

<b>Title:</b> Implementation of Inland Waterways Working Time Directive <b>IA No:</b> DfT00384 <b>RPC Reference No:</b> <b>Lead department or agency:</b> Maritime and Coastguard Agency <b>Other departments or agencies:</b> Department for Transport	<b>Impact Assessment (IA)</b>			
	<b>Date:</b> 20/06/2017			
	<b>Stage:</b> Final			
	<b>Source of intervention:</b> EU			
	<b>Type of measure:</b> Secondary legislation			
<b>Contact for enquiries:</b> Julie.Carlton@mcga.gov.uk, 020 3817 2498				
<b>Summary: Intervention and Options</b>				<b>RPC Opinion:</b> GREEN

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANDCB in 2014 prices)	One-In, Three-Out	Business Impact Target Status
-£27.42m	-£27.42m	£1.9m (NQRP) £1.0m (QRP)	In scope	Qualifying provision

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

Working hours in transport on the inland waterways of Europe have been governed by Directive 2003/88/EC on working time, which sets only broad limits for this sector. This led to inconsistent application between Member States and provided considerable flexibility for employers, meaning the Directive was difficult to enforce and provided no framework to industry for safe patterns of work.

Regulation is needed to provide enforceable limits to working time and patterns of work. The Regulations follow the pattern of other working time regimes in the UK, both creating duties for employers to ensure that their workers comply with the working time limits laid down, and providing workers with additional rights, which can be enforced through an employment tribunal (industrial tribunal in Northern Ireland); aiming to reduce the negative effects associated with working long hours.

**What are the policy objectives and the intended effects?**

The primary objective of the Regulations is to ensure the safety of inland waterway vessels and the health and safety of workers on vessels engaged in inland waterways transport by ensuring that workers do not work excessive hours. In addition, the Regulations are intended to implement Directive 2014/112 (hence referred to as "the Directive") in a proportionate way for the UK industry. Directive 2014/112 lays down the specific requirements of the working time Directive with regards to inland waterway workers.

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

As the Directive places duties on workers and provides workers with rights that must be enforceable, only legislation can adequately transpose the Directive. Two options were considered prior to consultation: Option 0 "do nothing" i.e. not implementing the Directive, is not a viable option, since the UK must implement the Directive in order to give it legal effect in the UK, and to avoid infringement proceedings. Option 1 does the minimum necessary to implement the Directive. Option 2, in addition to Option 1, provides workers on inland waterways vessels with the same entitlement to annual leave as workers ashore and seafarers (5.6 weeks per year, or pro rata for periods of less than a year, capped at 28 days.) The majority view during consultation was that workers on inland waterways should have the same entitlement to annual leave as workers in other sectors. No evidence was provided that the change would incur significant costs for industry. Option 2 is now considered the preferred option.

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

<b>Does implementation go beyond minimum EU requirements?</b>		Yes		
<b>Are any of these organisations in scope?</b>	<b>Micro</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
<b>What is the CO<sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO<sub>2</sub> equivalent)</b>		<b>Traded:</b> N/A		<b>Non-traded:</b> 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 : \_\_\_\_\_ John Hayes \_\_\_\_\_ Date : \_\_\_\_\_ 01 December 2017 \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 1

Description: Implement Inland Waterways Working Time Directive only

## FULL ECONOMIC ASSESSMENT

Price Base Year: 2017	PV Base Year: 2017	Time Period Years: 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -51.29	High: -3.32	Best Estimate: -18.30

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.01	1	0.39	3.32
High	0.01		5.96	51.29
Best Estimate	0.01		2.12	18.30

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

The main affected groups are operators in the inland waterway sector. Operators may incur costs for additional crew members and staff needed to cover the operations of their vessels due to restrictions on working time and working patterns. There will also be administrative costs for additional health assessments and the costs of familiarisation with the Directive. Some operators will need to employ additional administrative staff for record keeping purposes to comply with the additional regulations.

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

There is a shortage of qualified boat masters to operate inland waterways vessels, so some operators may not be able to fulfil their requirement for more staff, and so be forced to limit their operations. In some smaller rivers, operations may stop being economically viable, so that bulky cargoes are transferred to the roads, with resulting environmental and public health costs. The restrictions on working time may also mean that some workers earn less, although we assume that the number of overall hours worked will not fall, so these earnings will likely transfer to other employees.

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

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

No monetised benefits.

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

Workers' health and safety should benefit from reduced working hours and more rest days.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5%
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The costs and benefits are based on the responses to a stakeholder consultation on impacts and on public consultation responses, assuming that these responses are representative of the industry as a whole. The main assumption when calculating the number of affected vessels was that only operators with more than 10 vessels will incur compliance costs. We have used a range of scenarios to test the sensitivities of this assumption. For the low cost estimate we assumed that additional crew would only be required in the peak season, whereas in the high cost scenario they would be needed year round. We also used ranges for the number of workers in the sector and how many additional workers would be required per vessel operator, wages paid to employees, the number of small passenger vessels in the UK and the proportion of workers requiring health assessments. The best estimate used an average of the high and low cost scenarios generated using the extreme estimates for these sensitivity ranges.

### BUSINESS ASSESSMENT (Option 1)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>Score for Business Impact Target (qualifying provisions only) £m: 0.0</b>
Costs: 1.9	Benefits: 0.0	Net: 1.9	

# Summary: Analysis & Evidence

# Policy Option 2

Description: **Implement Inland Waterways Working Time Directive and provide workers with same annual leave entitlement as shore based workers**

## FULL ECONOMIC ASSESSMENT

Price Base Year: 2017	PV Base Year: 2017	Time Period Years: 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -84.78	High: -3.32	Best Estimate: -27.42

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.01	1	0.39	3.32
High	0.01		9.85	84.78
Best Estimate	0.01		3.18	27.42

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

These are mostly the same as option 1 above, with the main affected groups the operators in the inland waterway sector. Operators may incur costs for additional crew members and staff needed to cover the operations of their vessels due to restrictions on working time and working patterns. There will also be administrative costs for additional health assessments and familiarisation costs. Some operators will need to employ additional administrative staff for record keeping purposes to comply with the additional regulations. In addition to the monetised costs above there will be additional costs to cope with the increase in mandatory annual leave, as businesses will need to employ additional work in order to cover the extra time spent on annual leave.

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

There is a shortage of qualified boat masters to operate inland waterways vessels, so some operators may not be able to fulfil their requirement for more staff, and so be forced to limit their operations. In some smaller rivers, operations may stop being economically viable, so that bulky cargoes are transferred to the roads, with resulting environmental and public health costs. The restrictions on working time may also mean that some workers earn less, although we assume that the number of overall hours worked will not fall, so these earnings will likely transfer to other employees.

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

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

No monetised benefits.

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

Workers' health and safety should benefit from reduced working hours and more rest days.

