

Title: Merchant Shipping (Domestic Passenger Ships) (Safety Management Code) (Amendment) Regulations IA No: DfT00305 Lead department or agency: Maritime and Coastguard Agency Other departments or agencies: Department for Transport	Impact Assessment (IA)		
	Date: 7 October 2014		
	Stage: Consultation		
	Source of intervention: Domestic		
	Type of measure: Secondary legislation		
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Summary: Intervention and Options		RPC Opinion: RPC Opinion Status	

Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out? Measure qualifies as
£1.43m	£0.85m	-£0.08m	Yes OUT

What is the problem under consideration? Why is government intervention necessary?
 Passenger ships operating in UK waters are required to be surveyed for domestic safety management (DSM) twice a year. Ships operating internationally under international safety management (ISM) require two ship surveys, one office survey and annual self-assessments in a five year period which is considered appropriate to the operational safety risks. Ships operating locally have a lower level of safety risk due to operating closer to shore therefore the existing survey regime is considered disproportionate and places unnecessary burdens on businesses given the risks they face. Government intervention is required to amend statutory requirements to reduce this unnecessary burden.

What are the policy objectives and the intended effects?
 The proposal intends to provide a more suitable audit regime for domestically operating passenger ships to the safety risks involved. This aligns the requirements with the audit regime for internationally operating ships, thereby reducing the number of ship audits undertaken each year. In addition, the proposal introduces annual self-assessments and an office audit as part of the regime to ensure that there is consistency in safety management on shore as well as on board ship. The final objective is to remove gold plating identified during the Red Tape Challenge where domestic High Speed Craft are required to comply with ISM rather than DSM.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)
 Do nothing is not considered a viable policy option as it fails to meet the policy objectives and issues raised by the domestic passenger ship industry. Do nothing is therefore considered the baseline for this Impact Assessment.

 Option 1 – revise the DSM audit regime and remove gold plating applied to domestic High Speed Craft. **This is the preferred option** and meets the requirements of risk based regulation and reducing regulation. This option has the support of industry.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 04/2020

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: N/A

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

Signed by the responsible Minister: _____ Date _____

Summary: Analysis & Evidence

Policy Option 1

Description: Amendments to the DSM survey regime and removal of requirements for domestic high speed craft to follow the ISM

FULL ECONOMIC ASSESSMENT

Price Base Year 2014	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 1.41	High: 1.45	Best Estimate: 1.43

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.0	years	0.1	0.6
High	0.0		0.1	0.6
Best Estimate	0.0		0.1	0.6

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

The new costs to the MCA and business of meeting the requirements of the revised audit regime, which have been monetised in this IA, are estimated at around £0.063 million to £0.068 million per year, with a Best Estimate of around £0.065 million per year on average. This includes the opportunity cost of staff time involved in the preparation for the office audit and self-assessments and the fees charged for the office audit. There are new costs to the MCA of reviewing self-assessments.

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

The key non-monetised cost to businesses is the familiarisation costs due to the need for operators to familiarise themselves with the proposed regulations. This cost is expected to be negligible as the DSM system requirements remain the same with only the number of surveys changing. The preparation time for the office audit and self-assessments is considered similar to the preparation for ship surveys.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	years	0.2	2.0
High	0.0		0.2	2.0
Best Estimate	0.0		0.2	2.0

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

The best estimate of the benefits to the MCA and business of meeting the requirements of the revised audit regime, what have been monetised in this IA, are around £0.24 million per year on average. The key benefit to business is the reduction in the number of hours charged of the Maritime and Coastguard Agency's (MCA) surveyor fees. The MCA benefit from no longer facing the costs of the 'in-service' audit which is not charged to business under the Do nothing and is no longer a requirement under Option 1.

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

Operators will benefit from increased flexibility; they can carry out the self-assessments at a time which is most suitable for the company as opposed to the pre-set date and time of the audit. There is a potential saving where the time taken to prepare and draft self-assessments may reduce over time as companies become more familiar with the process.

Key assumptions/sensitivities/risks Discount rate (%) 3.5%

1.) Given the limitations of the available evidence base, it has not been possible to monetise some of the benefits of Option 1. 2.) The estimates of the costs under the Do Nothing and Option 1 presented in this IA are sensitive to the data sources used in this analysis and the assumptions that have been made in this IA.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:				In scope of OITO?	Measure qualifies as		
Costs:	0.0	Benefits:	0.1	Net:	0.1	Yes	OUT

Evidence Base

1. Background

1.1 Domestic Safety Management Code

Domestic Safety Management (DSM) was introduced in 2001 by Merchant Shipping (Domestic Passenger Ships) (Safety Management Code) Regulations 2001 (Statutory Instrument, SI 2001/3209). The DSM Code requires operators of domestic passenger ships to have in place a safety management system tailored to their specific operations. This safety management system should include:

- A health and safety policy
- Procedures to ensure the safe operation of ships in compliance with relevant rules
- Lines of communication between personnel ashore and afloat
- Procedures for reporting accidents
- Procedures for responding to emergency situations

The DSM Code was developed to establish a common standard for the safe operation of passenger ships employed on domestic (operating only in UK waters) trade and it applies to ships of Class III, IV, V, VI and VI(A)¹ and those certified under the Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters) Regulations 2010² (SI 2010/680). The objectives of safety management require the shipping company to apply a simple and cost effective means of ensuring safety on board ships; preventing human injury and loss of life; and complying with applicable regulations and rules.

