

Title: Merchant Shipping (Code of Safe Working Practices) (Amendments and Revocation) Regulations 2015 – formerly Revocation of Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regulations 1998 IA No: DfT 00271 Lead department or agency: Maritime and Coastguard Agency Other departments or agencies: Department for Transport	Impact Assessment (IA)		
	Date: 22/10/15		
	Stage: Final		
	Source of intervention: Domestic		
	Type of measure: Secondary legislation		
Contact for enquiries: Julie Carlton 023 8032 9216			

Summary: Intervention and Options **RPC Opinion:** EANCB Validated

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
£ 1.10m	£ 1.10m	£ -0.101m	Yes OUT

What is the problem under consideration? Why is government intervention necessary?
The Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regulations 1998 ("the Code Regulations") require specified numbers of copies of the MCA's Code of Safe Working Practices for Merchant Seamen to be carried on UK ships, with a view to ensuring that all seafarers on board have ready access to the safe information it contains. Increasingly ships are relying on electronic documentation on board, and this statutory requirement to carry hard copies is increasingly outdated and imposes an unnecessary cost on industry. MCA considers that the Code Regulations can be revoked and replaced with a goal-setting requirement without detriment to safety and are therefore unnecessary.

What are the policy objectives and the intended effects?
The policy objective is to improve prescriptive, outdated legislation. The Code of Safe Working Practices for Merchant Seamen, "the Code", is produced by the MCA in consultation with the shipowner and seafarer representative organisations, and is intended to provide a practical, best practice guide for seafarers on safe working practices. Health and safety regulations made in 1988 refer to relevant chapters of the Code, but the majority of those statutory instruments (S.I.s) have been revoked (one S.I. remains). Removing the prescriptive statutory requirement to carry copies of the Code for specified crew members will provide flexibility in how the Company provides access, including through on-board computer networks in future.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)
Policy option 0 – do nothing.
Policy option 1 is to revoke the Code Regulations. High-level health and safety regulations require that seafarers are provided with "such information, training and instruction as is necessary to ensure the health and safety of workers and that of other persons aboard ship who may be affected by their acts or omissions". MCA would enforce access to the Code as part of that "necessary information".
Policy option 2, which is the preferred option following public consultation, is to revoke the Code Regulations, and to introduce a specific, but non-prescriptive duty on the Company to ensure all seafarers have access to the Code on board.
No other policy options have been considered.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 07/2020

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 (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: Robert Goodwill Date: 28/10/2015

Summary: Analysis & Evidence

Policy Option 1

Description: Revocation of Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regs 1988

FULL ECONOMIC ASSESSMENT

Price Base Year 2009	PV Base Year	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £0.92m	High: £1.27m	Best Estimate: £1.10m

COSTS (£)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant)	Total Cost (Present Value)
Low	£250	£0	£250
High	£250	£0	£250
Best Estimate	£250	£0	£250

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

A negligible cost to government (£250) from publicising the changes has been identified (see section 5.1.3). No other costs to industry, charities or government have been identified which can be monetised.

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

Reduced safety levels as a result of loss of access to the Code could incur costs, but this is considered a low risk and has not been monetised.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant)	Total Benefit (Present Value)
Low	0	£0.108	£0.92
High	0	£0.150	£1.27
Best Estimate	0	£0.129	£1.10

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

Shipowners will no longer be required to purchase hard copies of the Code for specified officers, provided that the Code is readily available to all on board. This will bring them a potential benefit in terms of reduced costs where they choose to hold fewer copies, need fewer loose-leaf updates or switch to digital versions which can be made available and maintained more cheaply. The company will save staff time updating hard copies of the Code annually. The total estimated benefit is expected to be between £108k and £150k per year from year three onwards.

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

In addition to the reduced cost of purchasing copies of the Code, the Company will have the flexibility to introduce new technology to make the Code widely available in future. There may also be safety benefits because it will be easier to ensure that one centrally maintained, digital copy of the Code is updated - rather than many hard copies. As there is no evidence of the extent of this impact, these benefits cannot be monetised.

Key assumptions/sensitivities/risks

Discount rate

3.5%

It is assumed that the support of the the UK Chamber of Shipping and the seafarer unions is representative of UK industry as a whole, and shipowners will wish to continue to carry copies (hard or soft) of the Code once the regulations have been revoked. However, there is a risk that seafarers will have less access to the Code, or that some shipowners will not supply copies. It is assumed that it will take at least 2 years for the official publisher to produce sophisticated on-line or other digital versions of the Code to replace significant numbers of hard copies.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: £0	Benefits: £0.1	Net: £0.1	YES	OUT

Summary: Analysis & Evidence

Policy Option 2

Description: Revocation of MS (Code of Safe Working Practices for Merchant Seamen) Regs 1988 and new goal-setting duty to make Code available on board.

FULL ECONOMIC ASSESSMENT

Price Base Year 2009	PV Base Year	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £0.92m	High: £1.27m	Best Estimate: £1.10m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	250	0	250
High	250	0	250
Best Estimate	250	0	250

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

A negligible cost to government (£250) from publicising the changes has been identified (see section 5.1.3). No other costs to industry, charities or government have been identified which can be monetised.

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

Reduced safety levels as a result of loss of access to the Code could incur costs, but this is considered a low risk and has not been monetised.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	£0.108	£0.92
High	0	£0.150	£1.27
Best Estimate	0	£0.129	£1.10

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

Shipowners will no longer be required to purchase hard copies of the Code for specified officers, provided that the Code is readily available to all on board. This will bring them a potential benefit in terms of reduced costs where they choose to hold fewer copies, need fewer loose-leaf updates or switch to digital versions which can be made available more cheaply, including savings in staff time from updating the Code annually. The estimated benefit of between £108k and £150k per year from year three onward, is expected to be a slight over-estimate.

