Title: Harbours (Seafarer Remuneration) Bill **IA No:** DfT00443 **RPC Reference No:** N/A **Lead department or agency:** Department for Transport **Other departments or agencies**:	**Impact Assessment (IA)** **Date:** 19/04/2022 **Stage: Consultation** **Source of intervention:Domestic** **Type of measure: Primary Legislation** **Contact for enquiries:** RemunerationConsultation@dft.gov.uk

Summary: Intervention and Options

RPC Opinion: N/A

Cost of Preferred (or more likely) Option (in 2019 prices)			
Total Net Present Social Value	**Business Net Present Value**	**Net cost to business per year**	**Business Impact Target Status**
£ -0.03m	£ -86.8m	£ 2.24m	Qualifying Provision

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

Seafarers who work on international routes to or from UK ports are not entitled to NMW if they are not ordinarily resident in the UK; do not work at least to some extent in the UK; or work on non-UK flagged ships. This means that ferry operators are able to undercut those seafarers who are currently entitled to the NMW by hiring workers who are not entitled to it, and paying them less. Ensuring that seafarers working on ships that regularly use UK ports are paid a fair wage, as well as ensuring fair competition for operators are the key themes of the rationale for introducing a NMW equivalent salary.

What are the policy objectives and the intended effects?

The policy objective is to ensure ferry staff working on ships that regularly use UK ports are paid a fairer wage, by granting a National Minimum Wage equivalent (NMWe). This will also create a level playing field between those who are currently not paying equivalent to NMW and those who are paying NMW or equivalent. Access to UK ports could (ultimately) be made conditional on operators paying their workers the equivalent of the NMW.

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

Alternatives to regulation were dismissed early on as it would not be feasible to achieve the policy objective using a non-regulatory mechanism. It should also be noted that the preferred option outlined here is subject to views at consultation and there may be potential changes once we have received views from consultees.

Option 0: Do nothing.

Option 1 *(preferred)*: Creating new powers in primary legislation to enable UK ports to make access conditional on operators paying the equivalent to NMW to seafarers on all passenger ferries, roll-on-roll-off passenger vessels (ro-pax), and roll-on-roll-off vessels (ro-ro), including container/roll-on-roll-off vessels (con-ro) (but excluding pure container services and dedicated car-carriers).

Option 2: Identical to Option 1, except that provisions would also apply to unaccompanied container freight.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 07/2027

Is this measure likely to impact on international trade and investment?		Yes		
Are any of these organisations in scope?	**Micro** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:** No	**Non-traded:** No	

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

Signed by the responsibleSELECT SIGNATORY: ______________ Date: ______________

Summary: Analysis & Evidence — Policy Option 1

(preferred option)

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2022	PV Base Year 2022	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -0.10	**High:** -0.01	**Best Estimate:** -0.04

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.00		4.74	**41.52**
High	0.01	1	24.28	**204.49**
Best Estimate	0.00		11.86	**101.00**

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

Operators of international scheduled ferry services that stop at a UK port with regular roll-on-roll-off services (including mixed passenger or container services) will have additional pay costs, and/or compliance costs and familiarisation costs. The large majority of these increased costs will be from increased wage requirements: companies who currently pay below the National Minimum Wage (NMW) will need to pay the equivalent to minimum wage for all time spent in UK waters and ports or else pay increased port charges broadly reflecting an estimate of the increase in costs they would incur if they did pay NMW equivalent.

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

We have not considered any non-monetised costs.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.00		4.74	**41.52**
High	0.00	1	24.27	**204.39**
Best Estimate	0.00		11.85	**100.97**

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

Our central estimate of the overall benefits is for a total benefit to seafarers working on ships that regularly use UK ports and the Exchequer of £100.97m. This is a transfer from employers to seafarers with a largely neutral net impact. Seafarers working on ships that regularly use UK ports benefit from increased wages, while seafarers and the Exchequer benefit from non-wage labour benefits, predominately consisting of pension and National Insurance.

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

Seafarers working on ships that regularly use UK ports will experience increased welfare as a result of increased pay.

Key assumptions/sensitivities/risks | 3.5%

There are a number of sensitivities involved in this analysis, and a high/mid/low range has been used to try to account for some of this uncertainty. Key assumptions include the number of seafarers on each vessel journey, the proportion of staff paid below the minimum wage, and the market wage for seafarers in scope. Pay costs to businesses in scope are also assumed to be equal to pay benefits to seafarers working on ships that regularly use UK ports.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 11.73	**Benefits:** 0.00	**Net:** -11.73	11.20

Summary: Analysis & Evidence **Policy Option** 2

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2022	PV Base Year 2022	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -0.17	**High:** -0.02	**Best Estimate:** -0.05

COSTS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Cost** (Present Value)
Low	0.00	1	4.82	**42.23**
High	0.01		25.25	**212.58**
Best Estimate	0.00		12.21	**103.98**

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

Shipping operators that stop at a UK port with regular roll on-roll off services (including mixed passenger or container services) or regular container only services will have additional pay costs, compliance costs and familiarisation costs. The large majority of these increased costs will be from increased wage requirements, and these costs will be particularly high on ro-pax services due to the higher numbers of seafarers required to staff services and the frequency they visit UK ports.

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

We have not considered any non-monetised costs.

BENEFITS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Low	0.00	1	4.82	**42.22**
High	0.00		25.23	**212.41**
Best Estimate	0.00		12.20	**103.92**

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

Our central estimate of the overall benefits is for a total benefit to seafarers working on ships that regularly use UK ports and the Exchequer of £103.92m. This is a transfer from employers to seafarers with a largely neutral net impact. Seafarers working on ships that regularly use UK ports benefit from increased wages, while seafarers and the Exchequer benefit from non-wage labour benefits, predominately consisting of pension and National Insurance.

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

Seafarers working on ships that regularly use UK ports and will experience increased welfare as a result of increased pay.