No two ship operations are the same, and ships vary significantly in size and are employed under a wide range of different locations and conditions. The general principles to the safe operation of ships are consistent however, and can be expressed in such terms that they can be applied to a wide variety of ships.

The current practice is for each ship to be audited for compliance with the DSM Code twice annually. The first of these two annual ship audits is generally undertaken at the same time as the survey for the issue of the Passenger Ship Safety Certificate; the second of the annual audits is undertaken whilst the ship is 'in service' (operating).

1.2 International Safety Management

The International Safety Management Code for the Safe Operation of Ships and for Pollution Prevention (the ISM Code) has as its objectives; ensuring safety of life at sea, preventing human injury and loss of life, avoiding damage to the environment (particularly the marine environment) and avoiding damage to property. This is achieved through:

- A safety and environmental protection policy;
- Instructions and procedures to ensure safe operations of ships and protection of the environment in compliance with relevant international and flag State legislation;
- Defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;
- Procedures for reporting accidents and non-conformities with the provisions of the Code;
- Procedures to prepare for and respond to emergency situations; and
- Procedures for internal audits and management reviews.

The ISM Code first became mandatory in UK legislation in 1997³ to implement European Council Regulation (EC) No. 3051/95. The application of the ISM Code was extended further in 1998 and 2002⁴

¹ Definitions of ship classifications are listed in SI 2001/3209, the Merchant Shipping (Domestic Passenger ships) (Safety Management Code) Regulations 2001.

² SI 2010/680 came in to force in April 2010

³ The Merchant Shipping (ISM) (Ro-Ro Passenger Ferries) Regulations 1997 (SI 1997/3022)

⁴ The Merchant Shipping (International Safety management (ISM) Code) Regulations 1998, as amended (SI 1998/1561)

and finally, the existing UK legislation was consolidated in Merchant Shipping (International Safety Management (ISM) Code) Regulations 2014 (SI 2014/1512) and implements EU Regulations 336/2006. It applies to UK ships on international voyages: passenger ships of UK Classes I, II and II(A); cargo ships of 500 gross tonnage (GT) and over; and mobile offshore drilling units of 500 GT or more. In addition, both domestic and internationally operating High Speed Craft (HSC) must comply with the ISM Code, as well as any non-UK ships whilst in UK waters.

The audit regime under the ISM Code requires one office audit, two ship audits and annual self-assessments of both ship and office over a five year period.

2. Problem under consideration

The current practice requires each UK domestic ship to be audited for compliance with the DSM Code twice each year, whereas UK internationally operating passenger ships are audited for compliance with the ISM Code twice in every five year period.

The ISM audit regime is considerably less onerous than the audit regime currently in practice for UK domestic passenger ships even though the facilities/resources required should an emergency situation arise on board are not as easily accessible as they are for ships operating domestically. Therefore the DSM audit regime is disproportionate to the perceived safety risks involved.

In addition to the commitment to improving the DSM audit regime as part of the Red Tape Challenge, some additional gold plating within the ISM Code was highlighted. The ISM Code currently requires both international and domestically operating HSC to comply with the ISM requirements. This goes above and beyond the international requirements, which in other countries only requires internationally operating HSC to comply. Removal of the gold plating, without extending the DSM regime to domestic HSC, would leave these ships without any form of safety management system in place.

3. Rationale for intervention

The general consensus within the UK domestic passenger ship industry is that the current regime places an unnecessary burden on the operators of domestic passenger ships. Not only is the regime considered disproportionate to the safety risks compared to the international regime, the Domestic Passenger Ship Safety Group⁵ (DPSSG) expressed a concern that the current DSM system does not always ensure that high and consistent safety management standards are applied because at present the shore side offices are not inspected.

The rationale for intervention is threefold. Firstly, ships operating domestically, within UK waters, have better access to shore-based emergency response facilities. These facilities can be accessed more readily and quickly than for ships on international voyages due to the closer location to the UK coast. These facilities would be able to reach a ship in significantly less time and therefore mitigates many of the safety risks which ships on international voyages face. However, although the ISM Code has more stringent requirements suitable to the operating area, the practicalities of the audit regime is considerably less. The DSM Code has a more burdensome ship audit regime and is considered inconsistent with the approach taken with the ISM Code.

Secondly, safety management systems are reliant on good communication between the company shore-based offices and the ship. It is important that the safety management systems are consistent throughout and an audit of both aspects, office and ship (as with the ISM audit regime), will ensure that both marry up.

Finally, on review of the ISM Code requirements during the Red Tape Challenge it is considered by safety experts in the Maritime and Coastguard Agency (MCA) that requiring domestic HSC to comply with the more stringent standards of the ISM Code is no longer necessary. The initial application of the international standard of safety management to non-seagoing high speed craft was a reaction to the novel construction and operational capacity (in terms of speed and passenger numbers) of the vessels. While such a stringent standard might have been justified when this type of ship first became prevalent, the industry has now matured and safety concerns have proved to be unfounded. This is due to

⁵ The Domestic Passenger Ships Safety Group is a group comprised of key stakeholders representing operators, builders and repairers of domestic passenger ships. The group provides a forum for industry to raise concerns; and for the MCA to publicise and discuss issues arising with a bearing on the industry to ensure the buy in of the stakeholders.

operators having accumulated sufficient operational experience and systems on board these vessels. Therefore, MCA safety experts feel that downgrading domestic HSC to the DSM regime would not introduce any additional safety risks.