Other key non-monetised benefits by 'main affected groups' The flexibility to introduce new technology to make the Code available to seafarers as this becomes available would be the same as Option 1. Safety benefits may also accrue from the ability to update a digital copy centrally as updates are issued. However, there is no evidence on the basis of which these benefits can be monetised.

Key assumptions/sensitivities/risks

Discount rate

3.5%

It is assumed that it will take at least 2 years for the official publisher to produce sophisticated on-line or other digital versions of the Code to replace significant numbers of hard copies. There is a risk that seafarers will have reduced access to the Code, but this risk is lower than under Option 1.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:	In scope of OIOO?	Measure qualifies as
Costs: £0	YES	OUT
Benefits: £0.1		
Net: £0.1		

Evidence Base (for summary sheets)

1. Problem under consideration

The Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regulations 1998 ("the Code Regulations") require specified numbers of copies of the MCA's Code of Safe Working Practices for Merchant Seamen ("the Code") to be carried on UK ships, to ensure that each department, and key personnel on board have copies. The purpose of the Regulations is to ensure that those with specific health and safety responsibilities have a copy and that all seafarers on board have ready access to the safety information it contains. The duty holder is the "Company" (the person or organisation responsible for the operation of the ship).

The Code is available as a single, plain text pdf document on line and also on a CD. However, these versions are difficult to navigate and current guidance explicitly states that a printed version of these copies cannot be counted as one of the mandatory copies on board, because of the lack of document control.

Increasingly, ships are reducing the amount of paperwork on board, and instead moving to electronic documentation, hosted on ship-board computers (internet access is not universally available or reliable). MCA has made some attempts to accommodate this, producing an electronic (CD) version of the Code and putting in place administrative arrangements to allow use of electronic copies alongside a reduced number of hard copies but the statutory requirement to carry hard copies looks increasingly outdated, and does not fully reflect the realities on board UK ships.

2. Rationale for intervention

The Government is seeking ways to reduce the regulatory and administrative burdens on industry, including addressing outdated and ineffective legislation.

The Code Regulations are considered outdated, for the reasons set out above in section 1.

The Code is widely regarded as a source of best practice guidance for seafarers – for example, it is carried on many non-UK ships where there is no requirement to do so, and has been translated in to Chinese by a foreign publisher.

In addition, the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 require that seafarers are provided with "such information, training and instruction as is necessary to ensure the health and safety of workers and that of other persons aboard ship who may be affected by their acts or omissions". MCA believes that the Code is one element of the "necessary information" for seafarers on UK ships, and this view is endorsed by the UK Chamber of Shipping and seafarer unions, Nautilus International and the National Union of Rail and Maritime Transport Unions. MCA will publish guidance to this effect.

It therefore appears that no explicit statutory requirement may be necessary to ensure that the Code continues to be carried on most UK ships. A general duty to provide health and safety information to seafarers could be used to enforce carriage of the Code.

This will modernise the statute book, and give industry greater flexibility to respond to new developments in operational practice and technology.

3. Policy objectives

3.1 There is one main policy objective:

- to reduce the regulatory burden on industry by modernising and simplifying legislation.

The proposal will give shipowners greater flexibility as to how they provide seafarers on their ships with access to the Code of Safe Working Practices.

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 require employers to provide seafarers with “such information, training and instruction as is necessary to ensure the health and safety of workers and of others aboard ship.” The Code is considered to be one element of the “necessary information” to which seafarers must have access.

3A. Outcome of public consultation

A targeted consultation of affected groups was held on Option 1 only in May 2014. (Full public consultation was not held because the Code is only of interest to those working in the shipping industry.) 25 trade organisations, unions 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, the British Marine Federation and International Marine Contractors Association. Ten responses were received, the majority from significant players in the industry.

While there was some support for the revocation of the Regulations, in the interests of reducing costs for shipowners, most of those who responded were concerned that to remove entirely the explicit statutory requirement on UK ships to carry copies of the Code would

- (a) result in the Code being less easily accessible on board some ships, so that seafarers had fewer opportunities to refer to the best practice guidance it contains, putting safety standards at risk;
- (b) undermine the status of the Code as the authoritative guide on health and safety on ships, so reducing the respect in which the guidance it contains is held, also with a detrimental effect on safety;
- (c) make it harder to enforce carriage of the Code on UK ships.

As a result of these concerns, the MCA has reviewed its proposals and has introduced Option 2 as its preferred option. This builds on the duty to provide information to seafarers, by explicitly requiring that seafarers have ready access to the Code.

The consultation-stage impact assessment for this proposal did not require approval from the Regulatory Policy Committee (RPC) because the proposal is taking forward a Red Tape Challenge measure. The IA, issued as part of the public consultation package, invited consultees to submit additional evidence on the costs and benefits of the proposed revocations. No monetised evidence was submitted.

4. Description of options considered (including do nothing)

4.1 Do nothing:

The Code Regulations are out of step with other, more recent health and safety legislation on merchant ships, in that they are very prescriptive. They are also outdated, since they require all crew members to have access to hard copies of the Code. The Do Nothing Option therefore does not address the objective set out in Section 3.

