Summary: Analysis and Evidence' sheet and elsewhere in this impact assessment. However, the potential for additional design costs is noted in the key non-monetised costs box on this summary sheet.

c) Ro-Ro Ferries (Cargo), Cargo, Container, Bulk Carriers and Tanker/Combi – Based on the information received from industry sources, the impact on these classes of ship is assumed to be not significant and no additional build costs are assumed. This is because these classes of ship generally have a small enough crew and sufficient flexible space that the additional accommodation space could be included without increasing the overall size of the ship.

d) Ro-Ro Ferries (Passenger) – No figures have been received from industry, either before or after consultation. The impact is assumed to be not significant and no additional build costs are assumed for the purposes of this impact assessment.

e) Summary

Table 5 and Table 6 summarise the estimates of the additional costs to the owners and operators of UK registered ships of complying with the MLC crew accommodation requirements by purchasing larger ships in the future.

Table 5 – Estimated additional lifetime build costs for replacement Tugs

Tugs		Calculations / Evidence
Low Scenario		
Cost per ship replaced (£m)	£0.5m	Industry estimate, see text
No. of Tugs in Fleet	118	See Table 4
Annual Cost £m over 30 years	£2.0m	£0.5m x 118 * (1/30)
Total Cost £m	£61.2	
Total Cost £m (Present Value)	£38.9m	
Best Estimate		
Cost per vessel replaced (£m)	£0.8m	Mid-point of high/low estimate
No. of Tugs in Fleet	118	See Table 4
Annual Cost £m over 25 years	£3.7m	£0.8m x 118 * (1/25)
Total Cost £m	£91.9m	
Total Cost £m (Present Value)	£62.7m	
High Scenario		
Cost per vessel replaced (£m)	£1.0m	Industry estimate
No. of Tugs in Fleet	118	See Table 4
Annual Cost £m over 20 years	£6.1m	£1.0m x 118 * (1/20)
Total Cost £m	£122.5m	
Total Cost £m (Present Value)	£90.1m	

¹⁵ 15% of £415 million

¹⁶ 20% of £467 million

Table 6 – Estimated additional lifetime build and operational cost for Large Passenger Ships

Large Passenger Ships		Calculations / Evidence
Low Scenario		
Cost per ship replaced (£m)	£2.1m	Industry estimate, see text
No. of Vessels in Fleet	3	See Table 4
Average Annual Cost £m over 30 year appraisal period	£0.2m	
Total Cost £m over 30 years	£6.2m	
Total Cost £m (Present Value)	£4.1m	
Best Estimate		
Cost per ship replaced (£m)	£2.2m	Mid-point of high/low estimate
No. of Vessels in Fleet	3	See Table 4
Average Annual Cost £m over 30 year appraisal period	£0.2m	
Total Cost £m over 30 years	£6.6m	
Total Cost £m (Present Value)	£4.6m	
High Scenario		
Cost per ship replaced (£m)	£2.3m*	Industry estimate
No. of Vessels	3	See Table 4
Average Annual Cost £m over 30 year appraisal period	£1.1m	
Total Cost £m over 30 years	£33.5m	
Total Cost £m (Present Value)	£21.0m	

* + £0.5 million per annum operating costs for each replacement vessel.

6.1.6. Additional costs to the owners and operators of UK registered ships if they continue to purchase the same sized ships in future (including the annual costs of reduced commercial capacity)

It is expected that it would be possible for shipbuilders to continue to build some classes of ship at current sizes whilst meeting the requirements of the proposed Regulations. However, if shipowners purchase the same sized ships in the future with expanded crew accommodation areas, there could be a reduction in the useful commercial space on these ships. This could result in costs for the operators and owners of affected ships. For example, there could be a reduction in carrying capacity for cargo or passengers for some classes of ship. Of those classes of ship that it is considered that it would be possible to continue to build at the same size in future, industry sources indicate that this is only likely to be an issue on passenger ships as space is less critical for other types of ship.

Data received from industry prior to the public consultation indicates the following typical additional costs per ship type.

At public consultation, consultees were invited to provide any additional evidence on these costs. No such additional evidential data was provided.

Therefore, following the public consultation, the only changes that it has been possible to make to this analysis are to update the assumptions and analysis regarding the number of ships on the flag and hence the number which will need to be replaced on the basis of data extracted from the UK Ship Register in April 2013 (see Table 4); and to update the price base year from 2010 to 2012 using the GDP deflator.

a) Large Passenger Ships

Given that it is considered that in most cases large passenger ship operators would choose, or be constrained by external factors, to purchase vessels that are the same size when they replace their current vessels, the proportion of space allocated to crew accommodation would have to increase (much of which would be taken from passenger accommodation) and ship operators would suffer the economic cost of reduced passenger revenue. Industry sources have suggested that maintaining quality of

passenger services is of paramount importance, hence the expectation that space would be taken from passenger accommodation rather than other space on board.

For new MLC compliant vessels that are the same size as current vessels, estimates from industry construction sources indicate that the proposed Regulations would result in a typical loss of 3% to 3.5% of passenger cabins on a new MLC compliant large passenger ship compared to current vessels. Industry sources indicate that typical cruise ships currently have 1000 to 1550 passenger cabins. For the purposes of this impact assessment, it is assumed that this information is representative of typical UK registered cruise ships. Therefore, it is assumed that new MLC compliant cruise ships would have around 30¹⁷ fewer passenger cabins in the Low scenario and around 54¹⁸ fewer passenger cabins in the High scenario, with a Best estimate that these ships would have around 41¹⁹ fewer passenger cabins. However, it should be noted that the extent that the number of passenger cabins would be reduced in practice would be highly likely to vary between different types of cruise ships. The direction of bias as a result of these assumptions is uncertain.

It is assumed that ship operators would choose to forego space in the passenger cabin categories which currently derive the least revenue. Assuming a typical average starting price, from cruise ship brochures and industry sources, for a passenger cabin is £1713 per person for 14 days (2012 prices), it is assumed that revenue is about £122 per person, per day (2012 prices)²⁰. It is assumed that normal occupancy would be 2 passengers per cabin, and this type of ship would usually operate with full occupancy as margins are tight²¹, for an average of 360 days in a year (based on industry advice that this type of ship has only 10 days out of service in every 2 years for maintenance). On the basis of these assumptions, the cost per lost cabin is estimated around £88,000 per year (2012 prices). It is assumed that this cost would apply to all cabins that would be lost on new MLC compliant cruise ships. However, it should be noted that this cost is very uncertain. The direction of bias resulting from this assumption is uncertain.

Therefore, on the basis of the above assumptions, the cost per year per cruise ship is estimated at £4.8 million²² (2012 prices) in the High scenario and £2.6 million²³ (2012 prices) in the Low scenario, with a Best estimate of £3.6 million²⁴ (2012 prices). Since passenger revenue would be lost in every year in which the ship operates, it is assumed that these costs would be incurred in each year after the ship is introduced for the duration of its assumed operating life (i.e. 20 years for the High scenario, 30 years for the Low scenario and 25 years for the Best estimates). For example, under the High scenario, for a ship that is assumed to be introduced in Year 1, it is assumed that the costs of around £4.8 million (2012 prices) per year would be incurred each year for the duration of its assumed 20-year operating life (i.e. from Year 1 to Year 20 of the 30-year appraisal period). Although these estimates are revenue rather than profit, they have not been adjusted to allow for any savings on food and services which do not have to be provided to the lost passengers, as it is believed that such savings would be cancelled out by the fact that additional revenue which would normally be realised from those passengers spending in shops and other facilities onboard would be lost.