4. Policy objective

The policy objective under the proposed regime is to deliver a more effective and efficient system both for operators and MCA alike. This will be achieved by:

- A reduction in the number of MCA audits (three in place of ten over a five year period); and
- Placing the responsibility for the safety of their ships on to the owners by providing a more flexible approach with the introduction of self-assessments (one each year) which may be undertaken at a time more suitable than the scheduled 'in service' audit

5. Description of options considered

Do nothing is not considered an option as it reneges on the commitments put forward during the Red Tape Challenge initiative. Doing nothing will be the baseline for the costs and benefits identified in this impact assessment (IA).

Option 1 - The proposed option reduces the burden on domestic passenger ship owners by the introduction of a new audit regime as described in the policy objective above. This new regime has an element of self-regulation by introducing the annual self-assessment of a company's DSM system. This places the responsibility of ongoing safety on each domestic passenger ship and domestic HSC operator, with minimal oversight from the MCA.

In addition, this option meets the commitments put forward during the Red Tape Challenge.

6. Monetised and non-monetised costs and benefits of each option (including administrative burden)

Note that figures may not sum due to rounding.

6.1 Introduction

This IA assesses the additional costs and benefits of the proposed Regulations (Option 1) compared to the "Do Nothing" scenario; the "Do Nothing" scenario represents what would happen if the Government does not take any action. In line with the Better Regulation Framework Manual, a 10 year appraisal period has been used in this IA. These regulations are expected to come into force on 6 April 2015. Therefore for the purposes of this IA the appraisal period begins on 6 April 2015 and ends on 5 April 2025.

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

- Monetised benefits to business: The reduction in costs under Option 1, the proposed audit regime, compared to the "Do Nothing" scenario (section 6.5)
- Monetised costs to business: The new costs associated with Option 1, the proposed DSM audit regime (section 6.6)
- Monetised benefits to the MCA: The reduction in costs under Option 1 compared to the "Do Nothing" scenario (section 6.7)
- Monetised costs to the MCA: The new costs associated with Option 1, the proposed DSM audit regime (section 6.8)
- Non monetised impacts of the proposed new audit regime (section 6.9)
- Comparison of the costs of the baseline, the 'Do Nothing' scenario and Option 1, the proposed new DSM audit regime (section 6.10); and

- Summary of the total benefits of Option 1, the proposed new DSM audit regime (section 6.11).
- Summary of net impacts of Option 1 (section 6.12)

For the purposes of this IA, the costs and benefits of the proposed Regulations (Option 1) during the appraisal period have been monetised to the extent that is possible. Given the limitations of the available evidence base, it has not been possible to monetise some of the costs and benefits of the proposed Regulations (Option 1) that have been identified. Where it has not been possible to monetise a cost or benefit a full qualitative description of the cost or benefit has been provided.

The estimates of the additional costs and benefits of the proposed Regulations (Option 1) that are presented in this IA are sensitive to the data sources used in this analysis and the assumptions that have been given in this IA. Consequently there are a number of uncertainties that have been considered in the estimates presented in this IA, however these estimates may change post consultation.

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

6.2 Application

MCA Marine Offices conduct surveys on all UK Class III to VI(A) passenger ships. The data provided from MCA Marine Offices in June 2014 indicates that there are approximately 802 passenger ships which operate under the DSM regime. There is no requirement for these vessels to register under the UK flag and existing databases do not require information on when a ship first became certified to be recorded so this information is not available. It is therefore difficult to predict the number of new ships which would be required to comply with the DSM regime in the future.

Option 1 introduces audits of shore side offices and office self-assessments. MCA records show that there are potentially 412 shore side offices although it should be noted that in some cases the ship itself may also be the office, especially in the case where a company only operates one ship. However, in these cases the scope of both audits will still be covered. MCA records show that there are 13 domestic HSCs operating in the UK.

The figures used in the IA are based on the current number of ships operating under the DSM regime as of June 2014 and do not take in to account any ships which may choose to certify, or allow their certification to lapse, within the next 10 years.

6.3 Assumptions

A number of assumptions have been made to form the calculations of the costs and benefits of option 1:

- a) Industry have provided data on the average hourly rate of pay for staff and crew involved in audits, which are within the range of £7 to £14 per hour. For the purposes of this IA, the hourly rate of pay is assumed to be the average of the rates provided by industry, which is £10.33 per hour. This value has been uplifted by 30% to account for overheads in line with the Standard Cost Model⁶. Therefore, the opportunity cost to business of this time is assumed to be £13.43;
- b) Industry has indicated that the time spent by one member of staff/crew preparing for an audit and gathering the required evidence would be:
 - 1-2 hours depending on the size of the ship. For the purposes of this IA, a simplifying assumption has been made that the preparation time takes 1.5 hours; and
 - 4-6 hours for the office audit depending on the number of ships the office is responsible for, with a Best estimate of 5 hours.
- c) MCA surveyors indicate that the DSM aspect of the survey for the Passenger Ship Safety Certificate is approximately 2 hours;
- d) MCA surveyors, on average, travel for approximately one hour/40 miles to conduct each 'in service' audit;