### Key assumptions/sensitivities/risks

Discount rate (%)

3.5%

The costs and benefits are based on the responses to a stakeholder consultation on impacts and on public consultation responses, assuming that these responses are representative of the industry as a whole. The main assumption when calculating the number of affected vessels was that only operators with more than 10 vessels will incur compliance costs. We have used a range of scenarios to test the sensitivities of this assumption. For the low cost estimate we assumed that additional crew would only be required in the peak season, whereas in the high cost scenario they would be needed year round. We also used ranges for the number of workers in the sector and how many additional workers would be required per vessel operator, wages paid to employees, the proportion of employees not receiving their full entitlement of annual leave, the number of small passenger vessels in the UK and the proportion of workers requiring health assessments. The best estimate used an average of the high and low cost scenarios generated using the extreme estimates for these sensitivity ranges.

## BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: 5.0
Costs: 2.9	Benefits: 0.0	Net: 2.9	

# Evidence Base

## 1 Problem under consideration

Working hours in transport on the inland waterways of Europe have been governed by Directive 2003/88/EC on working time, which sets only broad limits for this sector, for example allowing weekly hours of work to be averaged over extended reference periods. This led to inconsistent application between Member States which causes some difficulties for the industry on cross-border waterways.

In addition, in some sectors of the industry, such as the river cruise industry, crews work long hours for extended periods. Long working hours have been shown in scientific research to have adverse effects on the health and safety of workers, including long term health<sup>1</sup>.

While cross-border differences and the demands on workers of the river cruise industry are not relevant factors for the UK industry, the UK regulations implementing directive 2003/88/EC (the Merchant Shipping (Working Time: Inland Waterways) Regulations 2003 ("the 2003 Regulations) provide considerable flexibility in application to employers through the extended reference periods referred to above and the provision for "adequate rest". This means that the Regulations are difficult to enforce and provide no framework to industry for safe patterns of work.

The European social partners for the inland waterways transport sector, the European Barge Union, the European Skippers' Organisation and the European Transport Workers' Federation, developed a social partner's agreement (SPA) to address these issues.

The SPA includes provisions on:

- a maximum reference period for calculating weekly hours of work;
- maximum weekly and daily hours of work;
- a limit on the maximum number of consecutive days worked;
- minimum weekly and daily hours of rest;
- rest breaks;
- restrictions on night work;
- annual leave;
- protection of minors (under 18 years);
- record keeping;
- exceptions for emergencies; and
- health checks.

The European Social Partners invited the European Commission to implement their agreement as EU law, and this has been done through Directive 2014/112/EU ("the Directive"). During negotiations on the Directive the UK raised a number of concerns about the impact of the Directive on UK operations, and – since the SPA was intended largely to address the question of cross-border operations - argued for some flexibility for those working on waterways not linked to the waterways of other member states. While there was support from this view from other Member States, the UK was not successful in obtaining amendments to the Directive.

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<sup>1</sup> Dembe AE, Erickson JB, Delbos RG, et al: *The impact of overtime and long work hours on occupational injuries and illnesses: new evidence from the United States: Occupational and Environmental Medicine* 2005;**62**:588-597 (<http://oem.bmj.com/content/62/9/588.info>)

## 2 Rationale for intervention

On 23 June, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation in future once the UK has left the EU.

If the UK does not reflect these requirements of Directive 2014/112/EU for working time on inland waterways in its domestic law, it would not be following current Government policy nor meeting, in full, its EU legal obligations by which it is currently bound.

The Merchant Shipping (Working Time: Inland Waterways) (Amendment) Regulations 2017 will amend the 2003 Regulations to fully comply with the Directive. Implementation of the Directive and the SPA provides an opportunity to strengthen the framework for industry, and promote good practice in determining patterns of work. They also increase the minimum statutory leave to which workers in the sector are entitled from 4 weeks to 5.6 weeks, in line with workers in other sectors.

The 2003 Regulations as amended are referred to in this IA as “the Regulations”.

The Regulations follow the pattern of other working time regimes in the UK, both creating duties for employers to ensure that their workers comply with the working time limits laid down, and providing workers with additional rights which can be enforced through an employment tribunal (industrial tribunal in Northern Ireland); aiming to reduce the negative effects associated with working long hours.

## 3 Policy objective

The objectives for the EU proposal are -

- to harmonise rules on inland waterways across Europe;
- to improve living and working conditions of workers in the sector; and
- to improve the health and safety of workers in the sector.

For UK implementation, the following additional objectives apply:

- to implement the Directive while avoiding regulatory burdens and administrative costs for industry which do not contribute to safety;
- to improve the safety of inland waterways in the UK by ensuring that those in charge of inland waterway vessels are well-rested;
- to carry forward enforcement provisions including the right of a worker subject to the regulations to take a case to an employment tribunal (industrial tribunal in Northern Ireland) where they believe they are not receiving their entitlements under the Regulations.

## 4 Description of options considered

“Do nothing” is not a viable option, since the UK is obliged to implement the Directive in order to give it legal effect in the UK. This option is not considered further in this IA except as the baseline against which to compare other options.

Prior to consultation we considered two options for transposition:

- **Option 1:** transposition of the Directive and SPA into regulations amending the 2003 regulations, using copy-out where appropriate.
- **Option 2 (preferred option):** as above plus bringing the statutory entitlement to paid annual leave into line with that for other sectors (5.6 weeks paid leave, capped at 28 days). This change to annual

leave entitlement is gold-plating the regulations above the minimum required by the EU Directive. The rationale for this is to bring legislation in line with that in other sectors, as some employers have interpreted 4 weeks paid leave as including public holidays and others give public holidays in addition. This legislation will ensure consistent interpretation of the law and that workers on inland waterways receive equal entitlement to shore-based workers.

## 5 Consultation

The Maritime and Coastguard Agency has worked with industry since 2014 throughout the negotiation and implementation of the Directive, through ad-hoc meetings and through the Domestic Passenger Shipping Steering Group, which includes the Passenger Boat Association (representing 78 member companies<sup>2</sup>), and other groups representing a cross-section of operations from across the UK. This highlighted that the standards laid down in the Directive are not well suited to the kind of operations typical on UK waterways. This is because they are on operating patterns in use on the large mainland European rivers such as the Rhine and the Danube. This creates a risk that the measures impose burdens out of proportion to the risks they are trying to avoid.

A stakeholder engagement exercise was carried out to gauge the potential impact and costs to industry (Annex A provides the summary). Industry was consulted through trade associations representing different sectors of the industry: passenger ships (both those carrying more than 12 passengers, and those carrying no more than 12), and cargo vessels – estimated to be well over 100 companies in total. There were 23 responses. When combining survey responses and its analysis, it is possible to arrive at a total cost for a company to implement the new requirements

Formal public consultation was held between 26 January and 10 March 2017 (the questions asked are contained in Annex B). We received seven substantive, written responses from the relevant unions (Nautilus International, the National Union of Rail, Maritime and Transport Workers, and Unite), the Passenger Boat Association (PBA) which represents many operators affected by the Regulations, the Royal Yachting Association, and two individual operators. Further discussion was held at the Domestic Passenger Ship Steering Group meeting just after consultation closed.