In line with section 6.1.5 of this impact assessment, it is assumed that 3 new MLC compliant cruise ships would need to be introduced to replace the existing 3 UK registered cruise ships. The assumptions about the timing that these new MLC compliant cruise ships would be introduced are the same as in section 6.1.5 of this impact assessment.

On this basis, the present value of the total costs from reduced commercial capacity revenue over the thirty year appraisal period is estimated to lie in the range of around £71.7 million (2012 prices) in the Low Scenario to around £145 million (2012 prices) in the High Scenario, with a Best estimate of around £104 million (2012 prices).

These estimates are presented in Table 7.

¹⁷ This assumes that all UK registered cruise ships currently have 1000 cabins and that MLC compliant cruise ships that are the same size would have 3% less cabins.

¹⁸ This assumes that all UK registered cruise ships currently have 1550 cabins and that MLC compliant cruise ships that are the same size would have 3.5% less cabins.

¹⁹ This assumes that all UK registered cruise ships currently have 1275 cabins (the mid-point of the range) and that MLC compliant cruise ships that are the same size would have 3.25% less cabins (the mid-point of the range).

²⁰ This figure has been converted from 2010 prices to 2012 prices using the GDP deflator.

²¹ See for instance Carnival Cruise annual report, which suggests occupancy rates over 100% (due to 3 person occupancy of cabins). <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MzcxNDQ0fENoaWxkSUQ9MzY4NTEwfFR5cGU9MQ==&t=1>

²² £122 (£ per day) x 2 (persons) x 360 (days) x around 54 (cabins)

²³ £122 (£ per day) x 2 (persons) x 360 (days) x around 30 (cabins)

²⁴ £122 (£ per day) x 2 (persons) x 360 (days) x around 41 (cabins)

b) Ro-Ro Ferries (Cargo), Cargo, Container, Bulk Carriers and Tanker/Combi – Based on the information received from industry sources, the impact on these classes of ship is assumed to be not significant and no additional costs are assumed.

c) Ro-Ro Ferries (Passenger) – There could potentially be an impact on around 25% of UK ro-ro ferries as this is the approximate proportion of UK passenger ro-ro ferries engaged on overnight trips. Approximately 75% of UK ro-ro passenger ferries are engaged on short, daytime, trips where overnight crew accommodation is not a factor. However, at this stage no evidence on the level of this cost is available. Therefore, it has not been possible to monetise this cost in this impact assessment.

d) Tugs etc. – It is expected that tugs that are MLC compliant would need to be larger than current tugs. Therefore, for the purposes of this impact assessment, it is assumed that larger tugs would be built as a result of the proposed Regulations. The key costs of the proposed Regulations for the tug industry are therefore expected to be the construction costs that are previously outlined in the relevant section of this impact assessment.

e) Summary

Table 7 summarises the estimates of the additional costs to the owners and operators of UK registered ships of complying with the MLC crew accommodation requirements whilst continuing to purchase the same sized ships in future.

Table 7 – Estimated additional costs to the owners and operators of UK registered ships if they continue to purchase the same sized ships in future, costs of reduced commercial capacity.

Large Passenger Ships		Calculations / Evidence
Low Scenario		
Cost of lost cabin per year	£88,075	£122 per day, Industry estimate, see text
No. of lost cabins	30	3% of 1000 cabins
Lost revenue per year per ship (£m)	£2.6	£122 x 2 (persons) x 360 (days) x ~30 (cabins)
Average Annual Cost £m over 30 year appraisal period	£4.1	
Total Cost £m over 30 years	£124.2	
Total Cost £m (Present Value)	£71.7	
Best Estimate		
Cost of lost cabin per year	£88,075	£122 per day, Industry estimate, see text
No. of lost cabins	41	3.25% of 1275 cabins
Lost revenue per year per ship (£m)	£3.6	£122 x 2 (persons) x 360 (days) x ~41 (cabins)
Average Annual Cost £m over 30 year appraisal period	£6.0	
Total Cost £m over 30 years	£178.8	
Total Cost £m (Present Value)	£104.0	
High Scenario		
Cost of lost cabin per year	£88,075	£122 per day, Industry estimate, see text
No. of lost cabins	54	3.5% of 1550 cabins
Lost revenue per year per ship (£m)	£4.8	£122 x 2 (persons) x 360 (days) x ~54 (cabins)
Average Annual Cost £m over 30 year appraisal period	£8.1	
Total Cost £m over 30 years	£243.7	
Total Cost £m (Present Value)	£145.0	

6.1.7. Familiarisation Costs

The MCA will publish information about the proposed changes. The MCA has consulted/discussed with social partners (industry and Unions) through tri-partite Working Group meetings, and other contacts outside that group, to gather data for this Impact Assessment, and there have been a number of events publicising the changes resulting from the MLC as a whole. Indeed, the MLC itself has been available for public scrutiny since 2006. These actions will minimise the costs for shipowners and seafarers of becoming familiar with the new requirements of the proposed Regulations, the residual cost of which is considered to be insignificant and too small to quantify for this element alone.

6.1.8. Summary of Costs of the proposed Regulations (Option 1)

The monetised costs identified in this impact assessment fall upon the owners or operators of tugs, and large passenger ships such as cruise liners. The owners or operators of tugs would be expected to incur additional build costs resulting from the need to enlarge their (relatively small) ships in order to meet the criteria on crew floor space, headroom, and separation from non-living spaces. Cruise liner operators would be expected to incur either a) additional build and ancillary costs or b) lost revenue due to a reduction in the number of passenger cabins.

The estimates presented on the ‘Summary: Analysis and Evidence’ sheet reflect the following three scenarios.

1. The Low Scenario estimates are the sum of a) the estimates for the Low Scenario for Large Passenger Ships when it is assumed that all cruise ship operators would choose to build larger ships; and b) the estimates for the Low Scenario for Tugs.

2. The Best estimates are the sum of a) the average of the Best estimates for Large Passenger Ships when it is assumed that all cruise operators would choose to build larger ships and when it is assumed that all cruise operators would choose to forego passenger accommodation to meet the crew accommodation requirements; and b) the Best estimates for Tugs.

3. The High Scenario estimates are the sum of a) the estimates for High Scenario for Large Passenger Ships when it is assumed that all cruise ship operators would choose to forego passenger accommodation to meet the crew accommodation requirements; and b) the estimates for the High Scenario for Tugs.

These estimates are summarised in Table 8.

Table 8 – Summary of monetised present value costs	
	£million (Present Value)
Low Scenario	
Tugs – Low Scenario (see Table 5)	38.9
Large Passenger Ships (All cruise operators choose to build larger ships) – Low Scenario (see Table 6)	4.1
Total (PV)	43.0
High Scenario	
Tugs – High Scenario (see Table 5)	90.1
Large Passenger Ships (All cruise operators choose to forego passenger accommodation) – High Scenario (see Table 7)	145.0
Total (PV)	235.1
Best Scenario	
Tugs – Best Estimates (see Table 5)	62.7
Large Passenger Ships (All cruise operators choose to build larger ships) – Best Estimates * 50% (see Table 6)	2.3
Large Passenger Ships (All cruise operators choose to forego passenger accommodation) – Best Estimates * 50% (see Table 7)	52.0
Total (PV)	117.0

6.2. Benefits of the proposed Regulations (Option 1)

Several benefits of the proposed Regulations have been identified in this impact assessment. Given the limitations of the available evidence base discussed below, it has not been possible to monetise any of these benefits. Therefore, a full qualitative description of each benefit is provided below.