⁶ Better Regulation Executive, Measuring Administrative Costs: UK Standard Cost Model Manual <http://www.berr.gov.uk/files/file44503.pdf>

- e) MCA surveyors indicate that the proposed DSM office audit will take approximately 2 hours;
- f) MCA surveyors indicate that both the ship and office self-assessments will each take approximately 90 minutes each;
- g) Survey work can be taken by either MCA surveyor grade Marine Surveyor (MS) 1 or MS 2. It is assumed that the work will be split equally between the two grades. An average of their salaries is used. The average hourly rate of pay for these grades is between £20.99 and £23.88 per hour, with a best estimate of £22.43 per hour⁷. These values have been uplifted by 30% to account for overheads in line with the Standard Cost Model⁶. Therefore, the opportunity cost of surveyor time is assumed to be between around £27.29 and £31.04 per hour, with a best estimate of £29.16 per hour;
- h) The proposed DSM audit regime is as stated in Table 1, Section 6.4. However, the second ship audit may be taken anytime during years 2 and 3 but a simplifying assumption has been made for calculation purposes that this will occur in year 3. In addition, there is potential for operators to renew certification early. Operators are able to renew their certification three months (in year 5) from the expiry of their current certificate, similar to a vehicle MOT certificate. For the purposes of this IA it is assumed that the renewal will be undertaken in year 6.

Question for Consultees

Q1. Are the assumptions made in this IA a sound basis of the time and costs of the audit regime? Please submit any further evidence to substantiate these assumptions

6.4 The existing and the proposed audit regime

Table 1: A comparison between the current and proposed audit regimes

DSM audit Regime	Year 1	Year 2	Year 3	Year 4	Year 5
Existing	2 ship audits (one charged)	2 ship audits (one charged)	2 ship audits (one charged)	2 ship audits (one charged)	2 ship audits (one charged)
Proposed	1 office audit (charged)				
	1 ship audit (charged)		1 ship audit (charged)		
	1 self-assessment	1 self-assessment	1 self-assessment	1 self-assessment	1 self-assessment

DSM audit Regime	Year 6*	Year 7	Year 8	Year 9	Year 10
Existing	2 ship audits (one charged)	2 ship audits (one charged)	2 ship audits (one charged)	2 ship audits (one charged)	2 ship audits (one charged)
Proposed	1 office audit (charged)				
	1 ship audit (charged)		1 ship audit (charged)		
	1 self-assessment	1 self-assessment	1 self-assessment	1 self-assessment	1 self-assessment

* Please refer to assumption 'h' in section 6.3.

6.5 Monetised benefits to business: The reduction in costs under Option 1 compared to the “Do Nothing” scenario

⁷ This takes account of entitlement to annual leave, privilege holiday and bank holidays

The benefits to business are caused by a reduction in the costs of complying with the domestic safety management auditing regime under Option 1, compared to the existing auditing regime (Do nothing).

6.5.1 Reduction in time spent preparing for ship audits

Under the Do nothing industry has indicated that around 90 minutes would be spent preparing for the DSM audit of a ship. With the average salary of £13.43 per hour, the three hours preparation time for the two ship audits per year will equate to just under £40.29 per ship per year; and around £201.45 over the five year audit cycle.

Under Option 1, the time taken to prepare for the ship audits remains the same. However, there will be only two ships audits over the five year period instead of the 10 under the existing regime. With the average salary of £13.43 per hour, the three hours preparation time for the two ship audits over the five year period is estimated to cost just under at around £40.29.

Over the 10 year appraisal period, the Best estimate of the total benefit of the reduction in time spent preparing for ship audits for the 802 passenger ships is estimated to be around £258,501

6.5.2 Reduction in Surveyor costs

The existing DSM audit regime requires a domestic passenger ship to be audited twice a year. The initial DSM audit is currently carried out in conjunction with the passenger ship survey for the issue of a passenger ship safety certificate without which a ship cannot operate. The fee for the DSM aspect is not invoiced separately (one single invoice for the passenger ship survey). MCA surveyors estimate that the DSM aspect of the survey takes approximately two hours. The second audit, the 'in service' audit, is currently free of charge and similarly takes approximately two hours.

Based on the current hourly rate for a MCA surveyor's time of £94 per hour, the DSM aspect of the passenger ship survey takes up to 2 hours which equates to £188 per year; £940 over the five year audit cycle.

Under Option 1 the DSM audit of the ship will continue to be undertaken at the same time as the survey for the Passenger Ship Safety Certificate. The time taken to conduct the ship audit remains the same, however, there will be only two ships audits over the five year period instead of the five charged for under the existing regime. With the average MCA surveyor rate of £94 per hour, the four hours needed to undertake the two ship audits over the five year period is estimated to cost £376.

Over the 10 year appraisal period, the Best estimate of the total benefit of the reduction in surveyor fees for the 802 passenger ships is estimated at around £904,656.

6.5.3 Reduction in time spent accompanying surveyors during ship audits

A member of crew is expected to accompany the MCA surveyor during the ships audits.