4.2 Option 1 : Revoke the Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regulations 1998

Policy Option 1 is to revoke the Code Regulations, and to issue guidance which makes clear that it is still expected that all seafarers will have access to the Code on board ship. The Maritime Labour Convention, 2006, which is currently in force for those countries which ratified it 12 months or more ago, includes provisions on health and safety, requiring ratifying States to promote guidelines on many health and safety issues. The publication of the Code fulfils this requirement, without the need for a statutory requirement on UK ships to carry that publication, and specifying the number of copies required on board each ship.

4.3 Option 2 (Preferred Option): Revoke the Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regulations 1998, and introduce a new specific but non-prescriptive duty on the Company to ensure that the Code is readily available for all seafarers.

Option 2 was adopted in response to the concerns expressed in responses to the public consultation exercise (see section 3A above).

There is an existing duty in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997, as amended, to ensure that seafarers have “such information, instruction, training and supervision as is necessary to ensure the health and safety of workers and seafarers and that of other persons aboard ship who may be affected by their acts or omissions”. However, it could be difficult to enforce carriage of the Code using this provision, supported only by non-binding guidance.

Option 2 builds on this duty by making a specific duty for the Company to ensure that the Code is easily accessible and readily available to seafarers on board ship. There are however no prescriptive requirements about how that duty may be fulfilled, which will allow the Company some flexibility about precisely how many copies are provided, where they are located, and whether and to what extent to make use of digital versions of the Code as they become available.

4.4 Digital versus hard copy:

Under both Options, the Code may be carried in either digital or hard copy. Under Option 1, a small number of shipowners wishing to minimise costs might consider that the digital version which MCA makes available free of charge on line was sufficient to meet the generic duty to provide information to seafarers.

Under Option 2, where a specific duty spells out that the Code must be available and easily accessible to all, it would be hard to justify that conclusion.

In practice, it is expected that, initially at least, most ships will carry a combination of hard and digital pdf copies (the CD version, loaded onto on-board computers). Hard copies are expected to become less popular as and when a more sophisticated digital version is developed and becomes available.

5. Costs and Benefits

Note that figures in this section may not sum due to rounding. Costs are based on 2015 prices unless otherwise stated.

5.1 Costs of Option 1 compared to the do nothing scenario

5.1.1 Costs to shipowners

The measure is deregulatory, so there would be no costs of compliance for the shipping industry. Familiarisation costs are likely to be minimal, given that the only change is to remove specific statutory duties. These costs have not therefore been quantified.

There is a risk that seafarers will have less access to the Code if the Code regulations are revoked, in particular if shipowners were to rely on the digital version available on line – to which access could be unreliable at sea. This could potentially lead to a reduction in the level of safety on board, leading to costs for shipowners – however such costs would be very difficult to predict. MCA guidance would make clear that the Code must continue to be available to all seafarers on board, backed up by a generic duty to provide information to seafarers, and so the risk is considered to be low. This cost has not therefore been monetised.

5.1.2 Costs to booksellers

The Stationery Office (TSO) is the only official supplier of the Code. Sales vary widely by year, depending on whether there is a new version or amendments published. After publication of the new consolidated edition of the Code in November 2011, over 18,000 copies were sold in four months. In 2013, the total sales were around 2,200 for hard copies and 13 digital copies (the digital version was re-issued in 2010.) Numbers are much higher when a new edition is issued.

A hard copy of the Code is currently priced at £30, and the CD copy is £27.60 inc. VAT. A new edition of the Code is to be published on 4 September at a new price of £40. As the TSO contract was awarded following a competitive tender this impact assessment assumes there will be no effect on TSO's profits as a result of removing the regulations and so reducing the number of copies that TSO sells to UK-registered ships. This reflects the fact that TSO is operating in a competitive market and therefore the revenue it makes on each copy sold is equal to the marginal cost of producing that copy. Subsequently TSO makes only a 'normal' level of profit.

As TSO also sells the electronic version of the Code to ship owners it will receive any revenue (and incur the associated costs) from any increase in sales as ship owners move towards the electronic version. As with the book version we assume the same competitive market applies. Even if this assumption is not entirely accurate, increased sales of the electronic version will offset some (but probably not all) of the reduction in book sales.

Consultees were invited to provide any evidence on the competitiveness of the market in which TSO operates. No evidence was provided.

5.1.3 Costs to government

There will be some cost to MCA in publicising the changes to the legislation, and the intended status of the Code in future. This is expected to involve about one day of staff time, plus the publication cost for a Marine Guidance Note (about £139 in wage costs based on MCA wage rates uplifted by 30% to account for non-wage costs, plus £75 for publication) – about £250.

5.2 Benefits

5.2.1 Current number of copies and costs - "Do nothing scenario"

In order to comply with the regulations ship owners must currently purchase a copy of the code. This is currently priced at £30 for a hard copy (or £27.60 inc. VAT for a digital version) of which the ship owner bears the full cost. The saving from purchasing the digital version is therefore £2.40 per copy. The new edition of the Code will cost £40, and we have assumed for the purposes of this IA that any electronic version will be priced at the same proportion of the hard copy as the current edition, making a saving of £3.20 per copy. We have assumed that the cost of each version does not change again over the 10 year appraisal period. In the past, each edition has sold for the same price throughout its publication.

There is also a further cost to shipowners of purchasing the loose-leaf updates for the hard copy each year. These are priced at approximately £15 per copy per year.

Even if the regulations are removed shipowners will still be expected to carry (or make available onshore) a certain number of copies of the Code depending on the type of ship and number of crew in order to comply with the health and safety regulations. However, this might be difficult to enforce without a specific statutory provision. The incremental benefit from removing the Merchant Shipping regulation is therefore the difference in cost to shipowners between having both the health and safety regulations and the Code regulations in place and just the health and safety regulations.