Responses were mixed. The unions generally supported the regulations, although some concerns were raised about the impact of reduced hours and working days on the income of workers. Operators were concerned about the following impacts:

### 5.1 Annual free health assessment:

Under the new proposals, all workers are entitled to a free health assessment. More commonly referred to in the UK as “health surveillance”, the measure allows for early identification of ill health arising from work and helps identify any corrective action needed. For many of those working on inland waterway vessels, the health risks arising from their work are little different from the general working population – for example, those serving refreshments or checking tickets. For such workers, most cases will be able to be handled within the company by means of a simple monitoring questionnaire.

However there are some specific risks, such as exposure to diesel fumes on ro-ro ferries<sup>3</sup> or vibration on high speed craft. Shift work and particularly night work have also been demonstrated to have long-term health effects<sup>4</sup>. In these cases, workers exposed to such risks are already entitled to appropriate health surveillance under existing provisions. However, the new regulations will raise the profile of this entitlement, and may trigger additional requests for health assessments from employees.

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<sup>2</sup> The ONS estimate a total of 200 inland passenger water transport companies in the UK:  
<https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation>

<sup>3</sup> Roll on/roll off ferries carry vehicles which are driven onto the vessel under their own power

<sup>4</sup> Harrington JM: ‘Health effects of shift work and extended hours of work’: *Occupational and Environmental Medicine* 2001;**58**:68-72.  
(<http://oem.bmj.com/content/58/1/68>)

The PBA estimated this would cost £150 per person per year – for the small number of large companies with a substantial number of employees this could be a significant cost (for one company with 80 employees, the annual cost was estimated at £12,000 per year).

MCA does not accept the figure provided for the overall annual costs. While they accept that £150 would be a representative cost for a medical fitness assessment, this is only required where an initial assessment suggests there is a potential health problem arising from work. This would not be required for the majority of workers, for whom the health risks are little different from the general working population. Their health assessment could be covered by a simple self-assessment questionnaire, at negligible cost to the operators, if they do not provide these assessments already. MCA believes that this is essentially a restatement of an existing provision under health and safety legislation that workers are entitled to health surveillance, based on the risk of occupational health impacts.

MCA believes the overall cost above is a considerable over-estimate as the majority of workers will be unaffected, but the cost of £150 for a single fitness assessment, where required, is reasonable. MCA will seek to support employers in educating their workers on the purpose and benefits of properly targeted health surveillance, in line with Health and Safety Executive guidance. MCA got back in touch with the PBA following the consultation, and they accepted the MCA's interpretation of the regulations.

## **5.2 Pattern of working days and rest days:**

PBA were concerned that the Directive requirements on patterns of work, which require 2 days off for each six days working, would require them either to employ additional crews or to stop operating one day a week (depending on the size of the company). Recruitment of additional staff was estimated to cost £100,000 - £210,000 per operator for medium and large operators. Small operators were thought unlikely be able to afford additional staff and so could be forced to stop operating one day a week (which could lead to a 12% decrease in turnover).

However, this estimate does not take account of a provision in the Directive that allows for working patterns to be adjusted to cope with peaks in demand during the tourist season. During the season, only 2 days of accrued rest days have to be taken during each 31 day period. Other rest days can be taken by agreement at less busy times. The impact of this requirement can therefore be reduced significantly, though not altogether removed. We have assumed operators will be able to continue a daily schedule of operations and turnover will not be affected.

The PBA accepted the MCA's view that the provision for seasonal work will reduce this impact significantly, although additional hours may be required to cover demand peaks. The MCA estimated that the additional hours required to cover these rest days would equate to one crew for each company affected by the regulations. The size of the crew will depend on the size of the vessels. The MCA estimate that on average, a passenger vessel will need a crew of 2-5 staff, whereas a small passenger vessel would only require a crew of 1-2 persons.

## **5.3 Record keeping and health assessments:**

It was suggested in the response from PBA that large companies may need an additional member of administrative staff to administer these requirements (£20,000 to £30,000 per year). This response differs from the responses to the original industry survey, which indicated that all companies with a significant number of employees (over 100) already hold staff records.

## **5.4 Recruitment issues**

The PBA has also pointed out that, given the shortage of qualified boatmasters on the River Thames, exacerbated by the additional demands of the Thames Tideway project, companies would find it very difficult to recruit the additional qualified crew members they will need as a result of the Directive requirements.

## **5.5 Impact on workers**

Both PBA and Unite have pointed out that workers' earnings will be reduced as they will be unable to do as much overtime.

## **5.6 Increase in annual leave to 5.6 weeks (in line with other sectors)**

Of the seven, substantive written responses to the consultation, the majority (five) supported this proposal, which takes into account public holidays to increase the statutory minimum from 4 weeks to 5.6 weeks, in line with other sectors. Out of the four operators and operators' associations that responded, half of them raised concerns about this proposal, although no evidence was provided of increased costs as a result of the increase in paid leave.

## **5.7 Mitigation of concerns**

A number of the concerns raised above will be addressed through additional guidance on what operators need to do comply with the requirements. However, in light of the issues raised, the MCA intends to continue to work with industry during the implementation phase to ensure that any issues are identified, and the guidance will be kept under review. See also section 10 of this IA on the post-implementation review.

# **6 Costs and benefits of each option (including administrative burden)**

The costs and benefits as set out in this section apply to both options 1 and 2. The only exception is the monetised cost of the increase to the statutory minimum annual leave, (6.1.3) which is not included in option 1.

## **6.1 Monetised costs- costs to operators and employers**

### **6.1.1 Health assessment**

At consultation stage, the cost of health assessments was estimated as zero, on the basis that many workers on inland waterway vessels (day workers in navigational roles or offering hospitality services) are at no excess risk to their health compared to the general population and are already entitled to health surveillance under other legislation. Consultation responses suggested that the attention drawn to this entitlement by the new regulations may trigger more interest from workers and lead to higher demand for these health assessments. The purpose and benefits of well-targeted health surveillance will be stressed in the MCA guidance supporting the regulations.

In order to estimate indicative costs, we have assumed that 20% of workers in the sector may seek a health assessment from their employer for the first time (this can be a simple self-assessment questionnaire) and of these, 20% may require a further medical assessment. In the higher and lower scenarios these assumptions were adjusted to 40% and 10% of workers respectively, as this assumptions is based only on MCA expert opinion and is therefore quite uncertain.

Responses to the stakeholder engagement indicated that the cost of self-assessments were negligible, therefore we have assumed no cost for those employees who did not require a full medical assessment. We have used the estimated cost of a medical assessment (£150) supplied by the PBA for the workers requiring full medical assessment.

There are an estimated 2,400 workers in the sector according to the Business Register and Employment Survey. As the data are quite uncertain, we calculated upper and lower bounds of 1,259 – 3,574 as the estimated range for the number of workers in the sector. The scenario estimates were calculated as follows:



	LOW COST	HIGH COST	BEST ESTIMATE
<b>Total employment</b>	1,259	3,574	2,400
<b>% of workers seeking initial assessment</b>	10%	40%	20%
<b>% of workers requiring further assessment</b>	10%	40%	20%
<b>Number of workers requiring assessment</b>	13	572	96
<b>Cost per assessment</b>	£150	£150	£150
<b>Total annual costs</b>	£1,889	£85,786	£14,400

Table 1 Annual health cost calculations

### 6.1.2 Additional crew due to changes in the pattern of working days and rest days:

#### *Pre-existing compliance levels*

Prior to public consultation, MCA carried out a stakeholder engagement survey<sup>5</sup> which asked companies whether they were already compliant with the regulations and found that most companies were compliant with one or more of the regulations: 82% complied with daily rest requirements; over two thirds complied with weekly rest requirements; over 75% complied with average weekly rest; and over two thirds complied with mandatory rest days. This means the average level of compliance was 73%, and in total 59% of companies were compliant with all four regulations.