6.2.1. Benefit to Seafarers

There would be a particular benefit to some Seafarers from the crew accommodation aspects of the MLC due to required increases in the size of their living quarters. This would be a benefit in itself as it would make for a more comfortable living environment, but there could be knock-on benefits in terms of seafarers' general health and welfare as a result of the changes. Given the limitations of the available evidence base (e.g. we do not have access to any quantifiable evidence on the value that seafarers would place on increases in the size of their living quarters), it has not been possible to monetise this benefit in this impact assessment. However, there is qualitative evidence of this, for example:

Seafarer quote

“Accommodation on my vessel is very poor – bulkheads [walls] are paper thin and it is impossible to receive a proper rest period in the cabin. Poor c**p quality ... fittings. Toilets continually blocked. Crew comfort not taken into consideration, which is terrible seeing as this is a new vessel!” *page 18, Nautilus International survey of seafarers' living and working conditions - September 2010*

At public consultation, consultees were invited to provide additional evidence on these benefits. No such evidence was provided.

6.2.2. Benefit to shipowners and ship operators

It is expected that there would be impacts on crew health and safety resulting from better living and working conditions, which could potentially include a reduction in fatigue leading to a reduced risk of accidents (see reported document referenced at footnote 25). Fatigue is a “hot topic” in the context of seafarer and ship safety. In recent years, the human element, which includes fatigue and systems of working, has gained its due recognition as the most important factor in the accidents and incidents which occur at sea – a far more influential cause than faulty or sub-standard equipment. Evidence from several sources indicates that human error is the major cause of more than half of maritime insurance claims²⁵. Although an important issue, identifying the potential benefits directly attributable to the additional requirements of the MLC would require more evidence than is available and broad assumptions. It has therefore not been possible to monetise these benefits.

At public consultation, consultees were invited to provide additional evidence on these benefits. No such evidence was received.

6.3. Benefits of UK Ratification of the MLC

Section 3 and Annex 3 of this impact assessment discuss the overall benefits of UK ratification of the MLC. It is necessary to introduce the proposed Regulations in order for these benefits to be realised. However, a range of new legislation will be required before the UK can fully fulfil its obligations as a ratifying country. Therefore, it is not possible to determine the precise contribution of the proposed Regulations to realising these benefits.

At public consultation, consultees were invited to provide additional evidence on these benefits. No such evidence was received.

6.4. Costs of MLC Ratification for non-UK registered ships

Ratification of the MLC and creation of the necessary implementing legislation together enable the UK to enforce the minimum rights for seafarers provided for by the MLC on non-UK registered ships that call at UK ports on a ‘no more favourable treatment’ basis, meaning that non-UK registered ships that call at UK ports would be required to comply with the standards of the MLC. This could potentially lead to additional costs for the owners and operators of non-UK registered ships in terms of the costs of complying with the MLC and the potential to face delays when calling at UK ports. However, the extent that the proposed Regulations would contribute to such costs is uncertain. Furthermore, such costs

²⁵ “The Human Element, a guide to human behaviour in the shipping industry”, (MCA, 2010)
<http://www.dft.gov.uk/mca/the-human-element-a-guide-to-human-behaviour-in-the-shipping-industry.pdf>

would only represent a cost to the UK if they fall on UK entities (e.g. UK businesses or consumers). The extent that this would be the case is uncertain. The costs for non-UK registered ships are discussed in detail in the impact assessment for the 'Merchant Shipping (Maritime Labour Convention) (Survey and Certification) Regulations' (IA Number DFT 00193).

At public consultation, consultees were invited to provide additional evidence on these costs. No such evidence was received.

6.5. Monitoring and Enforcement

The requirements contained in these Regulations will be monitored and enforced by the Maritime and Coastguard Agency (MCA) in the UK, and other maritime safety administrations when UK ships visit ports in other countries, as part of their maritime labour inspections. The Survey and Certification costs for UK registered ships will apply across all requirements of the MLC and are investigated in the Impact Assessment for the 'Merchant Shipping (Maritime Labour Convention) (Survey and Certification) Regulations' (IA Number DFT 00193), which were made in July 2013. Those regulations also include a complaints procedure for seafarers who feel they are not receiving their entitlements under the MLC, including the provisions on crew accommodation.

7. Rationale and evidence that justify the level of analysis in this IA

The MLC was developed on a tripartite basis and is strongly supported by UK shipowner and seafarer representative organisations, which also support the prompt ratification of the MLC. Discussions on the proposals for implementing the MLC provisions for crew accommodation at the MLC Tripartite Working Group have been non-controversial, with both sides of industry stating that they reflect good practice. Consultation responses have confirmed that implementation of the MLC provisions on crew accommodation are supported by industry, reflect best practice.

The complex nature of crew accommodation matters, and the fact there are a large number of different types of ship affected, mean that where costs are significant, the deep level of detail included in this IA is justified. However, where costs are not significant, or where reliable data is not available, the magnitude of the implications of non-ratification of the MLC (albeit that these may not be quantifiable) mean that efforts to identify very small cost implications and/or achieve spurious accuracy, would not be in line with the government policy and IA Guidance which require a proportionate approach in order to make prudent use of taxpayer resources.

8. Risks

The proposed Regulations need to be implemented in order to allow the UK to fulfil its obligations as an MLC ratifying country. The risks of ratifying the Convention, and of not ratifying the Convention, are explored in Annex 3 of this impact assessment.

9. REDUCING REGULATION POLICY

9.1 Direct costs and benefits to business calculations (following OITO methodology)

As explained in Section 3, although there is an associated EC Directive requiring Member States to implement the provisions of the MLC, including those on crew accommodation, by August 2014, the MLC will come into force, and UK ships were required to hold MLC documentation under international law (enforced through Port State Control of ships) by 20 August 2013. These requirements are international and in general do the minimum to implement the MLC standards. These Regulations only exceed the minimum requirements in relation to MLC Guideline B3.1.6.3, the size of mess rooms, where industry and Unions have requested that the spatial minimum for mess rooms be set at 1.5m² per person rather than 1m², and consider the costs involved in this are negligible. This aspect of the measure is discussed in more detail in Section 6.1.2.2. Only this aspect of the measure is considered to be in the scope of OITO. However, for the reasons explained in Section 6.1.2.2, it has not been possible to monetise the cost of this change. Nonetheless, as industry and Unions consider the costs involved to be negligible, it is considered that this is a proportionate approach and that this measure should be classified as a "Zero Net Cost" measure. As the Equivalent Annual Net Cost to Business (EANCB)

should only be capturing the direct costs and benefits to business from the element of the measure that is in scope of OITO, the estimated EANCB presented on the 'Summary: Intervention and Options' sheet and the related estimates presented on the 'Summary: Analysis & Evidence' sheet are therefore £0.

9.2 Copy out

In preparing the regulations, Government policy on "copy out" has been applied as a means of transposing international legal requirements wherever possible. However, the Convention was not always drafted in a manner which facilitates this approach, and further elaboration is required in some cases. Particular difficulties are:

- Requirements which are set by reference to existing "national laws, regulations and other measures", and
- Provisions which require the Member to determine a particular standard in consultation with shipowner and seafarer representative organisations.

In addition, where existing UK legislation is considered to meet Convention standards, changes to adopt the language of the Convention have not always been made to avoid costs to business from dealing with unnecessary changes.

9.3 Alternatives to regulations

Introducing the proposals without recourse to legislation has been considered but would not adequately implement the Maritime Labour Convention itself or EC Directive 2009/13 which includes the provisions of the Social Partners agreement on the MLC relating to crew accommodation. Moreover, the Convention explicitly requires ratifying States to take action to deliver the measures, therefore no satisfactory alternative mechanism has been identified at this stage.