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

There are a number of sensitives involved in this analysis, and a high/mid/low range has been used to try to account for some of this uncertainty. Key assumptions include the number of seafarers on each vessel-journey, the proportion of staff paid below the minimum wage, and the market wage for seafarers in scope. Pay costs to businesses in scope are also assumed to be equal to pay benefits to seafarers working on ships that regularly use UK ports.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			**Score for Business Impact Target (qualifying provisions only) £m:**
Costs: 12.08	**Benefits:** 0.00	**Net:** -12.08	11.20

1. Policy Rationale

Policy background

1.1. Following the recent decision of P&O Ferries to make 786 employees redundant (see link to news report), the Government wishes to broaden the range of seafarers working aboard vessels visiting UK ports that are paid the equivalent of the UK National Minimum Wage .

1.2. The Government is seeking to deter other companies from repeating what P&O did to 786 seafarers, and ensure P&O do not profit from their actions, by ensuring ferry crews receive a fair wage when operating regularly in UK ports.

1.3. Seafarers who work on international routes to or from UK ports are not entitled to the National Minimum Wage (NMW) if they are not ordinarily resident in the UK; do not work at least to some extent in the UK; or work on non-UK flagged ships. The Government wishes to indirectly fix this gap making access to UK ports conditional on vessel operators demonstrating that they are paying at least the equivalent of UK NMW to their staff while in UK waters.

1.4. The Bill will also safeguard against unfair competitive advantage between vessels registered with the UK Ship Register or domestic operated vessels and those operating internationally.

1.5. The Secretary of State (SoS) delivered an oral statement to Parliament on 30th March 2022 which outlined the government response to the P&O decision and was set out as a nine-point plan (link to Hansard transcript). One of these included a commitment to introduce primary legislation to encourage payment of NMW equivalent through charges and conditions for access to the port. This intervention is an important element of the Government response, and underpins other strands within the nine-point plan. For example, to address the limitation of this Bill (discussed further below), the government is seeking to establish minimum wage-equivalent corridors with Denmark, France, Germany, Ireland, Spain and the Netherlands, as well as asking unions and operators to agree a common level of seafarer protection on these routes.

Problem under consideration

1.6. Current NMW entitlement is limited to:

- workers working or ordinarily working in the UK (inc. internal waters);
- workers working or ordinarily working in the UK territorial waters, unless they are on ships exercising the right to innocent or transit passage;
- workers on UK-flagged ships, so long as they are ordinarily resident in the UK and work to at least some extent in the UK;
- workers working or ordinarily working in connection with the sea-bed/subsoil of the UK sector of the continental shelf, again unless they are on ships exercising the right to innocent or transit passage.

1.7. We therefore have an unlevel playing field where some workers are not entitled to the NMW, relative to others. This means that ferry operators are able to undercut those seafarers who are currently entitled to the NMW by hiring workers who are not entitled and are willing to accept lower rates, and paying them less. The government believes that all seafarers working on ships that regularly use UK ports deserve a fair wage whilst working in UK waters and that government intervention, within the bounds of international law, is therefore needed to address this. To note, for the purposes of this legislation, we are interpreting ‘seafarers working on ships that regularly use UK ports’ as encompassing seafarers on services that are using UK ports at least weekly, as well those on specific vessel types. The rationale for which vessels are in scope and which are excluded is outlined below.

Rationale for intervention

1.8. Ensuring that seafarers working on ships that regularly use UK ports are paid a fair wage and ensuring fair competition for operators are the key themes of the rationale for introducing the

NMWe. The payment of NMW equivalent to seafarers working on ships that regularly use UK ports while in our waters, will improve the welfare of these workers and their working conditions.

1.9. For the purposes of this legislation, we are interpreting ‘seafarers working on ships that regularly use UK ports’ as encompassing seafarers working on at least weekly scheduled services to and from UK ports. Given this criteria, some vessels such as cruise ships, bulk and general cargo have been deemed out of scope. Seafarers on cruise vessels and bulk vessels are not regarded to be working on ships which are using UK ports regularly, as per our criteria. Cruise vessels are unlikely to have weekly services to the UK, and bulk vessels could change their crew between journeys, meaning it may not be the same seafarers working on the ships that are regularly using UK ports.

1.10. Currently, there is a gap in the National Minimum Wage law that means some seafarers working on ships that regularly use UK ports are not covered. The lack of powers of the UK government to ensure NMW has resulted in the parts of the market paying UK-related seafarers a wage below the NMW, with no powers for the UK government to protect the welfare of these workers, thus creating a real risk that other operators may follow suit.

1.11. This gap in NMW regulation can be seen as a failure on the part of the government on the basis of competition and equity and welfare, which has resulted in the risk of poor seafarer welfare persisting within the UK maritime sector along with creating cost advantages for some operators who do not pay the NMW, compared to other competitors who are required to or choose to.

1.12. **Competition:** Operators, which do not pay seafarers a minimum wage equivalent, could have a cost advantage over their peers who are required to or choose to pay minimum wage. The longer they are able to operate with lower labour costs, the more they will be put at an unfair advantage, which could distort competition within the maritime sector. Ensuring that all seafarers working on ships that regularly use UK ports are captured within the legislation would ensure a fairer competition between operators of these services. We have chosen to exclude cruise ships and ‘bulk’ and general cargo as it is difficult to establish whether these services are regularly using UK ports, given the nature of the operating cycles. There is further discussion on this below.

1.13. **Equity and welfare**: indirectly granting NMW protection to seafarers working on ships that regularly use UK ports is driven by a desire to ensure equity and welfare. This expansion would ensure that these seafarers maintain a wage in line with the wider competitive labour market and benefit. This would reduce wage inequality across UK workers and the higher wage would ensure that the role remains a viable option for more of the labour force.

Policy objective

1.14. The policy objective is to offer greater employment protection to seafarers working on ships that regularly use UK ports, by granting an NMWe to seafarers. This will be facilitated by enabling UK ports to make access conditional on vessel operators being able to demonstrate that they are paying at least the NMWe to their staff.

1.15. Although the policy objective is to ensure ferry staff working on ships that regularly use UK ports are paid a fairer wage, the policy intervention is limited to UK ports only and we are aware that it cannot, on its own, set a floor on wages paid during the international portion of a journey. However, this is the first step towards creating a fairer working environment for these workers and in parallel, we are pursuing agreements with governments in several other countries which will seek to extend this intervention beyond the UK as far as possible.