#### *Number of affected operators<sup>6</sup>*

The survey results also showed that the companies which believed they were most likely to be affected were the companies operating 10 or more vessels. We have therefore assumed that only companies with 10 or more vessels would potentially need to recruit additional staff to cover changes in working patterns.

#### *Passenger vessel operators*

Data from the MCA and the UK Shipping Register show 295 operators of passenger vessels (more than 12 passengers) responsible for 540 vessels. This means that the highest possible number of operators with 10 or more vessels is 27, which represents the high cost scenario. As we don't have further details on the breakdown of the industry, we used a fairly small range between scenarios, with as assumptions of 24 operators with 10 or more vessels in the best case. The survey results show that for operators of 10 or more vessels, 86% would need to recruit additional crew in order to comply with one or more regulations. This means that 21 passenger vessel operators would be affected in total.

#### *Small passenger vessel operators*

The MCA does not have accurate on the number of small passenger vessels (no more than 12 passengers) or their operators. They estimate that there are 400 of these vessels on UK waterways, with a range of 300 – 500 to reflect uncertainty. A significant number of small passenger vessels, estimated to be 76%<sup>7</sup> are solely owner-operated and will therefore not be affected by these changes. This leaves 96 vessels in scope of the Regulations in the central case.

As we do not know how many companies operate these vessels, dividing by 10 gives an estimate of the number of operators with 10 or more vessels. We assume the same level of compliance as for passenger vessels, meaning the central case estimate is that 8 small passenger vessel operators will be affected.

#### *Cargo vessel operators*

<sup>5</sup> Annex A is a summary of the survey responses

<sup>6</sup> See Annex C for calculations

<sup>7</sup> FSB small business estimates

We have assumed that cargo vessels are unaffected as cargo vessels in the UK rarely operate outside the normal working week (5 days) and so would not be affected by the Directive requirements for patterns of working days and rest days.

*Additional staff required per operator*

At the time of the stakeholder survey, it was assumed that each operator would only need to hire one additional staff member in order to cover changes to working patterns. Consultation responses suggest that the impact for such companies may be greater than previously anticipated. As stated in 5.2, for these larger companies this is not expected to result in a reduction in operating days, but will require a whole crew, rather than one staff member to cover peak periods.

To reflect the consultation, MCA estimated that each company would require an additional crew with 2-5 crew members for passenger vessels, and 1-2 crew members for small passenger vessels. A range is provided as there is no way of knowing the size of the operators or vessels affected, nor how they distribute their working hours amongst crew members. The central case assumes a total of 84 additional crew spread throughout the various subsectors.

To account for the changes in demand due to seasonality and peak operating periods, as a worst case, we have assumed that an additional crew may be required for each company affected, during the whole year. A best case estimate would be an additional crew for each company during the summer months only (May to September – 5 months).

The wage estimates used a range of £18,000 - £30,000 per full time worker, based on analysis of responses to the stakeholder engagement survey. They were uplifted by 21.2% to reflect non-wage labour costs, as per WebTAG guidance.

The best estimate used in this impact assessments is the mean of the best estimates for the full annual salary (table 2) and the seasonal salary (table 3) scenarios, which gives a total of £1,737,800 (inc. non-wage costs). We have used the mean of these scenarios as there are no robust data available on the split between annual and seasonal workers.

TYPE OF VESSEL	AFFECTED OPERATORS	LOW COST <sup>8</sup>	HIGH COST <sup>9</sup>	BEST ESTIMATE
Passenger	18 – 23	£790,000	£4,210,000	£2,090,000
Small Passenger	6 – 10	£130,000	£750,000	£360,000
<b>Total</b>	<b>24 – 33</b>	<b>£920,000</b>	<b>£4,960,000</b>	<b>£2,450,000</b>

*Table 2 Costs of additional workers – Full annual salary (inc. non-wage costs)<sup>10</sup>*

TYPE OF VESSEL	AFFECTED OPERATORS	LOW COST	HIGH COST	BEST ESTIMATE
Passenger	18 – 23	£320,000	£1,750,000	£870,000
Small Passenger	6 – 10	£60,000	£310,000	£150,000
<b>Total</b>	<b>24 – 33</b>	<b>£380,000</b>	<b>£2,060,000</b>	<b>£1,020,000</b>

*Table 3 Costs of additional workers – Seasonal salary (inc. non-wage costs)*

<sup>8</sup> Lowest refers to 2 additional crew members for passenger ships (1 additional crew member for small passenger vessels) per 10 vessels on an annual salary of £18,000

<sup>9</sup> Highest refers to 5 additional crew members for passenger ships (2 additional crew members for small passenger vessels) per 10 vessels on an annual salary of £30,000

<sup>10</sup> Totals may be different due to rounding

### **6.1.3 Cost of increasing the statutory paid annual leave from 4 weeks to 5.6 weeks**

An increase in the statutory annual leave workers on inland waterway vessels are entitled to could lead to increases in staff costs for operators, as we assume that they may need to pay additional wages in order to employ crew to cover this additional leave, if they are not already allowing their workers 5.6 weeks leave.

Annual leave is a worker entitlement, not enforced through inspection, so the MCA has no information on leave arrangements within shipping companies. In addition, this is a diverse sector with many small and micro businesses so requesting data directly would place a disproportionate burden upon these businesses.

There was no evidence provided in consultation responses on individual operators' annual leave arrangements so it is difficult to estimate how many employees would be affected by this proposal, which gold-plates the EU directive. The rationale for the gold-plating is to bring legislation in line with that in other sectors, as some employers have interpreted 4 weeks paid leave as including public holidays and others give public holidays in addition. This legislation will ensure consistent interpretation of the law and that workers on inland waterways receive equal entitlement to shore-based workers.

Most inland waterways operators will have some shore staff who are already entitled to 5.6 weeks leave under the Working Time Regulations 1998, and so it is expected that at least some employers will already be giving mobile workers the same leave as their shore-based colleagues. The industry consultation received seven responses, of which four were from operators or operators' associations. Half of these responses raised concerns about this proposal, although they did not mention cost as the reason, and did not provide any estimate of the costs incurred.

We have therefore assumed that in the central case, as half of the employers who responded to the consultation supported or did not comment on the proposal to increase the annual leave entitlement; half of the employees in the inland waterways sector are already entitled to a minimum of 5.6 weeks paid leave and therefore will not be affected by these proposals. The other half will see an increase in their annual leave entitlement which will incur costs for the operators. The annual leave entitlement is calculated on a pro-rata basis therefore we took into account the proportion of part-time workers in the sector to calculate the total additional days of leave which would need to be paid for, assuming that a part-time worker is equal to 0.5 FTE.