Under the Do nothing there are two ships audits a year. Each audit is expected to take 2 hours. The first of these two annual ship audits is generally undertaken at the same time as the survey for the issue of the Passenger Ship Safety Certificate; with the second of the annual audits being undertaken whilst the ship is 'in service' (operating). With the average salary of £13.43 per hour, the four hours of crew time to accompany surveyors equate to around £53.72 per year; and around £268.60 per ship over the five year audit cycle

Under Option 1, the proposed audit regime, there are two ship audits every five years compared to the existing regime of ten ship audits over the five year period. The ships audits are still expected to take 2 hours and the average salary of crew is £13.43 per hour. Therefore the opportunity cost of crew time of accompanying surveyors is expected to be around £26.86 per ship audit and £53.72 over the five year audit cycle.

Over the 10 year appraisal period, the Best estimate of the total benefit explained above for the 802 passenger ships is estimated at around £. 344,668

Table 2: Monetised benefits to Business under Option 1 compared to the “Do Nothing” scenario (Best estimate), (£s, 2014 prices)

Note: The DSM audit regime effectively repeats every 5 years.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total over 10 years (2 audit regimes)
	2015-16	2016-17	2017-18	2018-19	2019-20	
Reduction in time spent preparing for ship audits (6.5.1)						
Costs under Do nothing (£)	32,313	32,313	32,313	32,313	32,313	323,126
Costs under Option 1 (£)	16,156	0	16,156	0	0	64,625
Reduction in costs (£)	16,156	32,313	16,156	32,313	32,313	258,501
Reduction in Surveyor Costs (6.5.2)						
Costs under Do nothing (£)	150,776	150,776	150,776	150,776	150,776	1,507,760
Costs under Option 1 (£)	150,776	0	150,776	0	0	603,104
Reduction in costs (£)	0	150,776	0	150,776	150,776	904,656
Reduction in time spent accompanying surveyors during ship audits (6.5.3)						
Costs under Do nothing (£)	43,083	43,083	43,083	43,083	43,083	430,834
Costs under Option 1 (£)	21,542	0	21,542	0	0	86,167
Reduction in costs (£)	21,542	43,083	21,542	43,083	43,083	344,668
Total reduction in costs (£)						1,507,824

Note: figures are not discounted.

6.6 Monetised costs to business: The new costs associated with Option 1, the proposed DSM audit regime

The overall cost to business of complying with the DSM auditing requirements is reduced under Option 1, compared to the Do nothing. However, Option 1 imposes some new requirements of office audits and self-assessments which will cost business.

6.6.1 Costs of preparing for a DSM office audit

In the new regime, operators will be charged for one office audit over the five year period. Industry has indicated that approximately four to six hours, depending on the number of ships owned, will be needed to prepare for the office audit. For the purposes of this IA the best estimate costs will be established on the basis of five hours preparation time. Based on paragraph 6.3.a, the estimated average rate of pay for staff and crew involved in audits is £13.43 per hour. Therefore, the best estimate of the preparation costs for the office audit is £67.15 over the five year period.

It should be noted that companies who own more than one ship will only have one office audit.

Over the 10 year appraisal period, the Best estimate of the total cost explained above for the potential 412 shore based offices is estimated at around £55,332.

6.6.2 Costs of undertaking the DSM office audit

Surveyor Time

Option 1 introduces one office audit over the five year audit cycle, MCA surveyors anticipate the office audit will take approximately two hours. This is based on their experience of undertaking the ISM office audits. At the MCA hourly rate of £94, a total cost of £188 will be charged for the office audit to business over the five year period.

Crew Time

A member of crew is expected to accompany the MCA surveyor whilst the office audit is being undertaken. With the average salary of £13.43 per hour, the two hours of crew time to accompany surveyors for the office audit will equate to around £26.86 for the office audit over the five year period.

Over the 10 year appraisal period, the Best estimate of the total cost of undertaking the DSM office audit for the 412 shore based offices is estimated at around £177,045.

6.6.3 Costs associated with the proposed new annual self-assessments

The proposed new DSM audit regime introduces an aspect of self-regulation. Companies will be required to assess their DSM systems in the office and on each ship against the Regulations and submit their findings to the MCA.

Based on the time scales for undertaking self-assessments under the ISM audit regime, the MCA expectation is that both the office and ship annual self-assessments will take approximately the same time as it would preparing for the existing DSM ship audit; 90 minutes each, as discussed in section 6.5.1. This includes completing the self-assessment form. With the average salary of £13.43 per hour, the 90 minutes of staff time preparing a self-assessment is estimated to cost around £20.15 per assessment.

Companies will only require one annual office self-assessment regardless of the number of ships it operates. Over the 10 year appraisal period, the Best estimate of the total cost of undertaking the office self-assessment for the estimated 412 shore based offices is estimated at around £82,997.

Each ship will also require its own individual annual self-assessment. Over the 10 year appraisal period, the Best estimate of the total cost of undertaking the ship self-assessments for the 802 ships is estimated at around £161,563.

In addition, it is also anticipated that once the self-assessment system has been established the time it takes to conduct the self-assessment will reduce as companies become familiar with the process.

Table 3: Monetised cost to business from Option 1, the proposed DSM audit regime (Best estimate) (£s, 2014 prices)

Note: The DSM audit regime effectively repeats every 5 years.