1.16. To enforce this, we are proposing will give ports an express power to surcharge operators which are not able to provide a true certificate of compliance when required. The aim of the surcharge is to make compliance advantageous, but in the event of persistent non-compliance, and/or non-payment of surcharge, we further propose that ports be given the power to suspend/exclude the operator from the port indefinitely.

Options considered

Option 0 (do nothing)

1.17. Without this intervention, ferry operators would be free to continue to pay staff working on ships that regularly use UK ports less than the national minimum wage whilst in UK waters. This would be detrimental to those seafarers who, under current National Minimum Wage (NMW) regulations, remain ineligible, and would allow ferry operators to continue to pay ferry crews below the NMW. Doing nothing would knowingly allow wage disparities to continue to exist for the seafarers that fall within the scope of this regulation.

Option 1 (preferred option)

1.18. Creating new powers in primary legislation to allow UK ports to make access to ports conditional on the payment of all seafarers working on ships that regularly use UK ports the equivalent of the NMW while in our waters. The provisions would apply to all passenger ferries, roll on-roll off passenger vessels (ro-pax), and roll on-roll off vessels (ro-ro), including container/roll on-roll off vessels (con-ro) but excluding pure container services and dedicated car-carriers. The provisions will apply to all services operating at least weekly. This is because for any services operating less frequently than weekly, it would unlikely that seafarers would be spending a notable proportion of their time within UK jurisdiction.

1.19. This option includes fewer types of vessels and services than Option 2, and is provisionally (ahead of consultation) the preferred option as it presents fewer practical difficulties in terms of enforcement, as well as ensuring we are minimising any risk of disruption to supply chains. This option also does not include vessels that are likely to be operating less than weekly and seafarers on these vessels would therefore not be deemed as working on ships that regularly use UK ports.

Option 2

1.20. Option 2 is identical to Option 1 in terms of the nature of intervention, but the provisions would apply to all passenger ferries, ro-pax, ro-ro (including con-ro and car-carriers) as well as container freight. Any of these vessel types accessing UK ports would be subject to the requirement to be paying all seafarers working on ships that regularly use UK ports, the NMWe.

1.21. Both options exclude cruise ships as well as bulk and general cargo services. In the case of bulk and general cargo, we consider that even where services operate to a published schedule, it would be hard to encompass them as there may be many avenues for avoidance. In terms of cruise ships, most dedicated cruise operations do not operate weekly cycles to set destinations even within high season, so it is likely that most would not meet the frequency/regularity criterion set out here.

1.22. It should also be noted that the preferred option outlined here is subject to views at consultation and there may be potential changes once we have received views from consultees.

2. Costs and Benefits

Summary

2.1. The cost-benefit analysis considers the following costs and benefits. All direct costs and wage benefits are monetised whilst wider benefits are un-monetised.

Monetised Costs (all are direct costs to business)

- Additional pay costs: this is the costs of firms paying higher wages than in the counterfactual. This is a direct cost to business, and is by far the largest share of overall costs.
- Compliance costs: the compliance regime is subject to confirmation after consultation. To give an estimate it is assumed that each vessel owner will need to fill in a “declaration” of compliance

once a year to every port its vessel calls at. On top of this there will be a small but non-zero number of “spot checks” where companies are inspected to check if they are indeed compliant[1].
- Familiarisation costs: assumed firms in the market (vessel owners and ports) will need to familiarise with a small amount of new documentation. This is a direct cost to business.

Monetised Benefits

- Additional pay benefits: this is the benefit of seafarers receiving higher wages than in the counterfactual. This is an economic transfer from employers to employees.

Non-monetised Benefits

- Reputational benefits to UK as strong on seafarer rights.
- Competition benefits as a result of a level playing field between operators currently paying NMW equivalent and those who will soon be required to.

Quantified costs analysis

Approach

2.2. As above, the quantified cost-benefit analysis consists of three monetised costs, which all fall on business: (1) costs of paying higher wages; (2) costs of new compliance regimes; and (3) familiarisation costs. There is also one monetised benefit, which falls on individuals: (1) benefits of receiving higher wages (this is equivalent to cost (1) above).

2.3. The policy is assumed to be implemented immediately, and the standard ten-year appraisal period is applied, so costs are analysed from 2022 to 2031. All costs are converted to 2022 prices (based on the latest GDP deflators from the Transport Analysis Guide (TAG) data book) and discounted (from base year 2022, with subsequent years discounted at the standard Green Book rate of 3.5% per year).

2.4. In line with the policy intention (see above), Option 1 is assumed to include all roll-on-roll-off ships including passenger (ro-pax) and roll-on-roll-off freight (ro-ro) including container/roll-on-roll-off freight, in scope of the new wage rules. Option 2 will include these plus all fully cellular container ships. In all cases, the expected number of vessel journeys is based on past data, which has been filtered to include only those journeys which appear to be approximately weekly[2], to match the policy intention.

2.5. To account for the relatively high level of policy uncertainty, the analysis uses a range for most inputs. This means all calculations and outputs have three scenarios (low, medium and high), with a wide range between them. This approach is preferred to sensitivity tests at the level of individual inputs because it better captures the range of uncertainties across the inputs.

2.6. This section is as follows: it describes the model structure of each of the costs in the form of a diagram, and then lists the inputs and assumptions used to inform each of the three calculations. It then presents cost outputs, followed by discussion of quantified and non-quantified benefits. Finally, impacts are summed for Business Impact Target (BIT) analysis.

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[1] This cost is assumed to be a direct cost to business. Declaration costs are direct and will fall on businesses. For spot-check costs, the inspections will be carried out by private companies, or, if the inspections are carried out by a state authority, there are likely to be some cost recovery mechanisms to pass on the majority of inspection costs to vessel owners. Note that the cost of the spot-check is assumed to be the labour cost of the time taken to inspect. It is not assumed that vessels will be unable to operate normally during the spot-checks because it is not anticipated that checks would need to be made on board, or in a way that would hinder regular commercial operations.

[2] For many journeys, it is difficult or impossible to establish exactly which journeys are regularly scheduled. The approach has therefore been to discard all data points where the same ship called at the same port fewer than 10 times per quarter.