It is likely that the costs calculated here are a significant over-estimate of the impact on business. Most operators will employ shore-based staff as well as vessel-based staff. The shore-based staff are already entitled to 5.6 weeks paid leave, and it seems unlikely that an operator will discriminate between their staff in terms of paid leave entitlement. However, in the absence of MCA access to data on employees' leave, and given the range of businesses covered, we feel the range of scenarios used is likely to capture the true cost to businesses

For the low-cost scenario, we assumed that all staff are currently entitled to 5.6 weeks paid leave, whereas the high-cost scenario assumed that no staff in the sector were currently entitled to a minimum of 5.6 weeks. The wage estimates used an annual salary range of £18,000 - £30,000 per full time worker, based on analysis of responses to the stakeholder engagement survey. They were uplifted by 21.2% to reflect non-wage labour costs, as per WebTAG guidance.

Calculation of the annual costs of the increased annual leave entitlement for each case is shown below:

	LOW COST	HIGH COST	BEST ESTIMATE
<b>Weekly salary</b>	£345	£575	£460
<b>Proportion of workers requiring additional leave</b>	0%	100%	50%
<b>Additional weeks of annual leave per worker</b>	1.6	1.6	1.6
<b>Annual cost per worker (inc. non-wage costs)</b>	£669	£1,116	£893
<b>Total workers (FTEs)</b>	1,269	3,487	2,375
<b>Total annual costs</b>	£0	£3,890,382	£1,060,031

Table 4 Calculations for the costs of additional annual leave

#### 6.1.4 Record keeping

In the survey conducted in 2016, relatively few companies identified additional costs arising from record keeping. It was therefore assumed that only companies which employ a large number of staff would need to recruit additional admin staff for record-keeping purposes, if they did not keep such records already. The companies which responded to the survey and employed over 100 staff members all already hold staff records and as a result the original assumptions was that there is no requirement to employ additional members of admin staff.

However, responses to the public consultation in early 2017 indicated that some companies felt that the administrative burden of the regulations meant an additional member of admin staff would be required. The record-keeping burden will be larger on companies with more staff, therefore we assumed the companies which would potentially be affected would be those with 10 or more vessels, as calculated in 6.1.2.

To account for the uncertainty of these responses, we used a range of 0% - 100% of companies which would require additional staff, giving a low of zero (which corresponds with findings in the 2016 survey) and a high of 33 affected operators. We assumed that each company would require one additional employee. The mean annual salary for “human resources administrative occupations” was taken from the Annual Survey of Hours and Earnings. The estimates for the various scenarios are shown below:

	LOW COST	HIGH COST	BEST ESTIMATE
<b>Total companies with 10+ vessels</b>	24	33	29
<b>Proportion requiring admin staff</b>	0%	100%	50%
<b>HR staff salary</b>	£20,033	£22,625	£21,329
<b>Total annual costs</b>	£0	£916,660	£372,251

Table 5 Calculations for admin staff costs

#### 6.1.5 Familiarisation costs

Prior to consultation we assumed 1 hour is spent reviewing the Directive per vessel. This will need to happen regardless of whether the vessel will need to change operations to comply with updated regulations, therefore the number of vessels represents the total estimated inland waterway fleet in the UK. Given an hourly wage range of £8 - £10, total familiarisation costs are expected to be between £7,000 and £11,000, with a best estimate of £9,000 in the first year. No comments were received disagreeing with this estimate during the public consultation phase.

Type	NUMBER OF VESSELS WHICH NEED FAMILIARISATION	LOW COST	HIGH COST	BEST COST
Passenger	540 <sup>11</sup>	£4,320	£5,400	£4,860
Small passenger	300 – 500 <sup>12</sup>	£2,400	£5,000	£3,600
Cargo	40 – 60 <sup>13</sup>	£320	£600	£450
<b>Total</b>	880 – 1,100	£7,040	£11,000	£8,910

Table 6 Calculations for familiarisation costs

### 6.1.6 Summary of monetised costs

The transition costs for this policy are the familiarisation costs. Assuming 1 hour is spent reviewing the Directive per vessel, familiarisation costs are expected to be between £7,000 and £11,000, with an average cost of £9,000 in the first year.

The annual costs for this policy are comprised of the health assessments, the employment costs for additional crew and for providing crew with increased paid leave, and employment costs for additional administrative staff.

Health assessments may cost in the range of £1,900 and £85,800, with a best estimate of £14,400.

Taking into account the average number of self-employed operators, those already compliant and the number of vessels per company it can be estimated that the employment costs for the transposition of the Directive could be between £380,000, if only seasonal operations are affected, so that seasonal salaries are paid to additional crew, and £4,960,000, if operations are affected all year round, so that full annual salaries are paid. These minimum and maximum values also account for the ranges used to estimate annual salaries and the number of crew each operators would need to employ. The best estimate for combining these extremes is £1,740,000 which is the average of the full seasonal and annual scenarios.

The estimated range of costs for bringing statutory annual leave up to 5.6 weeks is £0 - £3,890,000, with a best estimate of £1,060,000. This varies dependent on the assumed proportion of the workforce who will receive an uplift to their leave entitlement.

The estimated costs of hiring additional administrative staff are quite uncertain given the differing responses in the stakeholder engagement survey and the consultation. The estimated range of costs is £0 - £920,000, with a best estimate of £370,000.

See Annex D for a summary of the various assumptions used across the different scenarios.

## 6.2 Non-monetised costs- costs to workers

### 6.2.1 Mobile workers:

The Directive applies to -

“mobile workers employed as members of the navigation personnel (crew members) or in another function (shipboard personnel) on board a craft operated within the territory of a Member State in the commercial inland waterway transport sector”

“Mobile workers” are defined as “any worker employed as a member of travelling personnel by an undertaking which operates transport services for passengers or goods by inland waterway”.

The Office of National Statistics has published the following provisional estimates for the number of workers in the inland waterways sectors in 2015:

<sup>11</sup> These vessels must be surveyed by the MCA. Source is the MCA database

<sup>12</sup> MCA estimate- these vessels only need register with local authorities, therefore this is the MCA's estimate of numbers

<sup>13</sup> The Commercial Boat Operators Association estimated that around 50 cargo vessels would be subject to these regulations

Reference year 2015; Thousands

	FULL TIME EMPLOYEES			PART TIME EMPLOYEES			TOTAL EMPLOYEES			TOTAL EMPLOYMENT		
	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private	All
<b>PASSENGER</b>	0.1	1.5	1.6	0.0	0.1	0.1	0.2	1.6	1.8	0.2	1.8	2.0
<b>CARGO</b>	0.0	0.3	0.3	0.0	0.1	0.1	0.0	0.4	0.4	0.0	0.4	0.4

Table 7 Employment estimates for the inland waterway sectors, 2015

The Directive limits the maximum daily, weekly and annual working time, and set an average weekly limit of 48 hours per week averaged over the year (excluding annual leave, sick leave etc.). For context, the Annual Survey of Hours and Earnings estimates that in 2016, full-time employees in the inland passenger water transport sector worked an average of 41 weekly hours, with a median of 37.5 hours. This suggests that only a minority of workers would be affected by this weekly limit.