As discussed in section 5.1.2 TSO sells between 2,000 and 40,000 copies of the Code each year. However, it is not possible accurately to assess what proportion of these copies are sold to UK ships, as we know that the Code is carried on many ships not on the UK Register.

Therefore, the following estimate is made in order to calculate an indicative figure.

There were 1,226 UK ships on the UK register (at Jan 2014) required to carry the Code and all of these must carry at least one, and in most cases, at least four hard copies of the Code.

The regulations specify:

- one copy per ship for ships with no more than 5 crew

- one copy each for the master, safety officer, each safety representatives and for use of the crew (minimum of four copies) for ships with between 5 and 20 crew;
- on other ships, one copy each for master, chief officer, chief engineer, purser or catering officer, safety officer, each safety representative, and sufficient copies to give all crew members ready access to a copy (minimum of 7 copies).

The UK ship register shows for each UK registered ship a ship type. The type of ship and its size will affect the size of the crew. An estimate has been made of which of the categories above each vessel on the register falls into, based on MCA knowledge and experience of ship operations. MCA holds a database of ships with safe manning documents, which shows the minimum safe number of crew for the operation of the ship. However, this is not reliable data as to the number of ships falling into each category above for the following reasons:

- 1) Only ships of 500GT or more require a safe manning document. This data does not therefore include ships under 500gt.
- 2) The safe manning level is the statutory minimum number of crew with which the ship must operate, as agreed with the MCA. Many ships operate with additional crew on board – for example, the safe manning document does not include hotel staff on passenger ships. However, hotel staff would be included in determining the number of copies of the Code to be carried.
- 3) Some ships have one specified safe manning level when they are operating in near coastal waters (which is a defined area around the coast of the UK and Ireland) but a higher level when they operate worldwide. It is assumed that the number of copies of the Code carried on board such ships would correspond to the higher crewing level.

MCA has therefore made an assumption about which of the bullet-pointed categories above each manned vessel on the UK shipping register falls into (N.B. unmanned vessels such as pontoons and dumb barges are excluded since they are not required to carry copies of the Code). For each category of ship, the regulations specify the personnel on board who must have a copy of the Code. As the manning arrangements on board each ship may vary, a “low” and a “high” estimate for the number of copies on board is given for each category.

In addition, the crew of each of the small commercial vessels, operating under one of the MCA’s Codes of Safety for small commercial vessels, (referred to hereafter as “small commercial vessels”) must have on board, or have access ashore to, at least one copy of the Code.

There are approximately 5,500 small commercial vessels, but about 700 of these are commercial yachts which may be chartered for leisure use without a crew. These are not required to carry a copy of the Code. We do not have any data on the employment status of those operating small commercial vessels, but based on MCA experience of small commercial vessel operations it is believed that a further 10% to 25% of these vessels are operated solely by self-employed people, who are not required to carry a copy of the Code. This leaves between 3,600 and 4,320 small commercial vessels which would each carry – or have access to – one copy of the Code.

These small vessels are perhaps less likely to have sufficiently extensive information systems on board to be able to replace the hard copy with a digital copy of the Code.

The total number of copies carried on UK ships is calculated by multiplying the “high” and “low” estimates for the number of copies on each type of ship by the number of ships in that category. The following estimate has therefore been made of the number of copies of the Code being carried on UK ships in accordance with the 1998 Regulations.

<i>Number of crew required</i>	<i>Number of copies of Code per ship (low)</i>	<i>Number of copies of Code per ship (high)</i>	<i>Number of ships (low)</i>	<i>Number of ships (high)</i>	<i>Current number of copies of the Code (low)</i>	<i>Current number of copies of the Code (high)</i>
Fewer than 5	1	1	467	467	467	467
Between 5 and 20	4	6	572	572	2,288	3,432
More than 20	7	12	187	187	1309	2,244

Small Commercial Vessels	1	1	3,600	4,320	3,600	4,320
<i>Totals</i>			<i>4,826</i>	<i>5,546</i>	<i>7,664</i>	<i>10,463</i>

Note 1: Number of ships taken from UKSR database January 2014 (excluding unmanned vessels).

As the number of copies of the Code carried on each ship are estimated by type of ship, using MCA experience and knowledge of the manning levels of ships, the numbers should be taken as approximate.

There is no evidence to show how long a copy of the Code would last, and how often it would wear out and need to be replaced. The Code is a loose-leaf document, and pages are therefore liable to be damaged with frequent page-turning. In addition, the Code is updated annually, and a new consolidated edition has been published twice in the last ten years. It is therefore assumed that a copy in regular use would last about 5 years before the Company replaced it.

It is therefore assumed that UK ship owners on average purchase 1,533 - 2,093 copies of the Code of Safe Working Practices for Merchant Seamen each year.

5.2.1 Benefits under Option 1

The benefits under Option 1 accrue only for shipowners.

5.2.1.1 Monetised benefits

Under Option 1, once the Regulations are revoked, it is assumed that shipowners will continue to purchase at least one copy of the Code per ship but will rely more extensively on electronic access to the Code.

At consultation stage, we assumed that all shipowners who can will switch to using the digital version given its lower cost of purchase and amendment. Discussions with industry during and since consultation have suggested that in many cases, at least initially, multiple hard copies will still be held on board. There are a number of reasons for this. One is that on-board support systems are not widespread on all ships and therefore hard copies would still be needed to ensure that the Code was available to all departments, and to make the Code available to seafarers' when they are not at a work-station. There is also a recognised need to provide back-up for when on-board systems fail.