Model structure and inputs

<u>Figure 1 Model structure (additional pay costs)</u>

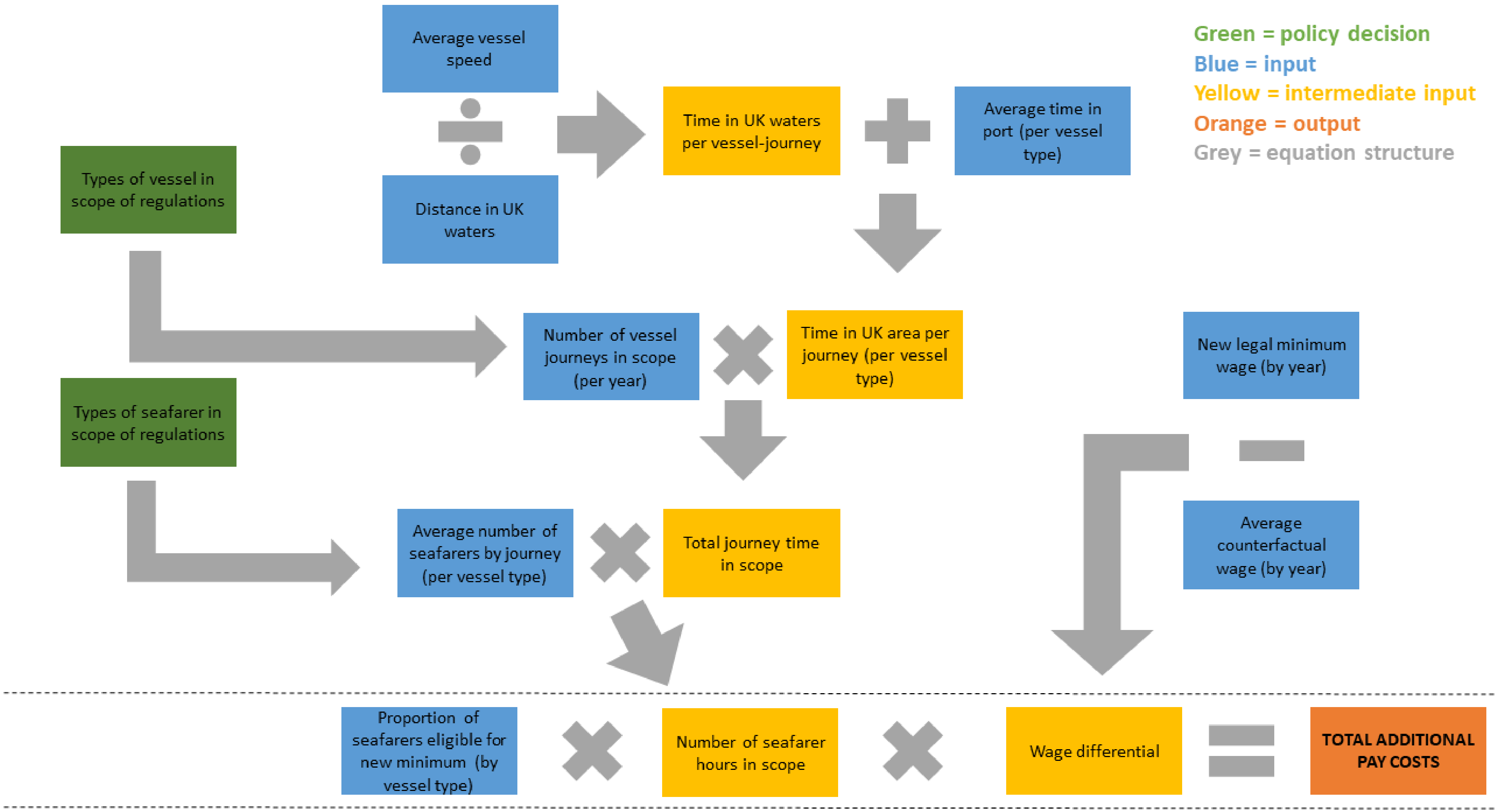

Figure 2 Input table (additional pay costs)

Input	Source	Description	Low	Medium	High
Average counterfactual wage	£5.50/hr from P&O (see evidence to Parliament at link) Inflation from GDP deflators (see TAG data book at link) Wage growth from Office for Budget Responsibility (OBR) long term assumptions (link)	Wage costs start at £5.50/hr and increases year-on-year at various rates. Additional uniform uplift of 17.9% for non-wage labour costs as per advice from the Department of Business, Energy, and Industrial Strategy (BEIS)[1]. Please note the "High" scenario has the *lowest* counterfactual wage because this is the scenario with the largest gap between counterfactual and minimum wages.	£5.50/hr in 2022, plus average wage growth per year plus uplift	£5.50/hr in 2022, plus per-year increase based on inflation rate plus uplift	£5.50/hr across ten years (nominal freeze) plus uplift
New legal minimum wage	Rates up to 2024 from Low Pay Commission (LPC) (link) Wage growth from Office for Budget Responsibility (OBR) long term assumptions (link) Past National Living Wage (NLW) growth based on past rates for over-25s (link)	Rates up to 2024 based on Low Pay Commission rates: £9.50/hr in 2022, £10.32/hr in 2023 and £10.95/hr in 2024. Subsequently, different year-on-year growth rates. Additional uniform uplift of 17.9% for non-wage labour costs as per advice from BEIS/ONS.	Nominal freeze after 2024 plus uplift	Grows with average wage growth after 2024 plus uplift	Grows with average past National Living Wage growth plus uplift
Proportion of seafarers eligible for new minimum	Department for Transport (DfT) port freight statistics data shows 30-40% ro-pax of vessel-journeys were by P&O and Irish, the operators thought to pay below minimum wage. DfT seafarer statistics (link) show approximately 50% of seafarers being ratings.	On ro-pax, assume that 30-40% of vessel-journeys are likely to be crewed by seafarers paid below minimum wage. On ro-ro and container, assume that all journeys are likely to have some seafarers paid below minimum wage. For all journeys, assume that ratings are paid below minimum wage, but officers are not (50% of seafarers are ratings).	15% on ro-pax, 40% on ro-ro and container	17.5% on ro-pax, 50% on ro-ro and container	20% on ro-pax, 60% on ro-ro and container
Average number of seafarers per journey	Policy assumptions, sense checked against port freight statistics (ro-pax) and Consolidated European Reporting System (CERS) data for number of people on board (ro-ro and container) which show figures broadly in line with these numbers.		100 on ro-pax 20 on ro-ro	120 on ro-pax 30 on ro-ro	150 on ro-pax 40 on ro-ro

[1] Transport Analysis Guidance (TAG) unit A4.1 recommends an alternative non-wage uplift of 26.5%. The 17.9% uplift is recommended for use in appraisal of wage policies by the Department for Business, Energy and Industrial Strategy (BEIS) and based on Office for National Statistics (ONS) data. The 17.9% uplift rate has been chosen for this IA for consistency with general government wage appraisal practice.