	Year 1 2015-16	Year 2 2016-17	Year 3 2017-18	Year 4 2018-19	Year 5 2019-20	Total over 10 years (2 audit regimes)
Costs of preparing for a DSM Office audit (£) (6.6.1)	27,666	0	0	0	0	55,332
Costs of undertaking the DSM Office audit (Surveyor & crew time) (£) (6.6.2)	88,522	0	0	0	0	177,045
Costs associated with the proposed new i) annual office self-assessment (£) (6.6.3)	8,300	8,300	8,300	8,300	8,300	82,997
Costs associated with the proposed new i) annual ship self-assessment (£) (6.6.3)	16,156	16,156	16,156	16,156	16,156	161,563
Total new costs to business (£)						476,937

Note: Figures are not discounted.

6.7 Monetised benefits to the MCA: The reduction in costs under Option 1 compared to the “Do Nothing” scenario

Under the Do nothing scenario the MCA audits each ship for compliance with the DSM Code twice annually. The MCA does not charge for the 'in service' ship audit which occurs once annually. Although ship companies are not charged for this audit, the MCA incurs travel costs and costs for the Surveyor time.

Under Option 1 the number of ship audits will be reduced from twice annually to twice in a five year audit period. The MCA will no longer incur the costs for the uncharged survey under Option 1.

6.7.1 Reduction in MCA surveyor travel costs for the 'in service' DSM ship audit

Under the Do nothing, there is an annual 'in service' DSM ship audit which is conducted separately to any other surveys a ship may require. Although ship companies are not charged for this audit, the MCA incurs travel costs for the surveyors to conduct it.

There are 17 MCA Marine Offices throughout the UK and ship survey work is allocated appropriately to locations of the ships. The time taken to travel to the audits varies. Although travel claims are allocated an individual 'job number' it is difficult, and disproportionate, to extract this data due to the number of ships involved, the number of surveyors and individual claims which would need to be examined.

MCA surveyors, therefore, estimate that on average around one hour/40 miles is spent travelling to undertake an 'in service' audit.

The MCA operates the HM Revenue and Customs statutory tax free approved mileage allowance payments with the Standard Mileage Rate set at 45 pence per mile⁸. Under Option 1, as with the current practice, MCA surveyors will look to conduct the DSM office audit where practicable at the same time as the Passenger Ship Safety Certificate, and the ship audit, and therefore no additional travel expenses will be incurred. As these travel costs for the 'in service' DSM ship audit are not incurred under Option 1, the cost saving under Option 1 equals the total travel costs under the Do nothing. The calculation for the annual cost under the Do nothing, and therefore the annual cost saving under Option 1, is set out below:

$£0.45 \times 40 \text{ miles} \times 802 \text{ passenger ships} = £14,436$

Over the 10 year appraisal period, the Best estimate of the total benefit of reduced travel costs incurred for the travel to the 802 passenger ships is estimated at around £144,360.

6.7.2 Reduction in MCA surveyor time for the 'in service' DSM ship audit

In addition to the travel costs, MCA surveyor resource time should also be considered due to the 'in service' not being charged for. As noted in section 6.5.2, a DSM ship audit is expected to take a maximum of two hours. The total time allocated to this activity is anticipated to be three hours, including the travel time.

Audits are undertaken by MCA surveyors of grades MS1 and MS2 who have a best estimate average salary of £29.16 per hour. This equates to £87.48 per ship per year; or £437.40 per ship over the five year audit cycle.

Under Option 1 the MCA will no longer incur the resource costs of the 'in service' DSM ship audit.

As this cost for MCA surveyor time for the 'in service' DSM ship audit is not incurred under Option 1, the cost saving under Option 1 equals the total travel costs under the Do nothing. The calculation for the annual cost under the Do nothing, and therefore the annual cost saving under Option 1, is set out below:

$£29.16 \times 3 \text{ hours} \times 802 \text{ passenger ships} = £70,159$

⁸ <http://www.hmrc.gov.uk/rates/travel.htm>

Over the 10 year appraisal period, the Best estimate of the total benefit of the reduction in MCA surveyor time spent auditing the 802 passenger ships is estimated at around £701,590

Table 4: Monetised benefits to MCA The reduction in costs under Option 1 compared to the “Do Nothing” scenario (Best estimate) (£s, 2014 prices)

	Annual Cost	Total Cost (Over 10 years)
Reduction in MCA surveyor travel costs for the 'in service' DSM ship audit (6.7.1)		
Costs under Do nothing (£)	14,436	144,360
Costs under Option 1 (£)	0	0
Reduction in costs (£)	14,436	144,360
Reduction in MCA surveyor time for the 'in service' DSM ship audit		
Costs under Do nothing (£)	70,159	701,590
Costs under Option 1 (£)	0	0
Reduction in costs (£)	70,159	701,590
Total Reduction in Costs to MCA		845,950

Note: Figures are not discounted.

6.8 Monetised costs to the MCA: The new costs associated with Option 1, the proposed DSM audit regime

The overall cost to the MCA of the DSM auditing requirements is reduced under Option 1, compared to the Do nothing. However, under Option 1 the MCA will have a new responsibility to review the self-assessments.