In addition, the digital Code as currently available is not particularly user friendly, and the full benefit of allowing digital copies may not therefore be realised until the official publisher has developed a more sophisticated product. We assume that the full impact of this will not be seen for three years.

We conservatively assumed that only a small proportion (25%) of small commercial vessels will have the electronic systems that allow them to replace a hard copy with a digital. This may understate the benefit. However, we have assumed that all other, larger, ships will have such systems and this may be an overestimate.

It is also likely that any new product designed for networked use on ship's systems would be more expensive than the current digital copy of the Code.

We estimate that a small percentage of UK shipowners would take advantage of the removal of the statutory duty to carry the Code on board their ships and would look for cheaper alternatives, or rely entirely on their on-board safety management systems, in order to reduce costs. However, there is no evidence on which to estimate the proportion of shipowners who would take this approach. The reduction in sales cannot therefore be monetised.

The cost of updating the Code will also be reduced, where fewer hard copies are carried. The saving will come from a reduction in staff time required for the manual removal of expired pages, and insertion of new or amended pages.

Some of this saving may be offset by the demands of installing or maintaining an electronic version on shipboard systems, but in many cases this may already be happening alongside maintaining hard copies.

The estimated number of sales (hard or digital) in a 5 year period is therefore now assumed to be virtually unchanged in the first two years, and to reduce to between 1 and 6 copies per UK ship thereafter.

Table 2: Option 1 year 1 and 2

<i>Number of crew required</i>	<i>Number of copies of Code per ship (low)</i>	<i>Number of copies of Code per ship (high)</i>	<i>Number of ships (low)</i>	<i>Number of ships (high)</i>	<i>Total number of copies of Code (low)</i>	<i>Total number of copies of Code (high)</i>
<i>Fewer than 5</i>	1	1	467	467	467	467
<i>Between 5 and 20</i>	4	6	572	572	2,288	3,432
<i>More than 20</i>	7	12	187	187	1309	2,244
<i>Small Commercial Vessels</i>	1	1	3600	4320	3,600	4,320
<i>Total</i>			4826	5,546	7,664	10,463

Table 3: Option 1 year 3 to 10

<i>Number of crew required</i>	<i>Number of copies of Code per ship (low)</i>	<i>Number of copies of Code per ship (high)</i>	<i>Number of ships (low)</i>	<i>Number of ships (high)</i>	<i>Total number of copies of Code (low)</i>	<i>Total number of copies of Code (high)</i>
<i>Fewer than 5</i>	1	1	467	467	467	467
<i>Between 5 and 20</i>	2	3	572	572	1,144	1,716
<i>More than 20</i>	4	6	187	187	748	1,122
<i>Small Commercial Vessels</i>	1	1	3600	4320	3600	4320
<i>Total</i>			<i>4,826</i>	<i>5,546</i>	<i>5,959</i>	<i>7,625</i>

There are four components to the savings for shipowners.

- First there is the saving from having to carry fewer copies of the code. Based on the reasoning set out above, there would be a drop in the number of hard copies of the Code carried on board UK ships of between (7,664 – 5,959 =) 1,705 and (10,463 – 7,625 =) 2,838 copies, per year after the first 2 years. On the assumption that shipowners will still purchase copies every 5 years that is between 341 and 569 copies per year. This equates to between £13,640 and £22,704 per year, with a best estimate (mid-point) of £18,172.
- The second component is the switch from hard copies to digital versions – saving an estimated £3.20 per copy. This saves business approximately £10,429 - £13,658 or £2,086 to £2,732 per year) under both the high and low scenario with approximately 3,259 (low scenario) to 4,385 (high scenario) copies being digital within 3 years (assuming all who can switch do). New, more sophisticated digital versions, allowing for networked copies on board, are likely to be more expensive than the current CD version. However, a single copy may be sufficient per ship, or per company, with the price reflecting the number of users it is licensed for. It is not possible accurately to monetise the impact of such developments, as such versions are not yet available. The estimated cost is therefore based on the current digital Code, which is on a CD and so can only be used by one user at a time.
- Thirdly there is a saving from not having to purchase the loose-leaf update for every currently held hard copy each year. This equates to between £ 48,885 and £65,775 per year, with £57,330 as a best estimate (mid-point). As above, this is based on current pricing of hard copy updates. New digital versions may include a subscription to annual updates.
- Finally, there will be savings in staff time, as there will be fewer hard copies of the Code which require updating. It is estimated that the task of manually replacing pages in the Code with amendments issued once a year will average 1 hour of staff time per copy of the Code per year. The actual cost of staff time will vary from company to company but is estimated on the basis of mean average hourly cost of staff in the water transport industry, from the ONS Annual Survey of Hours of Earnings (£16.40 per hour¹). This equates to £53,448 per year (low) to £71,914 (high).

Summing these together gives a total range of £0.069 to £0.097m per year (£0.083m as a best estimate) for the first two years and £0.118m to £0.163m per year (from year three onwards), (£0.141m as a best estimate). In present value terms over the appraisal period this gives a range of savings between £0.89m and £1.22m with a best estimate of £1.05m.

Saving per year	Low	High
Fewer copies	13640	22704
Electronic copies	2086	2732
Updates (year 3 onwards)	48885	65775
Staff time	53448	71914
Total	118058	163125

5.2.1.2 Non-monetised benefits

In addition, removing the statutory requirement, and a prescriptive approach to the number of copies to be carried will give shipowners greater flexibility in providing access to the Code to the seafarers on their ships, including allowing this to dovetail with other safety systems on board.