			15 on container	20 on container	25 on container
Number of vessel journeys	Analysis of DfT port freight statistics (some data at link, some numbers based on unpublished underlying data) Time trends from DfT port0601 (link), with ro-pax and ro-ro amalgamated, range comes from either side of a data break in 2017	Data filtered to "frequent services" by excluding journeys with fewer than 10 port calls per quarter to remove less-than-weekly journeys. Initially, assume that 2022 journeys are the same as 2019, on the basis of expected recovery to pre-pandemic levels. Subsequently, apply a constant annual growth rate based on average annual growth over time (2009-2019 trends). Figures to the right are rounded to the nearest 1,000.	Ro-pax: 41k then -1.4%/yr Ro-ro: 11k then -1.4%/yr Container: 2k then +0.0%/yr	Ro-pax: 49k then -0.5%/yr Ro-ro: 13k then -0.5%/yr Container: 3k then +1.3%/yr	Ro-pax: 56k then +0.0%/yr Ro-ro: 16k then +0.0%/yr Container: 5k then +2.9%/yr
Average time in port	Ro-pax: analysis of published timetables, implying roughly 1hr turnaround time at Dover and roughly 3hrs at a sample of other ports; journeys data shows 60% of ro-pax vessel journeys were through Dover, so the weighted average is 1.8hrs (60% * 1 + 40% * 3) Ro-ro: analysis of Clarkson's data on port stops for a sample of non-passenger ro-ro vessels Container: United Nations Conference on Trade and Development (UNTCAD) data (link) on median time in port, average was c.20hrs (0.83 days = 19.9hrs) and it is assumed that half the crew are "on shift" at a time throughout this period		Ro-pax: 1.8hrs per seafarer per port stop Ro-ro: 5hrs per seafarer per port stop Container: 10hrs per seafarer per port stop		
Average vessel speed	Based on a sample of publicly available vessel information (e.g. from ferry operator websites and register of vessel attributes), confirmed by spot-checks of a sample of vessels in Clarkson's data. Assumed that average speed is a little below steaming speed due to port entry/exit. Numbers rounded to create round total time inputs (40mins for ro-pax, 60mins for ro-ro and container). Note that 33km/hr for ro-pax fits with a sense-check of Dover-Calais ferry timetables (the distance is 27nm, so 12nm is 4/9 of a c.90min journey = c.40min)		33km/hr for ro-pax 22km/hr for ro-ro and container		
Distance in UK waters	United Nations Convention on the Law of the Sea (UNCLOS) article 3 (link)	Territorial waters = 12 nautical miles = c.22.2km	22km per journey		

Figure 3 Model structure (compliance costs)