The regulations also specify patterns of working days and rest days, assuming equal working days and rest days. As workers on inland waterways in the UK very rarely stay on board the vessel, this pattern of working has not been used. The regulations give workers an entitlement to equal rest days to their working days, which they have the right not to take up, provided that the annual, weekly and daily working time limits are observed.

Taken together, these provisions will reduce the scope for workers to do overtime so that they could lose income. However, it is likely that these impacts will only be felt at an individual level, as the overall number of hours worked is unlikely to decrease. It has not been possible to quantify the impact on individual workers, which will vary considerably between companies and even between individuals within companies. However, this was raised as a concern in public consultation.

## 6.3 Non-monetised costs- costs to operators and employers

### 6.3.1 Difficulties recruiting

As set out in section 5, consultation responses pointed out that there is a shortage of qualified boatmasters in parts of the country, particularly in London. If additional crews are required for vessels to remain compliant with the Regulations, as set out in section 6.1.2, but are not available, operators may have to reduce their hours of operation. This has not been monetised as we have no data on the availability of qualified boatmasters nor how many would be required to cover any additional hours.

### 6.3.2 Tidal waters

The daily minimum rest hours may hinder the current pattern of cargo operations on small tidal rivers with a large tidal range, where water levels restrict times of operation. For example, on the tidal Trent, two or three companies could be affected by this. Any significant increase in staffing costs would erode the cost margins of such operations to the extent that they can no longer compete with road transport. Moving heavy, low value cargoes back onto the roads would be detrimental both environmentally and to human health<sup>14</sup>. MCA will work with social partners to minimise any possible impacts in this niche area. This has not been monetised as we have no data on these businesses' commercial operations or at what point they would need to switch from waterways to roads.

## 6.4 Benefits

The Regulations will provide a prescriptive framework to prevent mobile workers working excessive hours. Fatigue is a known factor in accidents, and is also known to have long-term health effects. Some workers may therefore receive health benefits from the reduced working time, and more rest days. However this could be offset by reduced income. These have not been monetised as it is very difficult to robustly quantify

<sup>14</sup> OECD paper; *'The Environmental Effects of Freight'* (<http://www.oecd.org/trade/envtrade/2386636.pdf>)

the potential adverse effects from excessive work or calculate how changes to shift patterns will offset these.

The benefits for cross-border operations of harmonising the European rules for this sector will not benefit UK operators, as there are no significant cross-border operations in the UK (there is a waterway between Northern Ireland and Ireland, but this carries little commercial traffic). Also, the administrative provisions of the Directive (record keeping and health assessments) are designed for large-scale operations on the European river network, where crews live on board rather like seafarers on sea-going ships, and so are away from home for long periods. On UK inland waterways, where many operations are daytime only, and almost none require crew to live on board, the risks are lower and so they will have little benefit.

## 7 Analytical approach

The Regulations are intended to implement Directive 2014/112/EC Directive to the minimum level necessary to meet EU requirements. Evidence on impacts was sought through informal and formal public consultation. The evidence submitted is reflected in this IA. The costs remain low in absolute terms. The MCA will continue to work within industry to minimise unnecessary impacts, and will review the Regulations in three years.

### 7.1 Risks and assumptions

The Regulations need to be implemented in order to complete UK implementation of Directive 2014/112/EU on working time for mobile workers in inland waterway transport. Failure to implement the Directive could result in EU infraction proceedings with a consequential substantial fine for the UK with ongoing daily fines until such time as the UK does fully implement the Directive.

### 7.2 Direct costs and benefits to business calculations (following BIT methodology)

The direct costs to business have been appraised in section 6. The costs which have been monetised are all direct costs to business. There are no direct benefits to business which have been monetised in this IA.

The majority of the monetised costs of transposition of the EU Directive are a non-qualifying regulatory provision and therefore not scored against the Business Impact Target. This is because the proposals are an international measure that will be implemented according to the minimal requirement.

Bringing the statutory entitlement to paid annual leave into line with that for other sectors is counted as a qualifying provision because it gold plates the EU directive and is therefore scored against the BIT target. This has an EANDCB of £1.0m, and a BIT score of £5.0m.

## 8 Wider impacts

### 8.1 Equalities Assessment

In line with other regulations which implement EU health and safety Directives, the EMF Regulations will be applicable to all seafarers working on UK sea-going vessels to which the Regulations apply, irrespective of their age, ethnic origin, gender, nationality, race, sexual orientation or disability. These proposals are therefore considered to have no adverse impact as regards statutory equality duties.

### 8.2 Competition Assessment

The Regulations will ensure that UK legislation is in line with the requirements of Directive 2014/112/EU and thereby the requirements of other EU states which have implemented it with the intention of facilitating trade on a "level playing field". However, as UK inland waterways do not link to the waterways of other Member States, there is no direct competition with the vessels of other Member States.

### **8.3 Small and Micro Business Assessment**

There is no specific exemption from the Directive for small firms and it is likely that the Regulations will impact on small firms. EU Directives are however intended to protect the health and safety of all workers, and there is no justification for a lower level of safety on vessels operated by small and micro businesses, although owner operators are excluded from the regulations.

Small and micro businesses are also not exempted from the gold-plated regulations for increasing statutory annual leave as it would not be fair to employees to reduce their leave entitlement simply because they work for a smaller company.

Given that there are no exclusions, it is likely that these regulations could affect significant numbers of small and micro businesses, as they make up the majority of the inland waterways sector. Research from BEIS<sup>15</sup> lists only 5 medium or large firms within the inland passenger and freight water transport sectors.

We do not have a robust method of distributing the costs between businesses of different sizes, although the majority of costs are related to employment levels, therefore it is likely that most costs will fall upon the firms with the most employees. The BEIS research suggests that the majority of employees in the inland waterways sector work for the 5 medium or large firms within the sector, so these will bear a significant proportion of the costs.

### **8.4 Health Impact Assessment**

One of the objectives of Directive 2014/112/EU is to protect seafarers from the risks to their health of long working hours and inadequate rest. This measure is therefore not expected to result in any detrimental impacts on the health of inland waterway workers.

### **8.5 Human Rights**

The Regulations implement provisions of Directive 2014/112/EU, which is applicable to, and must be implemented by, all EU Member States. They are applicable to all those working on inland waterways vessels on Member States' inland waterways and there are accordingly no human rights compatibility issues arising from these Regulations.

### **8.6 Justice System**

Enforcement of the Regulations will be through a combination of inspection of inland waterway vessels by MCA surveyors (with the possibility of criminal sanctions for breaches of employer duties) and enforcement of their rights by workers through employment tribunals (Industrial tribunals in Northern Ireland).

## **9 Summary and preferred option with description of implementation plan.**

Both options do the minimum necessary to comply with Directive 2014/112/EC, and the preferred option brings annual leave entitlement into line with that for other workers in the UK. The Regulations are being implemented with supporting guidance to seek to ensure consistent application of the requirements and to ensure operators do not do more than is necessary to comply.