Where a digital version of the Code is used in place of multiple hard copies, there may be safety benefits, because it is easier to ensure that one, centrally-held copy of the Code is replaced with an updated edition, than to ensure that a number of hard copies held by a number of individuals are properly updated once hard copy updates are issued.

Although not directly an impact of the revocation of the regulations, there may also be a safety benefit from improved usage of electronic copies in comparison with hard copies, both because it is easier for seafarers to access, and because of improved search facilities to find the information required, as compared to the index of a hard copy.

The government also believes there are benefits to industry in modernising and simplifying the body of legislation which must be consulted and complied with.

These benefits cannot however be quantified.

Consultees were invited to provide any further evidence around the methodology and assumptions set out above, and any further evidence of benefits arising from the proposed revocation of the regulations. None were provided.

5.3 Costs of Option 2 compared with the do-nothing scenario

5.3.1 Costs to shipowners

This is a deregulatory measure and so there are no costs to shipowners.

There is a risk that seafarers will have less access to the Code if the Company is given more flexibility in deciding how many copies to carry. This could lead to a reduction in the level of safety on board, leading to costs for shipowners. However, there would be a new statutory duty to ensure that the Code is available to all seafarers on board, and it is considered unlikely under Option 2 that the on-line version of the Code would be relied upon, given the unreliability of internet access at sea. The risk of such costs materialising is therefore considered to be very low, and this cost has not therefore been monetised.

5.3.2 Costs to booksellers

The costs to booksellers would be very similar to those arising under Option 1, but the reduction in sales of hard copies, if any, would be less.

Taking into account the comments made during the public consultation period on the continuing demand for hard copies of the Code, at least in the short term, we estimate that slightly more ships would continue to carry the full compliment of hard copies of the Code under Option 2. However, the number of shipowners who would have reduced significantly the number of copies of the Code they put on their ships, or seek alternative safety guidance for their crew cannot be reliably estimated.

5.3.2 Costs to Government

MCA would publicise the change to the regulations under Option 2 in the same way as for Option 1. The estimated cost to MCA is therefore about £250 (see above).

5.4 Benefits of Option 2

Many of the same assumptions hold good for Option 2 as for Option 1. Although Option 2 will allow shipowners more flexibility about how access to the Code is provided on board ship, it will nevertheless provide an explicit duty to make the Code available. Slightly fewer shipowners may therefore expected to reduce or remove copies of the Code from their ships.

5.4.1 Monetised benefits

The monetised benefits of Option 2 in the first two years (until digital editions are available) would be very similar to Option 1, with very little change in the number of copies carried on board ships. Thereafter, however, retaining an explicit legal requirement for the Code to be readily available to all seafarers is expected to ensure that hard copies of the Code will continue to be carried, for example to ensure that in

the event of system failure, seafarers are not left without access to the Code. However, there is no evidence on which to quantify the extent to which the benefits will be reduced. The monetised estimate for benefits is therefore the same as for Option 1.

There are four components to the savings for shipowners.

- First there is the saving from having to carry fewer copies of the code. It is estimated that there would be a drop in the number of hard copies of the Code carried on board UK ships of between (7,664 – 5,959 =) 1,705 and (10,463 – 7,625 =) 2,838 copies, per year after the first 2 years. On the assumption that shipowners will still purchase copies every 5 years that is between 341 and 569 copies per year. £13,640 and £22,704 per year, with a best estimate (mid-point) of £18,172.
- The second component is the switch from hard copies to digital versions – saving an estimated £3.20 per copy. It is estimated that this would save business approximately approximately £10,429 - £13,658 or £2,086 to £2,732 under both the high and low scenario with approximately 3,259 (low scenario) to 4,385 (high scenario) copies being digital within 3 years. However, as under Option 2 it is not expected that all who can switch to digital copies will do so entirely, this is expected to be an over-estimate. New, more sophisticated digital versions, allowing for networked copies on board, are likely to be more expensive than the current CD version. However, a single copy may be sufficient per ship, or per company, with the price reflecting the number of users it is licensed for. It is not possible accurately to monetise the impact of such developments, as such versions are not yet available. The estimated cost is therefore based on the current digital Code, which is on a CD and so can only be used by one user at a time.
- Thirdly, there may be a saving from not having to purchase the loose-leaf update for every currently held hard copy each year. This is estimated at between £ 48,885 and £65,775 per year, with £57,330 as a best estimate – although this may be an over-estimate for the reasons set out above. As above, this is based on current pricing of hard copy updates.
- Finally, there may be savings in staff time, as there may be fewer hard copies of the Code which require updating. It is estimated that the task of manually replacing pages in the Code with amendments issued once a year will average 1 hour of staff time per copy of the Code per year. The actual cost of staff time will vary from company to company but is estimated on the basis of mean average hourly cost of staff in the water transport industry, from the ONS Annual Survey of Hours of Earnings (£16.40 per hour²). This equates to £53,448 per year (low) to £71,914 (high).

Summing these together gives a total range of £0.069 to £0.097m per year (£0.083m as a best estimate) for the first two years and £0.118m to £0.163m per year (from year three onwards), (£0.141m as a best estimate). In present value terms over the appraisal period this gives a range of savings between £0.89m and £1.22m with a best estimate of £1.05m.