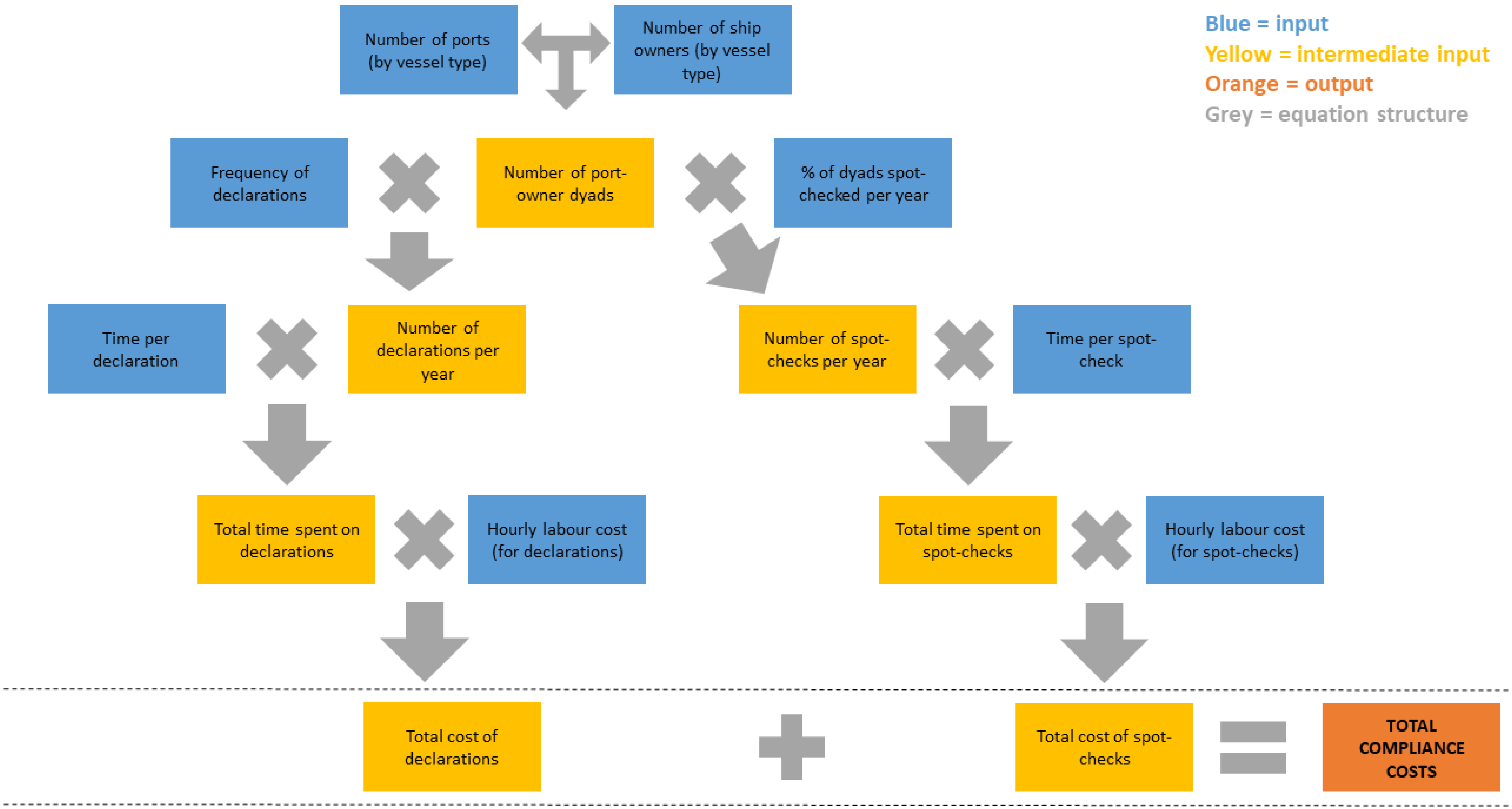

Figure 4 Input table (compliance costs)

Input	Source	Description	Low	Medium	High
Number of organisations in scope	Analysis of DfT port freight statistics (some data at link, some numbers based on unpublished underlying data)	Assume declarations are on the basis of port-owner dyads (i.e. every operator must submit a declaration to each port it calls at)	40 ro-pax, 54 ro-ro, 62 containers		
Frequency of declarations	Assumption	One per year per dyad	1/yr		
Time per declaration	Assumption based on the time being short	Note this includes operators and ports, i.e. the central assumption is the operator spends half an hour filling the form in and the port spends half an hour processing it.	0.5hrs	1hr	1.5hrs
Time cost for declarations	Annual Survey of Hours and Earnings 2021 Table 14.5a (link)	25/50/75 percentiles for transport managers, plus average projected wage growth (from the OBR). Additional uniform uplift of 17.9% for non-wage labour costs as per advice from BEIS/ONS.	£12.28/hr plus 3.83% annual wage growth plus 17.9% uplift	£15.66/hr plus 3.83% annual wage growth plus 17.9% uplift	£20.11/hr plus 3.83% annual wage growth plus 17.9% uplift
Number of spot-checks	Assumption based on there being a few but not many spot-checks	It's not known how the regime will work, so there is no evidence to base this on.	2% of dyads checked per year	5% of dyads checked per year	10% of dyads checked per year
Time per spot-check	BEIS advice on average time spent on National Minimum Wage enforcement spot-checks	BEIS advice is to assume 12hrs per NMW spot-check. Wide range provided to account for the fact it's not known how similar this regime will be.	6hrs	12hrs	18hrs
Time cost for spot-checks	ASHE 2021 Table 14.5a (link)	25/50/75 percentiles for HR managers, plus average projected wage growth (from the OBR). Additional uniform uplift of 17.9% for non-wage labour costs as per advice from BEIS/ONS.	£19.31/hr plus 3.83% annual wage growth plus 17.9% uplift	£24.33/hr plus 3.83% annual wage growth plus 17.9% uplift	£31.86/hr plus 3.83% annual wage growth plus 17.9% uplift

Figure 5 Model structure (familiarisation costs)

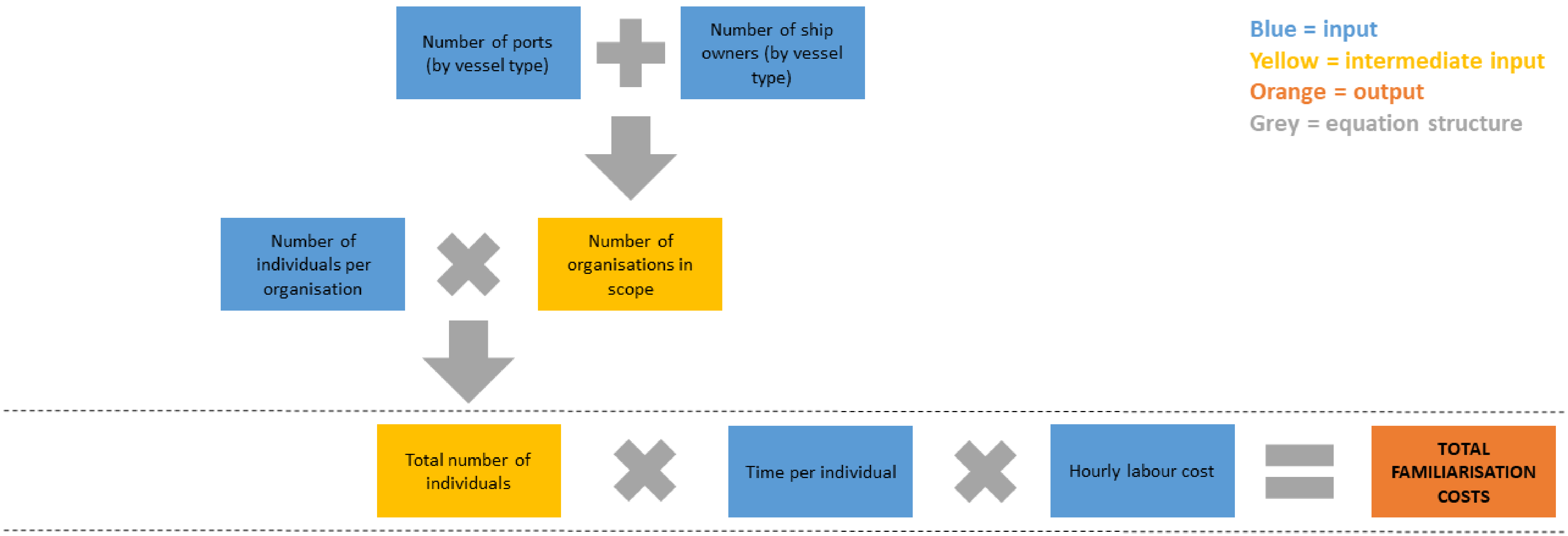

Figure 6 Input table (familiarisation costs)