The regulations will be made as soon as possible. The MCA will continue to work with the industry and will keep the guidance under review to ensure practical implementation.

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<sup>15</sup> UK Business Population Estimates, 2016



## 10 Post implementation review

### 1. Review status:

<input type="checkbox"/>	Sunset clause	<input checked="" type="checkbox"/>	Other review clause	<input type="checkbox"/>	Political commitment	<input type="checkbox"/>	Other reason	<input type="checkbox"/>	No plan to review
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### 2. Expected review date (month and year, xx/xx):

0	6	/	2	0
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### 3. Net costs/benefits set out in original legislation: Please refer to Impact Assessment

<b>Net cost to business per year (£m)</b> £2.9m	<b>Net Present Value (£million):</b> -£27.4m	<b>Total Cost (Present Value) (£million):</b> £27.4m
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### 4. Rationale for PIR approach:

Circle the level of evidence and resourcing that will be adopted for this PIR (see Guidance for Conducting PIRs): **low/ ~~medium~~/ high**

The impact of these regulations is low overall (EANCB £2.9m) because this is a relatively small industry. However, the industry is made up largely of SMEs and the MCA is aware of specific areas of the Regulations which do not sit well with UK operations. Aspects of the Directive are considered somewhat prescriptive and burdensome in relation to the level of risk of long working hours in many of the inland waterway operations in the UK. There are also significant uncertainties in the assessment of some of the likely costs identified.

For this reason, the statutory review period for the first review has been set at three years (instead of the more usual five). This will give industry time to work through implementation of the new requirements and to assess the impact, the value of the guidance and whether anything can be done to improve the regime.

**Given the overall low cost, the level of evidence and resourcing for the review will be low.**

<b>Key Objectives, Research Questions and Evidence collection plans</b>			
<b>Key objectives of the regulation(s)</b>	<b>Key research questions to measure success of objective</b>	<b>Existing evidence/data</b> Please consider: a) The data/evidence <i>sources</i> b) The <i>timeframes</i> they reference	<b>Any plans to collect primary data to answer questions?</b> Please consider: a) <i>How</i> stakeholder views will be collected b) <i>Timeframes</i> for evidence collection c) Why collecting new data is (or is not) necessary/proportionate
To improve living and working conditions of workers in the sector.	1) Have living and working conditions changed as a result of the Regulations?  2) Is the change positive or negative?	Information from meetings/consultation responses from operators  Statistics on worker complaints relating to the Regulations and Employment Tribunal cases.	a) Operators will be consulted through existing industry stakeholder groups and by correspondence if necessary.  With co-operation of unions/operators, a survey of crew members could be conducted.  b) Consultation will start in July - November 2019.
To improve the health and safety of workers in the sector.	1) What impact do you think the regulations have had on health and safety on vessels?  2) How many staff (per year) have taken up the offer of health assessment?  3) Have any medical issues been identified which could be linked to working time?	Feedback from operators on expected impact.  Stakeholder engagement survey and consultation responses.  Accident data does not include incidents of working time-related accidents on inland waterways.	a) Operators will be consulted through existing industry stakeholder groups and by correspondence if necessary.  With co-operation of unions/operators, a survey of crew members could be conducted.  Discussion with MCA consultant surveyors for feedback from inspections/discussion with operators.  b) Consultation will start in July - November 2019.  c) We do not propose to conduct analysis of accidents because  (i) the data set is too small for meaningful analysis; and  (ii) there are too many factors to isolate the impacts of (relatively small) working time changes on accident numbers.
To implement the Directive while avoiding regulatory burdens and administrative costs for industry which do not contribute to safety.	1) What administrative burdens have resulted from the Regulations?  2) What have these cost (per year)?  3) Have they brought any expected or unexpected benefits?  4) Are you able to	Feedback from operators on expected impact.  Stakeholder engagement survey and consultation responses.	

	provide any information about how the impact of the Regulations on UK business compares to that of EU competitors?		
To improve the safety of inland waterways in the UK by ensuring that those in charge of inland waterway vessels are well-rested.	1) What impact do you think the regulations have had on the safe operation of inland waterway vessels?	<p>Feedback from operators on expected impact.</p> <p>Stakeholder engagement survey and consultation responses.</p> <p>Accident data does not include incidents of working time-related accidents on inland waterways.</p>	<p>a) Operators will be consulted through existing industry stakeholder groups and by correspondence if necessary.</p> <p>With co-operation of unions/operators, a survey of crew members could be conducted.</p> <p>Discussion with MCA consultant surveyors for feedback from inspections/discussion with operators.</p> <p>b) Consultation will start in July - November 2019.</p> <p>c) We do not propose to conduct analysis of accidents because</p> <p>(i) the data set is too small for meaningful analysis; and</p> <p>(ii) there are too many factors to isolate the impacts of (relatively small) working time changes on accident numbers.</p>

# Annex A - Inland Waterways Working Time Directive Stakeholder Questionnaire Summary

## Company characteristics

The characteristics of the 23 companies that responded to the survey varied widely. Nearly two thirds had fewer than 25 employees, while just over 17 per cent had more than 100.

Nearly three quarters of the companies that completed the survey were either passenger vessel companies, charterers or both, with the remaining quarter including cargo companies, towage, maintenance and port authorities.

Of those companies that gave annual average wages of their employees, the majority paid their staff between £18,000 and £30,000 per year. For companies that gave wage information by the hour, most paid their crew around £8-10 per hour.

The number of vessels operated by the companies varied from 0 to 95, although almost 70 per cent operated fewer than ten.

## Employee records

Most companies stated that they already had employee records of working patterns, with only 22 per cent saying that they did not. Of those who said that they already had these records, most (around 61 per cent) had comprehensive records, and all said they had data on shift patterns.

As most of the companies surveyed already have the employee data required, and few associated costs were given for implementing a new system, no clear cost emerged as a result. We could therefore conclude that the requirement for an employee record system would bring about a negligible cost.

## Health assessment

Of those that were able to give an answer to this question, only 24 per cent said that their employees completed an annual self-assessment.

For the companies that said that their employees did not currently complete an annual self-assessment, the most common responses when asked what the cost of implementing one would be, were related to the cost being minimal to none. Most of the rest answered 'N/A', which could also be interpreted as no cost. The small number of companies that stated costs gave answers that varied widely, from a one-off fixed cost of several hundred pounds, to an annual cost of several thousand pounds, and several others said that they were unsure of what the cost would be.

This seems to show that most companies would either need to make no changes to their practices, or would have to pay a nominal amount to do so. Some companies may need to pay a considerable cost, but these are in the minority overall.

## Rest periods

Four of the questions asked companies about the consequences of implementing mandatory minimum rest periods.

**Daily rest:** Around 82 per cent of companies said that they currently comply with the need to provide daily rest periods. The small number of companies that were not already compliant would need to pay additional staff costs or employ an extra member of staff.

**Weekly rest:** Over two thirds of companies said that they already comply with the weekly rest requirements, with the majority of the remaining companies saying that they would need to hire more staff.