Saving per year	Low	High
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² ONS publication (Annual Survey of Hours and Earnings) <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-337425>

5.4.2 Non-monetised benefits

As for Option 1, the non-monetised benefits will be :

- Safety benefits where a single digital version of the Code is used in place of multiple hard copies, making it easier to ensure that it is kept up to date;
- Safety benefit from improved usage of electronic copies in comparison with hard copies, both because it is easier for seafarers to access, and because of improved search facilities to find the information required, as compared to the index of a hard copy.
- Benefits to industry in modernising and simplifying the body of legislation

In addition, a new, non-prescriptive duty to make the Code available to all seafarers on board all UK ships avoids the risk, implicit in Option 1, that a general duty supplemented by guidance might be difficult to enforce.

It will also ensure that shipowners do not stop carrying any copies of the Code, which was a risk (albeit a small risk) identified in relation to Option 1. Unquantifiable benefits therefore accrue from Option 2, because it introduces flexibility as regards provision of the Code but safety standards on board UK ships will be protected.

Option 2 therefore meets the objective of the measure without compromising safety. These benefits cannot however be quantified.

5.5 Comparison with the do-nothing option

The “do nothing” option is for the existing regulations to remain in force. While there are by definition no costs arising from the “do nothing” option, the potential benefits of a modernised, streamlined body of legislation, and with a more modern and flexible approach to providing seafarers with access to the Code of Safe Working Practices for Merchant Seamen, would not be realised.

Summary comparison of quantified costs and benefits (best estimate)

	Do nothing (£)	Option 1 (£)	Option 2
Costs to govt (£) (one off)	0	250	250
Costs to shipowners (£)	0	0	0
Benefits to govt (£)	0	0	0
Benefits to shipowners (£) (per year)	0	100,721	100,721
NPV (£)		1,097,201	1,097,201

5.6 Monitoring and enforcement

The current regulations are enforced on UK ships through health and safety inspection as part of an inspection of living and working conditions on board, in accordance with the International Labour Organisation’s Maritime Labour Convention, 2006 (MLC).

The inspection mechanism will be unchanged under either Option 1 or Option 2, but any necessary enforcement would be carried out under the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (as amended) rather than the Code regulations, now revoked. Although the offence would be more explicit under Option 2 than Option 1, there would be no appreciable difference in the cost of enforcement, whether that enforcement was carried out under Option 1 or Option 2.

6. Rationale and evidence that justify the level of analysis used in the IA (proportionality approach)

This is a deregulatory measure with some benefits to industry and little immediate impact in practical terms on the standards to be applied on board ships. In addition, initial discussion with industry has confirmed that in principle, and subject to more detailed information, the proposals are supported by industry. Further analysis of the impacts is not therefore considered necessary.

7. Risks and assumptions

The following risks and assumptions have been identified:

- TSO is assumed to operate in a competitive market.
- It is assumed that a copy of the Code is replaced every 5 years.
- The estimate of costs for purchasing the Code under the “do nothing” option is based on the current number of ships on the UK register, and the current cost of the Code. No estimate is made of the possible changes to the number of ships on the UK register, or to the price of the Code over the next 10 years.

- The price of the digital version of the new edition of the Code will be priced as the same proportion of the hard copy price as the current digital version.
- The price of both the hard copy and digital version of the Code (or any digital version replacing the digital version) will remain unchanged over the 10 year appraisal period
- It will take 3 years for a sophisticated digital version of the Code to become available and to be fully used on board UK ships.
- Only 25% of small commercial vessels will have the correct systems to allow them to switch to using the digital version, but all larger ships will be able to do so.
- All ships who can switch to using digital/digital versions of the Code will do so
- Following revocation of the Regulations ships will only carry one copy of the code
- The assessment of the impact of revoking the Regulations is based on the assumption that UK shipping companies comply with the existing regulations and accept the standards they impose as common good practice. There would therefore be no reason for changes in provision as a result of revoking the Regulations.

Since there are a number of assumptions underlying the analysis, we have provided a range on the final figures to improve the robustness of the analysis. Under all assumptions there is a clear net benefit to the policy.

There is a risk that shipowners see the revocation of the Regulations as a signal that the status of the Code is being somehow down-graded and seek to take cost-cutting measures which might reduce safety. Ultimately, this would be addressed by MCA taking enforcement action where standards did not meet industry norms. However, to seek to prevent this risk to safety standards occurring, a clear explanation of the status of the Code is included in the preface and MCA will publish clear statements about the continued requirement to carry and make use of the Code. These statements are endorsed by the UK Chamber of Shipping and seafarer Unions, and these will be widely circulated.

8. Direct costs and benefits to business calculations

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

The direct cost to business has been calculated in accordance with the “One in Two Out” methodology. Our best estimate of the direct costs to business is that there will be an estimated annual net benefit to business (EANCB) of - £100,721 (2009 prices). It is considered that the Regulations qualify as an “OUT”.

8.2 Copy out

The Code Regulations are domestic in origin, and it is proposed to revoke them. The new provision in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 are also domestic. The copy-out principle is therefore not applicable in this case.

8.3 Alternatives to regulation

Option 1 removes prescriptive regulation in favour of guidance on industry best practice, supported by high-level health and safety regulations. Option 2 replaces the prescriptive regulation with a goal-setting regulation, as part of general health and safety legislation. A legislative approach is needed to ensure that the objectives for the measure are met. Removing the regulations entirely was rejected by industry in consultation because of the risk to levels of safety on board ship. MCA believes that the current proposal can achieve the same level of safety as the current Regulations, which will be revoked.