6.8.1 Costs to the MCA for reviewing the self-assessments

In the new regime, companies will be required to conduct an annual self-assessment against the DSM system and submit the findings to the MCA. The MCA considers the time taken to review the self-assessments to be minimal and estimate, on average, 30 minutes reading time per self-assessment, in line with the ISM timescales. This average includes any assessments which may need additional time where the MCA surveyors considers the self-assessment to be unsatisfactory.

Self-assessments are reviewed by MCA surveyors of grades MS1 and MS2 who have a best estimate average salary of £29.16 per hour. It is estimated to take half an hour to review each of the office and the ship annual self-assessment. This equates to a best estimate cost of £14.58 per assessment.

Over the 10 year appraisal period, the Best estimate of the total resource cost to the MCA of reviewing the 412 office and the 802 ship self-assessments is estimated at around £177,001

6.9 Non monetised impacts if the proposed new audit regime

6.9.1 Non-monetised costs

6.9.1.1 Costs associated with replacing the existing ISM requirement with DSM for domestic High Speed Craft

The change from ISM to DSM for UK domestic HSC will only remove the requirements for companies to have in place:

- Instructions and procedures to ensure safe operations of ships and protection of the environment in compliance with relevant international and flag State legislation; and
- Procedures for internal audits and management reviews.

This change removes the gold plating of the international requirements applied to domestic HSC in line with Government Better Regulation initiatives.

However, it should be noted that the operators of these 13 UK domestic HSC also have internationally operating passenger ships which must comply with the ISM requirements. It is unlikely that these operators will run two different systems for the different ships and therefore will keep complying with the requirements of ISM. Therefore, it is anticipated that no additional costs or benefits will be associated with the removal of this gold plating.

6.9.1.2 Familiarisation costs

Businesses may incur familiarisation costs due to the need for operators to familiarise themselves with the proposed Regulations. This cost is expected to be small as the DSM system requirements remain the same with only the number of surveys changing. The only additional reporting requirement is the annual self-assessment which requires companies to draft a report. The MCA has drafted a self-assessment template to guide companies in providing the required evidence.

Question for Consultees

Q2. Do you agree with the estimated costs associated with the existing audit regime? If not, please provide relevant supporting information.

Q3. Do you agree with the estimated costs associated with the proposed audit regime? If not, please provide relevant supporting information.

Q4. Do you agree with the assessment of the potential familiarisation costs? If not, please provide relevant supporting information.

6.9.2 Non-monetised benefits

6.9.2.1 Non-monetised benefits to business

Reducing the number of audits carried out by the MCA from 10 in a five year period to two will benefit operators, as the time spent on preparing and attendance during the audits can be better utilised for carrying out the self-assessments every year. The self-assessments may be completed at a time which is most suitable for the company as opposed to the pre-set date and time of the audit. Once the self-assessments themselves have bedded in, there is also a potential saving in the amount of time required by the operator to prepare and draft the self-assessment.

6.9.2.2 Non-monetised benefits to the MCA

In much the same way, the reduction in the number of audits carried out by the MCA will allow MCA surveyor resource to be utilised on other statutory surveys and inspections.

6.10 Comparison of the costs of the baseline, the 'Do Nothing' scenario and Option 1, the proposed new DSM audit regime

A number of assumptions, set out in Section 6.3, have been made to form the calculations of the costs and benefits under Option 1. To account for the uncertainty around these assumptions, a range of estimates have been presented in this IA.

The costs to the operators of passenger ships operating in UK waters of the audit regime under the Do Nothing scenario, which are monetised in this IA, are estimated to be around £226,000 per year on average. Under Option 1, the costs to operators of the revised audit regime are estimated at around £122,000 to £124,000 per year on average, with a Best Estimate of £123,000 per year on average.

The monetised costs to the MCA of the audit regime under the Do Nothing scenario are estimated to be around £85,000 per year on average. Under Option 1, these costs are estimated at around £17,000 to £19,000 per year on average with a Best Estimate of £18,000 per year on average.

6.11 Summary of the total benefits of Option 1, the proposed new DSM audit regime

A number of assumptions, set out in Section 6.3, have been made to form the calculations of the costs and benefits under Option 1. For instance, Industry have indicated that the office audit may take between 4-6 hours, depending on the number of ships the office is responsible for, with a Best estimate of 5 hours. To account for the uncertainty around these estimates, a range of estimates have been presented in this IA.

The benefits to the owners and operators of passenger ships operating in UK waters of meeting the requirements of the revised DSM audit regime, which have been monetised in this IA, are estimated at around £102,000 to £104,000 per year on average, with a Best Estimate of around £103,000 per year on average. The monetised benefits to the MCA of the revised audit regime are estimated at around £66,000 to £68,000 per year on average, with a Best Estimate of around £67,000 per year on average. The present value of the total benefits over the 10 year appraisal period is estimated to be around £1.8 million to £1.9 million, with a Best Estimate of £1.9 million.

6.12 Summary of net impacts of Option 1

Overall the impacts of Option 1 present a Net Benefit. The Net Present Value of the impacts of Option 1 over the 10 year appraisal period are estimated to be between £1.41 million to £1.45 million, with a Best Estimate of £1.43 million. For Business the Net Present Value is estimated to be around £0.85 million over the 10 year appraisal period.