9.4 Review clauses

The proposed Regulations include a clause which requires a Ministerial review five years after they are made, and every five years thereafter, in line with the "review policy" on introducing international obligations.

The basis of this review will be the "Article 22 report" required by the International Labour Organisation (ILO). Parties to the Maritime Labour Convention, 2006 will be required to submit a report to the ILO, under Article 22 of the ILO Constitution, providing evidence of effective implementation of the Convention. Preparing for this review will enable the UK to establish the effectiveness of the policy (enforcement action taken) and identify any necessary amendments to UK legislation or to the Convention.

The review will examine UK MLC inspection reports and any enforcement action taken under the regulations, and the port state control record of UK ships in non-UK ports. In addition, complaints from seafarers on UK Ships to the UK as a flag state, and from seafarers in non-UK ships in UK ports, and the results of MCA investigations will be analysed.

A continuously reducing number of serious breaches and deficiencies in UK MLC inspections and Port State inspections, and complaints to MCA would demonstrate that the regulations were improving the standards on ships.

Successful resolution of complaints would also demonstrate that the regulations were having a positive impact.

10. Wider impacts

10.1. Equalities Assessment

The proposed Regulations would be applicable to all seafarers working on UK sea-going vessels to which the Regulations apply, irrespective of their age, ethnic origin, gender, nationality, race, sexual

orientation or disability. The Maritime Labour Convention, 2006 is based on the fundamental rights and principles of workers (Article III):

- (a) freedom of association and the effective recognition of the right to collective bargaining;
- (b) the elimination of all forms of forced or compulsory labour;
- (c) the effective abolition of child labour; and
- (d) the elimination of discrimination in respect of employment and occupation.

10.2. Competition Assessment

The proposed Regulations would primarily bring existing UK legislation into line with the requirements of the MLC. The MLC aims to provide a benchmark for the decent employment of seafarers globally, and it is expected that the MLC will be very widely implemented internationally.

By introducing a set of minimum standards that apply internationally, the MLC should promote a more level competitive playing field internationally and reduce the ability of ship operators to gain a competitive advantage through poor treatment of seafarers.

It is likely that this would reduce the competitiveness of ship operators that are currently less compliant with the requirements of the MLC and improve the competitiveness of ship operators that are currently more compliant with the requirement of the MLC. However, the magnitude of this impact is uncertain.

It is possible that the proposed Regulations could have an impact on competition. The precise impact would depend on how the proposed Regulations affect relative costs.

Cost increases introduced through new Regulations that change costs of some suppliers relative to others have the potential to impact competition (for example) if they thereby limit the range of suppliers. Whilst the illustrative estimates presented in this impact assessment suggest that complying with the MLC standards on crew accommodation would result in significant additional costs for UK registered tugs and cruise ships, the MLC is being widely ratified internationally. Furthermore, countries that ratify the MLC are able to enforce its minimum global standards on vessels registered to other states that visit their ports on a "no more favourable treatment" basis." Consequently, it is expected that ships registered in other countries therefore face similar additional costs.

Internationally, it is considered that the MLC would be more likely to provide a competitive benefit to UK firms. Ratification of the MLC allows the MCA to issue MLC certification, which would ensure that UK flagged vessels are not subject to unnecessary delays when visiting ships in ports of ratifying states. This should ensure that UK flagged vessels do not suffer a competitive disadvantage as a result of the introduction of the MLC globally.

10.3. Small Firms Impact Test

It is appropriate that the working conditions for all workers should be underpinned by common minimum standards regardless of the size of the company for which they work. Any costs arising from these proposals will inevitably have the greatest impact if they fall on small firms with a small turnover. As the Convention sets minimum standards for "decent work", it does not generally make concessions in those standards. However, these regulations will not apply to many small firms as it is proposed that the UK take advantage of the flexibility afforded by Article II paragraph 6 of the Convention, which allows the application of substantial equivalence to vessels under 200GT. To such end, the UK is progressing an amendment to the Small Commercial Vessels Code to make use of this flexibility. Small companies are likely to benefit most from this. However, this does not fall within the scope of these regulations, and will therefore be dealt with in a separate impact assessment.

The MCA has discussed the implications of the Convention with the Domestic Passenger Ship Steering Group and representatives of the Small Commercial Vessel sector, who represent the majority of small firms operating vessels that would be affected by the proposed Regulations. A large proportion of small ships fall under the code vessel regime, and operate on domestic voyages within 60 miles of a safe haven in the UK and would therefore not be covered by the UK's implementation of the MLC. This includes the implementation of the Crew Accommodation elements.

During the public consultation exercise on the draft regulations, consultees included small, medium and large businesses.

10.4. Health Impact Assessment

The objective of the Maritime Labour Convention is to provide all seafarers with decent employment by setting minimum global standards for living and working conditions, providing an effective regime to ensure that those standards are enforced, and a framework for continuous improvement. A feature of this is the standard of accommodation and recreational facilities, which have the potential to affect physical and mental health, fatigue and morale.

Seafarer quote

"It is like solitary confinement" page 23, Nautilus International survey of seafarers' living and working conditions - September 2010

Seafarer quote

"I work 12 hour days minimum. 7 days a week for 6 weeks. At the end of my tour I'm physically and emotionally exhausted" page 17, Nautilus International survey of seafarers' living and working conditions - September 2010

10.5. Human Rights

The proposed Regulations would implement provisions of the International Labour Organization's Maritime Labour Convention, 2006 which requires respect for the following fundamental rights and principles of workers (Article III):

- (a) freedom of association and the effective recognition of the right to collective bargaining;
- (b) the elimination of all forms of forced or compulsory labour;
- (c) the effective abolition of child labour; and
- (d) the elimination of discrimination in respect of employment and occupation.

There are no Human Rights compatibility issues arising from these Regulations.

10.6. Justice System

The main enforcement mechanism for these proposed Regulations would be through the inspection and certification of UK ships under the MLC by MCA surveyors. There would however also be offences and penalties laid down in the Regulations. These would be in line with the penalties in place for corresponding offences in existing Regulations. The MCA will review these offences and penalties with the Ministry of Justice to ensure a consistent approach in all sets of regulations implementing the MLC.

10.7 Greenhouse Gas Emissions

It is possible that there be could an impact on greenhouse gas emissions, particularly as a result of the changes to the design of new ships. However, given the limitations of the available evidence base (e.g. the Department does not have access to any evidence on how the changes to ship design would impact on greenhouse gas emissions), it has not been possible to estimate this impact.

11. Summary and preferred option

Introducing the proposed Regulations (Option 1) is the only policy option which satisfactorily achieves the policy objectives outlined above and is therefore the preferred option.

11.1 Implementation plan

These Regulations are part of a package of Regulations that are required to allow the UK to fulfil its obligations as an MLC ratifying country. The MLC came into force internationally on 20 August 2013.

A Merchant Shipping Notice and Marine Guidance Note will be published to accompany these Regulations, the former of which will provide the detail, and the latter will explain the provisions and give guidance on their practical interpretation. Information will also be available on the DfT/MCA website.

The primary enforcement mechanism for these Regulations on UK ships will be through flag State inspections for issue or renewal of a Maritime Labour Certificate. MCA surveyors will check the provisions for crew accommodation in the shipowners' Declaration of Maritime Labour Compliance Part II and by examining the crew accommodation onboard the ship as part of the inspection of UK ships. Further details about this regime are given in the consultation documents on the proposed 'Merchant Shipping (Maritime Labour Convention) (Survey and Certification) Regulations', which have been consulted on separately, and came into force in August 2013.