8.4 Review of regulations

Option 2 inserts a new provision into the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (as amended). These Regulations contain a statutory clause requiring review by October 2019 and every five years thereafter. The new clause will be reviewed as part of the wider review of those Regulations.

9. Wider impacts

9.1 Equalities Assessment

Although MCA does not consider that Option 1 would have had any detrimental effect on safety, revoking the regulations arguably denies seafarers, who are recognised by the International Labour Organisation as a vulnerable group of workers³, the protection of a statutory requirement on shipowners to provide access to a recognised and respected publication on health and safety. However the change would impact equally on all workers, regardless of their age, ethnic origin, gender, nationality, race, sexual orientation or disability.

Option 2, the preferred option, is intended to address this concern.

These proposals are therefore considered to have no adverse impact as regards statutory equality duties.

9.2 Competition Assessment

The 1998 Code Regulations are domestic regulations, although they are based on an international Convention, which requires competent authorities to provide guidance on health and safety for their ships. We are not aware of other countries which have similar regulations, although other administrations undoubtedly publish their own health and safety guidance, or support industry in doing so. It is also known (for example, from MCA surveyors inspections of non-UK ships in UK ports), that ships flagged with other registers carry the MCA Code (this is supported by the discrepancy between the number of copies of the Code sold by TSO each year, and the number MCA estimates would be needed by UK ships each year).

Revoking the regulations is not expected to bring any significant competitive advantage. However, by revoking prescriptive requirements, it provides a more flexible regime which will be able to adapt to new developments any may benefit UK shipowners in future.

Consultees were invited to offer any additional evidence on the potential for revocation of the Regulations to impact on competition. None was provided.

9.3 Small and Micro Business Assessment

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. The 1998 Regulations take account of the differing requirements for small, medium and large ships (by reference to the size of crew). To that extent they assist small and micro businesses, who generally (but not exclusively) operate smaller ships. Therefore, it would not be appropriate to exempt small and micro businesses from the revocation of these regulations.

Revoking the Regulations is not expected to have any additional benefit for these small vessels, for the following reasons:

1. vessels with no more than 5 crew are already required to have only one copy of the Code, and it is expected that one copy will continue to be needed as a back-up to any electronic system; and
2. small vessels are less likely to have the hardware on board to run an electronic system to provide access to the Code.

Consultees were invited to provide any additional evidence on the potential impacts of revocation of the Regulations on small firms. No quantified evidence was forthcoming.

9.4 Health Impact Assessment

The Code Regulations provide for carriage of the Code of Safe Working Practices for Merchant Seamen, which includes advice on living on board ships. Revocation of the Regulations is not intended to reduce the availability of the Code and the advice it contains on board ships. The revocation of the Regulations is not therefore expected to have any impact on health.

9.5 Human Rights

Since revocation of the Regulations is not expected to have any impact on safety information available to seafarers at work, there are no Human Rights compatibility issues arising from these Regulations.

9.6 Justice System

Revocation of the Regulations would remove 3 potential offences for the Company (the person or organisation responsible for the operation of the ship). A single offence will attach to the new duty in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (as amended). The main enforcement mechanism for these proposed Regulations would be through the inspection and certification of UK ships by MCA surveyors.

While MCA's preferred method of enforcement where deficiencies are found on board ships is to use improvement notices, prohibition notices, and in very serious cases detention of the ship, in order to secure rapid rectification of the deficiency, there are also offences and penalties laid down in the Regulations, which are available to MCA to take enforcement action after the event if this is considered justified. These are in line with the penalties in place for corresponding or similar offences in pre-existing Regulations.

The same methods of enforcement would be used for breach of the duty in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 that the shipowner and the employer must provide necessary information to seafarers to ensure their health and safety.

9.7 Greenhouse Gas Emissions

As the Regulations only affect seafarer health and safety and no significant additional costs are anticipated, it is not expected to affect maritime transport volumes. Therefore, no change in greenhouse gas emissions is expected.

10. Summary and preferred option with description of post implementation review

10.1 Summary and preferred option

Option 1 would revoke a statutory instrument dating from 1998. The objective of the regulations was to ensure that all those working on UK ships have access to the safety information contained in the Code of Safe Working Practices for Merchant Seamen, and this objective would continue to be enshrined in industry best practice, supported by high-level health and safety duties. Revocation of the regulations would reduce the amount of maritime health and safety legislation, but might introduce a risk that some shipowners would seek to save money by reducing access to the Code on board ship.

Option 2 is the same as Option 1, but rather than relying on best practice and high-level health and safety duties, introduces a specific but non-prescriptive requirement that the Code should be made available to all seafarers on board UK ships. This achieves the objectives without having a significant impact on safety. No significant monetised costs have been identified as a result of this proposal, but a small benefit to business has been identified.

³ <http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/seafarers/lang--en/index.htm>

Option 2 meets the policy objectives in Section 3 of this IA and is the preferred option.

10.2 Implementation plan

The Merchant Shipping (Code of Safe Working Practices for Merchant Seamen) Regulations 1998 will be revoked, and the new provision in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (as amended) introduced in October 2015, as soon as possible after the publication of a new version of the Code of Safe Working Practices for Merchant Seafarers. This will maximise the benefit to shipowners of the more flexible rules being introduced. Carriage of the Code would in future be enforced through inspections of health and safety under the Maritime Labour Convention, 2006. MCA's health and safety guidance will be revised to make clear that having copies of the Code of Safe Working Practices for Merchant Seafarers readily available on board continues to be required, because this is "necessary information" for the health and safety of seafarers.