Table 5: Business NPV and Total NPV of Option 1 from April 2015 to March 2025 (£s, 2014 prices)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
a) Business Benefits (£)	37,698	218,524	35,191	203,994	197,096	31,741	183,991	29,630	171,758	165,949	1,275,572
b) MCA Benefits (£)	84,595	81,734	78,970	76,300	73,720	71,227	68,818	66,491	64,242	62,070	728,167
c) Total Benefits (£) (a+b)	122,293	300,258	114,162	280,294	270,815	102,967	252,809	96,121	236,000	228,019	2,003,739
d) Business Costs (£)	140,644	23,629	22,830	22,058	21,312	118,419	19,895	19,222	18,572	17,944	424,525
e) MCA Costs (£)	17,700	17,102	16,523	15,964	15,425	14,903	14,399	13,912	13,442	12,987	152,357
f) Total Costs (£) (d+e)	158,344	40,731	39,353	38,022	36,737	133,322	34,294	33,134	32,014	30,931	576,882
Total NPV (£) (c-f)	-36,051	259,527	74,809	242,272	234,079	-30,354	218,515	62,987	203,986	197,088	1,426,857
Business NPV (£) (a-d)	-102,946	194,895	12,362	181,936	175,784	86,678	164,096	10,408	153,185	148,005	851,047

Note: All costs and benefits discounted by 3.5% per annum in line with HMT Green Book guidance.

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

The proposed changes to the Regulations are supported by industry and engagement has been made with key stakeholders through the DPSSG. Figures relating to the number of ships have been taken directly from the majority of MCA Marine Offices, whose surveyors undertake the DSM audits. Industry has provided information which form the basis of assumptions made in this impact assessment.

The level of analysis undertaken is in line with the depth of available information.

8 Risks

8.1 Risks of implementing the proposed changes

No risks have been identified with the implementation of the proposed revised DSM audit regime. The proposal has been developed with industry and offers a less onerous, more risk-based approach to safety audits.

There may be a perceived risk to safety from the removal of the mandatory ISM requirements for domestic HSC. However, MCA safety experts believe that is mitigated with the additional office audit being introduced into the DSM audit regime, the close proximity to shore and shore based facilities in an emergency and the accumulated sufficient operational experience and systems of companies operating these domestic HSC. The proposed removal of this gold plating was first published under the Maritime theme during the Red Tape Challenge, no comments were received either for or against the proposals.

8.2 Risks of doing nothing

The existing DSM audit regime will continue to be unduly burdensome on businesses and will not meet the Government's initiative on risk-based approach to regulations. Doing nothing will not address the concerns raised by industry that the current DSM system does not always ensure that high and consistent safety management standards are applied because at present the shore side offices are not inspected. In addition, the commitments made during the Red Tape Challenge will not be met.

9 One-In, Two-Out (OITO)

The proposed revocation is within scope of the One-In, Two-Out methodology as the proposed Regulations are domestic in origin. The Best estimate of the Net Benefit to business (Present Value) over the 10 year appraisal period is around £0.85 million. On the basis of the OITO methodology, the Best estimate of the Net Cost to business per year (EANCB) is therefore estimated at around - £0.08million per year (in 2009 prices).

10 Wider impacts

10.1 Equalities Impact Assessment

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

10.2 Small and Micro Business Assessment

The proposed Regulations will have the potential benefit on affected businesses irrespective of size. It is recognised that larger businesses will receive the greater benefit because a company which operates more than one ship will only require one office audit regardless of the ships it may own. However, the number of MCA DSM audits is greatly reduced compared to the current regime.

10.3 Competition Assessment

It is not anticipated that the proposed Regulations will have any marked effect on competition as the audit regime is applicable to all UK operators alike.

11 Summary and preferred option with description of implementation plan.

The proposed Regulations intend to align the DSM audit regime to that of the ISM audit regime and which is proportionate to the perceived safety risks. This will deliver a more efficient and effect regime for both the operators of domestic passenger ships and the MCA alike. The proposed regime will reduce the number of MCA audits from 10 to three over a five year period and introduce an aspect of self-regulation by asking operators to conduct annual self-assessments of their offices and ships.

The key benefits to the UK domestic passenger ship industry are:

- A reduction in staff and crew time spent preparing for ship audits;
- A reduction in the number of hours charges of MCA surveyor fees;

- Increased flexibility from being able to carry out self-assessments at a time most suitable to the company; and
- The potential saving where the time taken to prepare and draft self-assessments may reduce over time as companies become more familiar with the process.

The benefits to the MCA from the revised DSM audit regime stem mainly from incurring the costs of the non-chargeable 'in-service' ship audit which will no longer be required and will allow MCA surveyor resource to be utilised on other statutory surveys and inspections.

In addition, the proposed Regulations remove the element of gold plating of the ISM Code identified during the Red Tape Challenge initiative. Introducing the requirement for domestic HSC to comply with the DSM Code in place of the ISM Code will allow owners to decide which safety management system best suits the operation of their domestic HSC.

11.1 Post Implementation

The proposed regulations (Option 1) include the statutory sunset and duty to review clause. The Domestic Passenger Ship Safety Group will continue to monitor the implementation of the proposed Regulations and assess the impacts against those monetised in this IA.

A formal review will begin at the three year point unless issues are raised through DPSSG prior to this date. The review will seek feedback from the passenger ship industry addressing in particular the time spent in preparing for the new elements of this proposed audit regime; the office audit and self-assessments.