Furthermore, shipowners must have published procedures to deal with seafarers' complaints about their working and living conditions, and seafarers will also have the right to complain to an MCA surveyor in the UK or to any port state control officer in other countries, if they are not receiving their entitlements. This requirement will be implemented in UK law by the draft 'Merchant Shipping (Maritime Labour Convention) (Survey and Certification) Regulations' and is therefore not assessed in this impact assessment.

12. Changes to the impact assessment in response to the Regulatory Policy Committee (RPC) Opinion on the Consultation Stage Impact Assessment

The RPC commented that it is essential that the MCA works proactively with industry during the consultation period to develop robust monetised costs and benefits of this measure. Further information was sought through the public consultation exercise, but no quantitative evidence was provided by consultees. The changes required by the regulations can be implemented in a large number of ways, and are dependant on the innovation of designers. It would not therefore be a straightforward exercise to identify the associated costs and their precise impact will depend on individual approaches of designers and shipowners.

The RPC also asked for clarification regarding whether there would be transition costs associated with training enforcement staff on the new requirements of this measure. MCA surveyors have already been used to inspecting compliance with current repatriation regulations under the inspection of UK ships in compliance with ILO Convention 178. The cost of training surveyors to undertake MLC inspections is considered in the Impact Assessment for the 'Merchant Shipping (Maritime Labour Convention) (Survey and Certification) Regulations'. Crew accommodation requirements would be set out in the Merchant Shipping Notice (MSN), which would simplify the inspection process. Given the integration of the inspection process with inspection of other MLC requirements, it would not be possible to disaggregate the cost of training surveyors to inspect for this item in isolation.

References

No.	Legislation or publication
1	Maritime Labour Convention, 2006 http://www.ilo.org/global/standards/maritime-labour-convention/WCMS_090250/lang--en/index.htm
2	Merchant Shipping (Crew Accommodation) Regulations 1997 (SI 1997/1508) http://www.legislation.gov.uk/ukxi/1997/1508/contents/made
3	ILO Crew Accommodation Conventions C92 and C133
4	ILO (2001) The impact of seafarers' living and working conditions of changes in the structure of the shipping industry. Report JMC/29/2001/3 http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_PUBL_9221122379_EN/lang--en/index.htm
5	European Commission (2006) Communication from the Commission under Article 138(2) of the EC Treaty on the strengthening of maritime labour standards. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0287:FIN:EN:PDF
6	ILO (2012) Maritime Labour Convention, 2006: Frequently asked questions. http://www.ilo.org/global/standards/maritime-labour-convention/WCMS_177371/lang--en/index.htm
7	ILO (2011) Advantages of the Maritime Labour Convention, 2006. http://www.ilo.org/global/standards/maritime-labour-convention/WCMS_153450/lang--en/index.htm
8	Nautilus International survey of seafarer living and working conditions report: http://content.yudu.com/Library/A1nb2g/ShipboardSocialCondi/resources/index.htm?referrerUrl=http%3A%2F%2Fwww.yudu.com%2Fitem%2Fdetails%2F145295%2FQ-A---Seafarer-Living-and-Working-Conditions
9	The Merchant Shipping Act 1995

Annex 2: Background on the Maritime Labour Convention (2006)

At its 94th (Maritime) Session in February 2006 the International Labour Conference adopted the Maritime Labour Convention 2006. The Convention will come into force internationally on 20 August 2013.

The ILO's Maritime Labour Convention 2006 (MLC) provides comprehensive rights and protection at work for the world's more than 1.2 million seafarers. The Convention is a major tool in the furtherance of the Better Regulation objective of consolidation of existing legal instruments, as it consolidates and updates more than 65 international labour standards related to seafarers adopted over the last 80 years. The Convention sets out seafarers' rights to decent conditions of work on a wide range of subjects, and aims to be globally applicable, easily understandable, readily updatable and uniformly enforced. It has been designed to become a global instrument known as the "fourth pillar" of the international regulatory regime for quality shipping, complementing the key Conventions of the International Maritime Organization (IMO) (Safety of Life at Sea (SOLAS), prevention of marine pollution (MARPOL), and training and certification (STCW)).

The Convention's provisions are arranged in 5 Titles, as follows:

Title 1: Minimum requirements for seafarers to work on a ship (minimum age; medical certification; training; recruitment and placement).

Title 2: Conditions of employment (employment agreements; wages; hours of work; annual leave; repatriation; compensation for ship's loss; manning; career development).

Title 3: Accommodation, recreational facilities, food and catering.

Title 4: Health protection, medical care, welfare and social provision (medical care on board and ashore; shipowners' liability; health and safety; welfare facilities; social security).

Title 5: Compliance and enforcement

There were two criteria to be met before the MLC could come into force internationally. The first was that the Convention should be ratified by countries representing at least 33% of the world's tonnage. The second was that at least 30 countries should ratify the Convention. On 20 August, the Philippines became the 30th country to ratify the MLC, which between them represent nearly 60% of the world's fleet. Both criteria have therefore now been met.

In the UK, decisions on whether or not legislative changes are desirable and should be introduced in order to comply with a particular Convention will depend on a number of factors, including their costs and benefits, impact on other government policies, the commitment of resources and whether ratification would lead to an improvement in the level of protection for the workers concerned.

In this case, the UK played an active role in developing the Convention and fully supported the measures it contains. Command White Paper 7049 indicated the UK's commitment to ratification. Order in Council 2009/1757 declares that the MLC is ancillary to the existing Community Treaties and the MLC is considered itself to be a Community Treaty under section 1(2) of the European Communities Act 1972. The European Union has exhorted member states to ratify the Convention in full. Ratification and implementation of the Convention do not constitute any surrender of sovereignty, and do not extend European Union competence.

The UK government's social partners, the shipping industry and the seafarer's Trades Unions (see Annex 4), support prompt ratification of the Convention, so the policy of UK ratification is non-controversial. The social partners wrote jointly to Mark Prisk, then Minister for Business and Enterprise, in August 2012 pressing for rapid progress on implementation of the MLC.

Resolution 17 of the Maritime Labour Conference in February 2006 provides a two year phase in period after the Convention reaches its ratification criteria. In the first year, high priority ships (passenger ships, tankers and bulk carriers) must be issued with Maritime Labour Certificates. Within two years, all other ships must be compliant and (where appropriate) certificated. The UK will not now be among the first 30 nations to ratify and so will not benefit from this transitional period. However, the MCA has introduced early voluntary inspection of ships against MLC standards, so that both industry and unions can prepare for compliance with the Convention, and the MCA can issue documentation for UK ships in preparation for issuing certificates under the Convention when the necessary UK legislation is in place.

Annex 3: Impacts of UK Ratification of the Maritime Labour Convention (2006)

A.3.1. Context

There would be two sets of impacts from introducing the package of legislation that is necessary to implement the Maritime Labour Convention (MLC) in the UK. Firstly, there would be the costs and benefits which would be directly attributable to each of the Regulations that are necessary to implement the specific requirements of the MLC. Secondly, there would be additional costs and benefits that would arise from UK ratification of the MLC once the entire package of legislation is in place.

The costs and benefits which would be directly attributable to each of the proposed implementing Regulations for UK registered ships are considered in their respective impact assessments. Non-UK registered ships calling at UK ports may also be subjected to the requirements of MLC due to the “no-more-favourable treatment” regime. This means that a port state which has ratified the MLC will apply the same MLC standards to all ships visiting their ports, whether or not the ship’s flag state has ratified the MLC. The overall costs and benefits to the UK that would arise from the package of legislation necessary for UK ratification of the MLC are the sum of the costs and benefits of each of the implementing Regulations, plus the additional costs and benefits that would arise from UK ratification of the MLC.