**Average weekly rest over twelve months:** Just over three quarters of the companies stated that they already comply with the requirement for a mandatory average of 48 hours rest per week over a twelve month period. Most of those that were not yet compliant with this would need more crew in order to be able to fulfil the requirement.

**Rest days:** More than two thirds of companies surveyed said that they already comply with the mandatory rest day requirements. Of the rest, most indicated that extra staff would be required.

Overall, over half (59 per cent) of the companies already comply with all four of the requirements and so there would be no additional cost associated with the rest period sections of the directive. For the remaining companies, there would be a staff cost in order to become compliant. This potential staff cost is unclear, but based on the information provided, and also using the wage data provided earlier in the survey, the cost could be estimated as being £18,000 - £30,000 per year, or £8-10 per hour, uplifted by 20.2% to account for non-wage costs. All of the companies that would need to pay additional staff costs were either passenger vessel companies or charterers (or both), and generally tended to be the companies with the highest numbers of vessels.

## Conclusion

When combining the above survey responses and analysis, it is possible to arrive at a total cost for a company to implement the new requirements.

To bring in a system that records employee working patterns and to ensure that staff complete an annual self-assessment, the costs would be minimal. As many of the companies already comply with these requirements, this could be estimated as a zero cost overall, with a small number of companies needing to pay a couple of thousand pounds per year.

The rest period requirements seem to have the biggest potential impact. Although over half of the companies are already compliant with all four requirements, the cost for the others who are not yet compliant is not generally negligible, and could be estimated as costing around £18,000-£30,000 per year, or £8-10 per hour uplifted by 20.2% to account for non-wage costs.

Overall, there seem to be two groups of companies:

- Companies that are already compliant with the rest period requirements: The directive would bring only a nominal total cost to most of these companies.
- Companies that are not yet compliant with the rest period requirements: The directive would cost approximately the wages of one additional staff member for most of these companies.

## Notes

The above analysis has been carried out on the questionnaire responses, and it is assumed that these are representative of the population as a whole. However, if these companies are not representative and provide a skewed picture of the impact of the directive, then these conclusions may not hold.

One company that was noted as being exempt from the rest period requirements has been excluded from the analysis on rest periods.

## Annex B- Summary of questions from the consultation document

### “Travelling personnel” (page 2)

- *Question 1: Should vessel crew who return to the same departure point at the end of each voyage with the same passengers be considered as workers for the purposes of the Regulations (i.e. are they travelling personnel)? If not, should there be a time limit on the length of an individual voyage to which this provision applies?*

### Application (page 3)

- *Question 2: Are you content with the current pragmatic arrangement as regards selection of a working time regime?*

### Annual health assessment (page 4)

- *Question 3: Is the guidance helpful?*
- *Question 3.1: Does it make clear that a health assessment is not the same as a medical fitness examination?*
- *Question 3.2: Would a suggested pro-forma for health assessment, which operators could adapt as necessary, be useful?*

### Safety and health protection for those working at night

- *Question 4: Are there any particular measures which should be prescribed for workers on inland waterways?*

### Young persons (page 5)

- *Question 5: The draft MSN lists at section 6.6.2 those training courses which MCA recognises in the context of inland waterway vessels. Are there others that should be listed?*
- *Question 6: Do you have a preference between the two options for “night” in this context [11pm to 7am OR 10pm to 6am)?*

### Storage of records (page 5)

- *Question 7:*
  - *Q7.1 Do you agree this guidance is needed?*
  - *Q7.2 Do you agree with the proposed arrangements for the storage of records?*

### Adequate rest (page 5)

- *Question 8: Do you agree that removing the provision for “adequate rest” would result in a reduction in the protection of workers, in view of the prescriptive requirements in the proposed Regulations governing rest?*

### Entitlement to paid leave (page 6)

- *Question 9: Do you agree that the paid leave entitlements for workers on inland waterways should be extended, in line with the entitlement of other workers in the UK, to 5.6 weeks per annum or pro-rata for periods of less than one year? If not, please give reasons.*

### Offences and penalties (page 8)

- *Question 10: Please let us have your views on the proposed offences and remedies.*
  - *Q10.1 Do you think we have the right balance between offences and remedies?*
  - *Q10.2 Do you think the penalties are at an appropriate level?*
  - *Q10.3 Do you think that the offences/ remedies are consistent with shore-based workers under the Working Time Regulations 1998?*

## Annex C- Calculating the number of affected operators for changes to working patterns and rest days

### *Passenger vessel operators*

Total number of vessels: **540**

Total number of operators: **295**

Max number of operators with 10+ vessels (x):

$$10x + y = 540 \quad x + y = 295$$

$$y = 540 - 10x \quad y = 295 - x$$

$$540 - 10x = 295 - x$$

$$245 = 9x \quad x = 245 / 9$$

$$\mathbf{x = 27}$$

Non-compliance amongst operators with 10+ vessels = 86%

**Total affected operators = 23**

### *Small passenger vessel operators*

Note that numbers have been rounded

	Low	Mid	High
Number of small passenger vessels	300	400	500
of which are not owner-operated (assuming 76% owner-operators)	72	96	120
Max number of affected operators (assuming that operators with 10+ vessels are affected, this is the highest number of operators)	7	10	12
Compliance with all regulations	14%	14%	14%
Affected small passenger ship operators	6	8	10

## Annex D- Summary of scenarios used

	Used for	Low cost	Best	High cost
Total sector employment	General	1,259	2,400	3,574
Annual salary for crew	General	£18,000	£24,000	£30,000
Number of passenger vessels	General	540	540	540
Number of small passenger vessels	General	300	400	500
Number of freight vessels	General	40	50	60
Number of passenger vessel operators with 10+ vessels	General	21	24	27
Number of small passenger vessel operators with 10+ vessels	General	7	10	12
Additional crew required per passenger vessel operator	Crew costs	2.0	3.5	5.0
Additional crew required per small passenger vessel operator	Crew costs	1.0	1.5	2.0
Months of employment	Crew costs	5.0	8.5	12.0
Workers seeking initial health assessment	Health costs	10%	20%	40%
Workers requiring further health assessment	Health costs	10%	20%	40%
Hours for part-time workers	Leave costs	50%	50%	50%
Proportion of workers needed additional leave	Leave costs	0%	50%	100%
Annual salary for administrative staff	Admin costs	£20,033	£21,329	£22,625
Companies requiring administrative staff	Admin costs	0%	50%	100%
Hourly wage for familiarisation costs	Familiarisation costs	£8	£9	£10



## Annex E- Breakdown of costs (non-discounted)

Costs (£m)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Transition (familiarisation)	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual 1 (health)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual 2 (crew)	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Annual 3 (leave)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual 4 (admin)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Annual</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>	<b>0.39</b>
Transition (familiarisation)	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual 1 (health)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Annual 2 (crew)	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74
Annual 3 (leave)	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Annual 4 (admin)	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
<b>Total Annual</b>	<b>3.19</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>	<b>3.18</b>
Transition (familiarisation)	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual 1 (health)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Annual 2 (crew)	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96
Annual 3 (leave)	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Annual 4 (admin)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
<b>Total Annual</b>	<b>9.86</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>	<b>9.85</b>

Low

Mid

High