Input	Source	Description	Low	Medium	High
Number of organisations	Analysis of DfT port freight statistics	Assume every port authority and every company owning a vessel of the right type must familiarise	Ro-pax 43 (30 owners + 13 ports), ro-ro 48 (37 owners + 11 ports), container 61 (49 owners + 12 ports)		
Individuals per organisation	Assumption	2 managers per organisation	2		
Time to familiarise	Assumption based on the time being short	It is not known how much documentation will be produced.	1hr	2hrs	3hrs
Time cost	ASHE 2021 Table 14.5a (link)	25/50/75 percentiles for transport managers, no increase assumed because the cost is only incurred in the first year. Additional uniform uplift of 17.9% for non-wage labour costs as per advice from BEIS/ONS.	£12.28/hr plus 17.9% uplift	£15.66/hr plus 17.9% uplift	£20.11/hr plus 17.9% uplift

Cost-benefit analysis outputs

Summary of calculations

2.7. Figures 7 and 8 shows the outputs of the calculations by policy option. (For Option 1, ro-pax and ro-ro vessels are in scope. For Option 2, these vessel plus container vessels are in scope.) **Total costs are expected to be £101m**, in the central case for the preferred option, Option 1.

Figure 7 Expected costs of Option 1 *(total costs over ten years, all costs in discounted 2022 £)*

	Low	Medium	High
Additional pay costs	41,511,165	100,968,236	204,389,333
Compliance costs	9,121	32,634	94,386
Familiarisation costs	1,318	3,360	6,473
TOTAL COSTS	**41,521,604**	**101,004,231**	**204,490,191**

Figure 8 Expected costs of Option 2 *(total costs over ten years, all costs in discounted 2022 £)*

	Low	Medium	High
Additional pay costs	42,216,775	103,921,758	212,413,658
Compliance costs	15,138	54,159	156,640
Familiarisation costs	2,201	5,613	10,812
TOTAL COSTS	**42,234,113**	**103,981,530**	**212,581,110**

Discussion

2.8. By far the largest cost (>99.9% in the central case) consists of additional pay costs. This demonstrates that the compliance regime and familiarisation costs are highly likely to place a proportionally very low cost on business in comparison to additional pay costs.

2.9. The outputs also show that both the large majority and a disproportionate share of wage costs fall on ro-pax vessels: these account for 79% of vessel journeys in the Option 1 central case but 84% of costs. This result occurs because passenger services make the most frequent journeys and are staffed with the largest crews, hence they have the most seafarer-hours in scope of the new rules.

Cost to UK business

2.10. The figures above refer to the total cost to all businesses. Because many of the vessels in scope will be owned and flagged outside the UK, a share of this cost is likely to fall on non-UK businesses. To calculate the likely cost to *UK* businesses, three different definitions were considered:

- Vessel ownership: costs incurred by vessels owned by UK companies. DfT port statistics show this accounts for approximately 11% of ro-pax vessel-journeys, 22% of ro-ro vessel journeys and 0.3% of container vessel-journeys in scope of the cost-benefit analysis.
- Flag: costs incurred by vessels on the UK flag. <u>This is the way maritime regulations are typically assessed, so it should be seen as the central case for direct costs to UK business</u>. This accounts for approximately 26% of ro-pax vessel journeys, 1% of ro-ro vessel journeys and 0% of container vessel journeys in scope.
- Total: assume all costs are costs to UK business (i.e. 100% of vessel-journeys of all types). This can be regarded as an absolute upper bound. It also accounts for the possibility of indirect costs to UK business in the case that non-UK businesses pass additional costs through to UK businesses in the form of higher prices.

2.11. Figure 9 shows the result of applying these three definitions of UK business to the central cost estimates listed above. **Direct costs to UK business are expected to be about £22m over**

ten years, but overall costs could be higher than this in the case of non-UK businesses passing costs through to UK businesses via increased freight prices.

Figure 9 Costs to UK business *(total costs, discounted 2022 £)*

UK business definition	Option 1	Option 2
UK-owned	12,986,833	12,995,300
UK-flagged	**22,423,835**	**22,423,835**
All businesses	101,004,231	103,981,530

Indirect costs

2.12. There may be an indirect cost to business via a spill over effect, where workers paid above minimum wage experience an increase in wages to maintain pay differentials in the sector (i.e. businesses may raise pay for all staff, including those out of scope of the new rules). However, such pay increases are not required by the policy and would be entirely at the discretion of businesses. Therefore, we have not monetised this as a cost resulting from the regulations.

Benefits

Monetised

2.13. The benefit to this legislation will be improved seafarer welfare as a result of increased wages and non-wage benefits (e.g. employers' pension contributions) and benefits to the Exchequer (e.g. National Insurance contributions). This will enable seafarers to earn a fair wage whilst in UK waters.

2.14. The additional pay increase represents a transfer from employers to employees and as such is equivalent to £101m for Option 1 and £104m for Option 2 (as set out in figures 7 and 8).

2.15. Because of the international nature of the maritime sector, it is highly likely that many of the seafarers benefitting from higher pay will not be UK nationals or UK-based. For example, DfT seafarer stats show that 12% of ratings in the UK shipping industry are UK nationals[4]. This may not be a good proxy for the proportion of the additional spending power spent in the UK economy, but it suggests that, if the vessels in scope of these rules follow broader industry trends, the large majority of the beneficiaries will be non-British. If non-British workers are assumed more likely to live and spend shore time outside the UK, it would be expected that most of the additional pay benefits will be captured outside the UK and not reinvested into the UK economy in the form of higher spending Figures 9 and 10 report the monetised benefits of higher wages by policy option. However, due to lack of data on where seafarer wages are spent, no quantified breakdown is provided of the benefit to the UK economy. The figures presented are benefits to all seafarers, not just benefits to the UK.

2.16. These include the increase in higher wages and non-wage benefits arising from seafarers working on ships that regularly use UK ports. As further discussed in the BIT reporting section, the figures below are the best estimate of the total economic benefits arising from the regulations.