This annex contains a full qualitative description of the additional benefits of UK ratification of the MLC. However, due to various uncertainties and the limitations of the available evidence base, it has not been possible to monetise any of these benefits. A full qualitative description of each of the additional benefits to the UK has been provided. These additional benefits include:

- The general promotion of decent living and working conditions for seafarers;
- Contributing to the creation of a more level global competitive playing field for the shipping industry, which would reduce the competitive advantages gained by shipowners that operate substandard ships;
- Enabling UK registered ships to benefit from the system of MLC certification when operating internationally; and
- Avoiding the potential costs to UK registered ships of not ratifying the MLC

The key factors that have prevented the monetisation of all of the additional costs and additional benefits of UK ratification of the MLC include the uncertainty and limitations of the available evidence base surrounding the extent that UK ratification of the MLC would contribute to realising these costs and benefits (e.g. several of the impacts would depend upon which other countries ratify the MLC) and the extent that the impacts on UK registered and non-UK registered ships and the seafarers working on them would represent costs and benefits to the UK.

Despite the uncertainty around the scale of potential overall costs and benefits of UK ratification of the MLC, and the limitations of the available evidence base which mean that it has not been possible to monetise any of the additional costs and benefits of UK ratification of the MLC, it should be noted that the Chamber of Shipping and Seafarer’s unions consider the costs of implementing the MLC to be manageable and expect that the overall benefits to the UK of UK ratification of the MLC and the package of legislation necessary to implement the MLC in the UK would significantly outweigh the overall costs to UK shipowners of UK ratification of the MLC and the package of legislation necessary to implement the MLC in the UK.

A.3.2. Scope of impacts

In considering the impacts of the MLC, the international nature of the shipping industry must be considered. Whilst impact assessments should assess all of the impacts of the policy options that are being considered, the focus of the impact assessment process is assessing the impacts of the policy options that are being considered on the UK, which includes the impacts on the public sector in the UK, the impacts on UK businesses and the third sector in the UK, and the impacts on UK consumers.

The proposed UK implementing Regulations would primarily apply to ships that are registered on the UK flag. However, UK ratification of the MLC would give the UK the right to inspect non-UK registered ships for compliance with the minimum global standards provided for by the MLC when they call at ports in the UK, and each set of regulations would therefore allow the UK to enforce these minimum global standards on non-UK registered ships visiting UK ports on a “no more favourable treatment” basis. It should also be noted that the costs of the MLC Survey and Certification regime would also result from UK ratification of the MLC; these costs are considered in the impact assessment pertaining to the Regulations necessary to implement the MLC Survey & inspection regime in the UK.

Data from the UK Ship Register (UKSR) has been used to assist in monetising some of the impacts of some of the proposed UK implementing Regulations on UK registered ships.

However, the nationality of the registration of a ship does not necessarily relate to the nationality of its owner or operator, the geographical locations that it operates, and the origins and destinations of the goods and passengers that are carried. Therefore, it should be noted that ships registered on the UK flag are not necessarily “UK owned”, and “UK owned” ships are not necessarily registered to the UK flag, and it should be noted that UK imports and exports and passengers are not necessarily transported on UK registered ships. Similarly, when considering the impacts on seafarers, it should be noted that both UK nationals and non-UK nationals work on UK registered ships, and that UK nationals also work on non-UK registered ships.

Therefore, it should be noted that the extent that the impacts on UK registered ships and non-UK registered ships and the seafarers working on them would represent costs and benefits to the UK is uncertain. For example, costs to the owners and operators of UK registered ships would not necessarily represent costs to the UK, and some of the costs to the owners and operators of non-UK registered ships could potentially represent costs to the UK.

Estimating the overall costs and benefits of UK ratification of the MLC is further complicated by the fact that the scale of potential costs and benefits depends upon the number of other countries who ratify the MLC. The main impacts on UK registered ships of UK ratification of the MLC and ratification of the MLC in other countries are illustrated in Table 1. This table also illustrates the impacts on non-UK registered ships. For the purposes of interpreting Table 1, as explained above, it should be noted that:

- UK registered ships may be UK owned or non-UK owned;
- Non-UK registered ships may be UK owned or non-UK owned; and
- Seafarers working on UK registered ships and non-UK registered ships may be UK nationals or non-UK nationals.

Table 1 – Main impacts of MLC ratification

Impacts of...	Impacts on...	Type of impact	Direct impact falls on...
UK Ratification of the MLC	UK registered ships	Survey & Certification Costs Compliance Costs Benefits of MLC provisions	Shipowners, MCA Shipowners Seafarers and Shipowners
	Non-UK registered ships	Costs of PSC inspections in UK ports, and potential compliance costs if non-compliant Benefits of PSC inspections	Shipowners, MCA Seafarers and Shipowners
Ratification of the MLC in other countries	UK registered ships	Benefits of MLC certification when calling at ports in these countries	Shipowners
		Cost of delays caused by PSC inspections in ports in these countries if not MLC-certified	Shipowners
		Costs of compliance if non-compliant with MLC standards	Shipowners
	Non-UK registered ships	Survey & Certification Costs Benefits of MLC provisions	Shipowners Seafarers and Shipowners
Compliance Costs		Shipowners	

Whilst it is expected that the MLC will indeed be widely ratified internationally, it is not possible to predict precisely to what extent it will be ratified. Consequently, the scale of the costs and benefits of UK ratification is uncertain. For example, the benefits to UK registered ships of the system of MLC certification would mainly apply to UK registered ships that call at ports in MLC-ratifying states.¹ Monetising this impact would require additional evidence on which to base assumptions regarding the operational patterns of UK registered ships, and the extent of MLC ratification amongst the port states that these ships call at. The associated risks are discussed in section A.3.4 of this annex.

A.3.3. Additional benefits of UK ratification of the MLC

This section outlines the key additional benefits that it is expected would arise as a result of UK ratification of the MLC.

1.) UK ratification of the MLC would promote decent living and working conditions for seafarers globally.

- Employment conditions for seafarers vary across the world, with some seafarers working under unacceptable conditions.
- ILO (2001) discusses some of the problems faced by seafarers globally, including poor standards of crew accommodation, nutritionally inadequate food, and not receiving the same quality of medical care as available to land-based workers.
- By providing minimum rights for all seafarers that are globally applicable and uniformly enforced, the MLC promotes decent working and living conditions for seafarers globally, with the European Commission (2006) suggesting that the MLC “can help to bring about more homogeneous employment conditions for the benefit of seafarers”.
- One of the ILO fundamental rights and principles on which the MLC is based is to eliminate discrimination in respect of employment and occupation (MLC Article III(d)). One of the underlying principles of the MLC is therefore to ensure that seafarers, as far as practicable, are not discriminated against but enjoy the same living and working conditions as employees ashore

¹ The MLC Certification regime, together with the “no more favourable treatment” clause, will bring competitive benefits to all UK ships to the extent that they are competing globally, as explained in A3.3. section 3.

enjoy. This benefit would mainly accrue to seafarers whose current employment conditions fall short of the MLC standard, and would therefore have to be improved as a result of the MLC.

- ILO (2011) discusses the mechanisms that would ensure that the benefits of the MLC for seafarers would be realised, including that the MLC provides improved “enforcement of minimum working and living conditions” and the right “to make complaints both on board and ashore”.
- As UK registered ships already broadly comply with most of the standards required by the MLC, it is expected that seafarers working on non-UK registered ships would benefit to a greater extent. UK nationals working on non-UK ships would be among those to benefit in this way, although no data is available to quantify the magnitude of this potential benefit.
- The MLC requires wide international implementation (which it is expected to get) in order to be fully effective for all seafarers, and hence UK ratification could drive further benefits by providing additional incentives for other countries with ships calling at UK ports to ratify the MLC.

2.) UK ratification of the MLC would enable UK registered ships to benefit from the system of MLC certification.

- ILO (2011) notes that one of the benefits of the MLC is that it protects “against unfair competition from substandard ships through ‘no more favourable treatment’ for ships of non-ratifying countries”.
- Regardless of whether the UK ratifies the MLC, UK registered ships would still be subject to the provisions of the MLC on a ‘no more favourable treatment’ basis when visiting foreign ports in countries that have ratified the MLC. This means that UK registered ships operating internationally would be required to comply with the standards of the MLC when visiting ports in ratifying countries whether the UK has implemented the MLC or not.
- The ILO Guidelines on Port State Control state that possession of a valid Maritime Labour Certificate should be considered as prima facie evidence that the ship complies with the MLC. MLC certification is only available through a vessel’s flag state administration, hence non-ratification of the MLC in the UK would be expected to put UK Registered ships at a disadvantage as they would lack MLC certification which is a deficiency under the MLC even if they are otherwise in compliance with the MLC standards.
- Under the ILO Guidelines on Port State Control, failure to hold such a certificate, and the accompanying documentation, would give the Port State sufficient reason to subject the vessel to a more detailed inspection – although if conditions on board are found to be good then the inspection may not need to be extensive (this would be at the discretion of the PSC officer). Part of the documentation is a record of the national legislation applying to the vessel concerned. Where there is no documentation, the Port State Control inspectors may apply inappropriate standards from their own national interpretation of the MLC standards – particularly where the MLC standards are expressed in general terms.
- Therefore, the absence of an MLC certificate could potentially subject UK registered ships to longer delays in port than they would otherwise face as port states verify compliance with the MLC through port state control procedures. The benefits of UK ratification, in terms of the costs of non-ratification thereby avoided, would only apply when calling at ports of MLC-ratifying states.
- Furthermore, it should be noted that serious or repeated non-compliance with the MLC could also result in UK registered ships being detained in foreign ports in countries that have ratified the MLC.
- When the new EC directive on port state control is fully in force, ships would be considered as high, medium or low risk. UK ships are currently considered as low risk, minimising the frequency of inspection under PSC in Europe. If the UK does not ratify the MLC and so UK ships have no MLC documentation, this may over time affect the ranking of UK ships for PSC purposes, potentially leading to increases in the frequency of inspections.

3.) UK ratification of the MLC would promote a more level competitive playing field for shipping globally.

- At present, ship operators which operate substandard ships can gain a competitive advantage. This is because shipowners operating substandard ships can potentially gain a cost advantage and undercut shipowners which provide seafarers with decent conditions of work.
- UK ships generally have reasonably good employment conditions, and therefore operate with higher operating costs than ships registered on many other flags. UK ratification of the MLC would therefore benefit UK shipowners by ensuring that ships registered on other flags that call in UK ports would need to apply the minimum global standards of MLC and so lose some of their competitive advantage on costs.
- ILO (2011) reports that a benefit of the MLC would be a “more level playing field to help ensure fair competition and to marginalize substandard operations”.
- By enabling countries that ratify the MLC to enforce the minimum global standards provided for in the MLC on foreign registered ships that call at their ports on a “no more favourable treatment” basis, the MLC will help to create a more level competitive playing field and help to ensure fairer competition by limiting the scope for ship operators to gain a competitive advantage through operating substandard ships.
- As a consequence, the European Commission (2006) suggests that the MLC “should help to stabilise the maritime transport sector in the face of global competition and reduce the double gap between, firstly, European and third country operators and, secondly, between the different flags which favours *de facto* those maritime nations and operators with the least stringent social legislation.”
- The impacts of each set of proposed UK implementing Regulations on competition are fully discussed in the competition assessment contained in their respective impact assessments.

A.3.4. Risks of UK ratification of the MLC

The MLC will come into force in August 2013, after ratification by 30 flag states representing at least 33% of the world fleet tonnage. The benefits arising from ratification of the MLC will depend on how widely the MLC is implemented. Therefore, the main risk associated with ratifying the MLC is that the UK introduces new legislation to implement the MLC, but that subsequently the MLC only achieves a low take-up internationally. This would reduce the potential benefits and could potentially put UK-registered ships at a competitive disadvantage. However, it is likely that the MLC will be widely ratified internationally due to the high level of commitment from all sides.²

A.3.5. Risks to the UK of not ratifying the MLC

There are a number of risks to the UK associated with not ratifying the MLC. These include:

- The risk of EU infraction proceedings;
- The risk of negative impacts on the competitiveness of UK registered ships; and
- The risk of negative impacts on the competitiveness of the UK Ship register.

Failure to implement the Social Partners Agreement on the MLC which is annexed to Council Directive 2009/13/EC within 12 months of the coming into force date of the MLC would leave the UK open to infraction proceedings. This risk would apply to most of the UK implementing Regulations. The Social Partners Agreement covers the MLC provisions on minimum age, medical certification, seafarer employment agreement (SEAs), repatriation, hours of work, annual leave, shipowner liability and

² See Question A18 in ILO (2012).

And : ILO Maritime Labour Convention, 2006 A Guide for the Shipping Industry Page 8, Coverage

seafarer compensation, food and catering, medical care, health and safety, and complaint procedures. However, it should be noted that the Social Partners Agreement does not cover all of the MLC provisions, such as on wages, social security and most of the technical standards relating to crew accommodation.

If the UK does not ratify the MLC, there would be some short term cost savings to shipowners and to government by not having to implement the revised standards in the MLC. However, regardless of whether the UK ratifies the MLC, UK registered vessels would still be subject to the provisions of the MLC on a “no more favourable treatment” basis when operating in foreign ports in countries that have ratified the MLC. Consequently, there could potentially be a risk that UK ships operating in foreign ports would be inspected for MLC compliance as part of Port State Control regime inspections in countries that have ratified the MLC, and would be unable to evidence their compliance with MLC due to the UK not being able to issue MLC Certificates of Compliance.

Since 2006, MLC has been widely recognised in the shipping community as the fourth pillar of quality shipping (alongside the IMO Conventions on Safety of Life at Sea (SOLAS), prevention of marine pollution (MARPOL), and training and certification (STCW)). It is anticipated that MLC certification would become a sign of quality for shipowners in the early years of international implementation. There could be a disincentive to shippers to charter non-MLC certified ships, thus potentially damaging the business won by ships on the UK ship register if the UK does not ratify the MLC.

There would also be an impact on the reputation of the UK’s shipping industry and the UK ship register if the UK does not ratify the MLC, as this could be seen as a rejection of modern standards agreed by the global shipping industry. Since both the UKSR and UK shipping market themselves on grounds of quality, this impact could be severe.

Over time, the UK’s inability to issue statutory MLC documentation may discourage shipowners from registering their ships with the UK, and they may be more likely to choose a flag which can provide them with a certificate of MLC compliance, particularly if their ship already broadly meets the requirements of the MLC. Existing UK shipowners may also transfer to other flags if the UK cannot issue them with the documentation they need to operate efficiently, and to demonstrate that they operate quality ships.

Delay in the UK’s ratification of the MLC continues to reduce the time available to UK shipowners and to the UK and Red Ensign Group administrations to ensure that ships are prepared for and certified in accordance with the MLC before it comes into force internationally.

As the UK is not among the first 30 flag states to ratify the MLC, the transitional period between UK ratification and the MLC coming into force, which is the time available for UK shipowners to bring their ships into compliance with the MLC, is very limited. This also limits the time available for the MCA, as the competent authority, to survey and certify UK flagged ships, putting a strain on limited resources. There is a risk that, if the period between UK ratification and the international coming into force of the MLC is short, the MCA will be unable to complete certification within the time available.

A.3.6. Conclusion

1. Due to various uncertainties and the limitations of the available evidence base, it has not been possible to monetise any of the overall costs and benefits of UK ratification of the MLC.
2. Key additional benefits of UK ratification of the MLC include promoting decent living and working conditions for seafarers globally, enabling UK registered ships to benefit from the system of MLC certification and promoting a more level competitive playing field for shipping globally.
3. Despite the various uncertainties and limitations of the available evidence base, the UK Chamber of Shipping and Seafarer’s unions expect that the benefits to the UK of ratification of the MLC would significantly outweigh the costs to the UK.
4. The key risk to the UK of ratifying the MLC before it comes into force internationally is that the UK introduces new legislation to implement the MLC but that subsequently the MLC only achieves a low take-up internationally. This would reduce the potential benefits and could potentially put UK-registered ships at a competitive disadvantage. However, this is thought to be a low risk.

5. The key risks to the UK of not ratifying the MLC include the risk of EU infraction proceedings, the risk of negative impacts on the competitiveness of UK registered ships and the risk of negative impacts on the competitiveness of the UK Ship register.

Annex 4 - Shipowner and seafarer representatives

As the MLC, 2006 is an ILO Convention, it was negotiated on a tripartite basis between Governments, and representatives of the two sides of industry (shipowner and seafarer representatives).

In implementing the Convention, governments are also required to work in a tripartite manner. In the UK, the MCA has consulted with a Tripartite Working Group (TWG) to develop policy for its regulations and guidance.

The members of the TWG are:

Government Representatives

Department for Transport (Maritime Employment, Pensions and Training Branch)

The Maritime and Coastguard Agency

A representative of the other administrations of the Red Ensign Group (UK Crown Dependencies and UK Overseas Territories)

Shipowner representatives

The British Chamber of Shipping

The British Tugowner Association

Seafarer representatives

Nautilus International

National Union of Rail Maritime and Transport Workers

Unite

Other organisations have been invited to attend on an ad hoc basis.

P&I Clubs

P&I stands for **P**rotection and **I**ndemnity. P&I is insurance in respect of third party liabilities and expenses arising from owning ships or operating ships as principals. An insurance mutual, a Club, provides collective self insurance to its Members. The membership is comprised of a common interest group who wish to pool their risks together in order to obtain "at cost" insurance cover.

Annex 5 - Glossary of Terms

This glossary defines terms as they are used in this Impact Assessment and may not fully align with any legal definition. Where the definition is an exact legal definition, the source is quoted.

Ship includes any description of vessel used in navigation (*Merchant Shipping Act 1995 s.313*) other than one which navigates exclusively in inland waters or waters within, or closely adjacent to, sheltered waters or areas where port regulations apply. (*Article II.1(i)*) The Convention applies to all ships which are ordinarily engaged in commercial operations (*Article II.4*)

The UK therefore proposes to apply the provisions of the Convention to:

- all UK vessels which operate either on international voyages, or from a foreign port; and
- all UK vessels operating on UK domestic voyages which operate more than 60 miles from a safe haven in the UK;

UK ship [also UK-registered ship, UK flagged ship] : a ship on the UK Ship Register or an unregistered ship which is wholly owned by British or British Dependent Territories citizens or British Overseas citizens, or by a body corporate established under the laws of any part of the UK. (*Merchant Shipping Act 1995 s.85(2)*)

Non-UK [registered, flagged] ship: a ship registered to or flying the flag of a country other than the United Kingdom.

Shipowner: means the owner of a ship or another organization or person, such as the manager, agent or bareboat charterer, who has assumed the responsibility for the operation of the ship from the owner and who, on assuming such responsibility, has agreed to take over the duties and responsibilities imposed on shipowners in accordance with this Convention, regardless of whether any other organization or persons fulfil certain of the duties or responsibilities on behalf of the shipowner (*Maritime Labour Convention Article II .1(j)*)

UK shipowner means the shipowner of a UK registered/flagged ship.

Seafarer means any person who is employed or engaged or working in any capacity on board a ship.

UK seafarer means a seafarer of any nationality working on a UK ship.

Fishing vessel: means any ship or boat, of any nature whatsoever, irrespective of the form of ownership, used or intended to be used for the purpose of commercial fishing.

Fisherman means every person employment or engaged in any capacity or carrying out an occupation on board any fishing vessel, including persons working on board who are paid on the basis of a share of the catch, but excluding pilots, naval personnel, other persons in the permanent service of a government, shore-based persons carrying out work aboard a fishing vessel and fisheries observers.

Flag State: the authority under which a country exercises regulatory control over commercial vessels operating under its flag.

Port State: the authority under which a country exercises regulatory control over commercial vessels operating under the flags of other countries which call at ports in its territory.

The International Labour Organization (ILO): the tripartite UN agency which brings together governments, employers and workers of its members states in common action to promote decent work. (*From ILO website: www.ilo.org)*

The Maritime and Coastguard Agency (MCA): an Executive Agency of the Department for Transport, responsible for implementing throughout the UK the government's maritime safety policy. The MCA is responsible for implementing the legislation required to allow the UK to ratify the MLC, and will have the primary role in enforcing MLC standards on UK ship and on non-UK ships calling at UK ports.

Gross Tonnage: a measurement of volume (not weight) relating to a ship's enclosed spaces

Draught: the depth of water necessary to float a ship, or the depth a ship sinks in water

PSC deficiencies : Where specific aspects of the living and working conditions on board a ship do not conform to the requirements of the MLC and deadlines for their rectification have been set by an inspecting officer.

PSC (Flag State) detention : Where conditions on board a ship are clearly hazardous to the safety, health or security of seafarers or the non-conformity constitutes a serious or repeated breach of the requirements of the MLC, including seafarers' rights.

ISM : International Safety Management Code is the SOLAS system for managing the safe operations of ships and for pollution prevention.

Paris MOU : A memorandum of understanding signed by 27 participating maritime Administrations who cover the waters of the European coastal States and the North Atlantic basin from North America to Europe. It seeks to eliminate the operation of sub-standard ships through a harmonized system of port State control inspections.

"sea-going" in relation to a UK ship:

(a) a ship in respect of which a certificate is required to be in force in accordance with-

- (i) the Merchant Shipping (Load Line) Regulations 1998
- (ii) the Merchant Shipping (Vessels in Commercial Use for Sport or pleasure) Regulations 1998 or
- (iii) the Merchant Shipping (Small Work boats and Pilot Boats) Regulations 1998,

(b) a passenger ship of class I,II,II(A), III, VI or VI(A) in respect of which a certificate is required to be in force in accordance with the Merchant Shipping (Survey and Certification) Regulations 1995, or

(c) a high speed craft in respect of which a permit to operate outside waters of Categories A,B,C or D is required to be in force in accordance with the Merchant Shipping (High Speed Craft) Regulations 2004(5). (*Merchant Shipping (Maritime Labour Convention)(Medical Certification) Regs 2010*)