Figure 10 Expected benefits of Option 1 *(total costs over ten years, all costs in discounted 2022 £m)*

	Low	Medium	High
Additional pay benefits	41.51	100.97	204.39

Figure 11 Expected benefits of Option 2 *(total costs over ten years, all costs in discounted 2022 £m)*

	Low	Medium	High
Additional pay benefits	42.22	103.92	212.41

[4] See Seafarers in the UK Shipping Industry 2021 (link): section "seafarers active at sea by nationality". Note that above, it was assumed that ratings and not officers would be eligible for higher pay as a result of the new rules. The data comes from MCA registration data and UK Chamber of Shipping returns, which may not be representative of the sectors in scope of the new rules. Therefore, this figure is illustrative only.

Non-monetised

2.17. There will also be reputational benefits to the UK, as we restate our commitment as a leading maritime nation as being strong on seafarer rights.

2.18. This legislation will also ensure there is no competitive disadvantage between vessels registered with the UK Ship Register or any vessel operating domestic routes that are currently required to or are voluntarily paying National Minimum Wage (NMW), compared to those competing operators who currently do pay NMW.

2.19. It is possible that higher rates of pay will make the sector more attractive to British workers, as jobs become viable alternatives to other minimum-wage jobs. This may increase the proportion of seafarers who are British and the proportion of the additional wages spent in the UK economy. However, in the absence of any evidence, it is not possible to estimate this effect. It is also possible that seafarer training requirements and the likely continuation of lower pay outside British territorial waters will mean any effect on employment of UK nationals is insignificant, as both low pay and additional barriers to entry will remain factors discouraging UK nationals from seeking employment in the maritime sector. Therefore, this effect is uncertain and not quantified.

2.20. These benefits hold in both Option 1 and Option 2. However, a few more seafarers are captured in the Option 2 scenario as container vessels are also covered. This means there will be a slightly greater benefit in these terms of Option 2 than Option 1.

Business Impact Target (BIT) analysis

Net present value

2.21. As the wage costs of both policy options represent a transfer to seafarers, and the non-wage costs of the policy are largely a transfer to either seafarers (sick leave, pensions, etc.) or the government (National Insurance Contributions), in net, un-equity-weighted terms, these are assumed to cancel out. As a result, the total net present value of the policy options is almost neutral (i.e. close to zero). The costs of the policy that are not a transfer are the familiarisation costs and compliance costs associated with the policy options as detailed in the section above. The net present values are therefore small (equivalent to the sum of these costs, which are a small fraction of total costs): a cost of about £36,000 in Option 1 and about £60,000 in Option 2.

BIT reporting

2.22. Figures 11 and 12 report the following Business Impact Target (BIT) outputs. Following standard practice and guidance, all BIT figures are reported in millions, in 2019 prices and discounted from 2020. BIT scores assume a full five-year parliamentary term[5].

- The net present social value (NPSV) is the best estimate of the total economic impact of the regulations. It includes costs and benefits, to businesses and individuals, and does not account for attribution of impacts to the UK. The reason for including all impacts rather than just UK impacts is to ensure all economic effects are captured: although attribution is possible as above, the distinction is not entirely clear-cut due to the globalised nature of the maritime sector and the fact that non-UK-attributed direct impacts may still have knock-on effects on the UK. Therefore, the NPSV includes all costs and benefits to ensure it captures the total possible economic effect of the regulations (note that because higher wages net out as costs to business and benefits to individuals, the NPSV is equivalent to the compliance and familiarisation costs).
- The business net present value (business NPV) is the best estimate of the total economic impact of the regulations *on businesses*. It includes costs and benefits to businesses (and because the costs of higher wages fall on business while benefits fall on individuals, this effectively means it counts only the costs) and, as above, does not account for attribution of impacts to the UK.

[5] In addition, to match the scenarios above, the table presents the "high" case as the one with the highest costs. This is despite the fact that this is the scenario with the lowest present value, because all NPV values are negative.

- The equivalent annual net direct cost to business (EANDCB) is the best estimate of the total cost to the private sector of the UK economy. It includes costs to UK businesses only, according to the UK flag definition described above.
- The Business Impact Target score (BIT score) is the equivalent cost to business across the length of a Parliament. This is assumed to be five years, so the BIT score is calculated by the EANDCB multiplied by five.

Figure 12 BIT outputs for Option 1 *(all costs in 2020 present value, 2019 £m)*

	Low	Medium	High
NPSV	-0.01	-0.03	-0.09
Business NPV	-35.69	-86.84	-175.73
EANDCB	1.30	2.24	10.09
BIT score	6.49	11.20	50.44

Figure 13 BIT outputs for Option 2 *(all costs in 2020 present value, 2019 £m)*

	Low	Medium	High
NPSV	-0.01	-0.05	-0.14
Business NPV	-36.30	-89.4	-182.62
EANDCB	1.30	2.24	10.39
BIT score	6.49	11.20	51.93

3. Risks and unintended consequences

Withdrawal of operators

3.1. Firstly, there is always a risk that the increased costs could lead to operators either withdrawing from some routes, or from the market completely as, due to the competitive nature of a large proportion of the sector, and current overcapacity on some routes once normal vessel operations are resumed, they are already operating on thin profit margins. In the short term, this could lead to some disruption to UK freight with a temporary reduction in capacity. In the medium to long term, we would expect the market to correct itself with additional sailings being picked up by existing or alternative operators, and as a result, significant disruption is considered a low risk.

3.2. The routes on the short straits already have multiple operators (including Eurotunnel), so it is unlikely that there would be a prolonged problem. This will need ongoing monitoring as loss of capacity may reduce resilience on a route with critical freight. On the Irish sea, competing lines are expected to move their shipping to take advantage of any cessation of service. The western channel has a single operator, which we understand already pays its seafarers National Minimum Wage (NMW) or higher. The east coast routes are more vulnerable as they have less demand but are also less important in terms of freight movements, and we would expect operators to substitute for each other with low levels of disruption.

3.3. This risk is deemed to be low as the cost increase is small compared to total costs. In addition, there are services that already operate with wages above NMW and manage to be profitable, such as domestic routes and those run by operators who already pay NMW.

Pass-through of costs

3.4. Secondly, as demand for logistic services via sea is likely to remain strong, a key consideration will be the treatment of the higher costs faced by operators from minimum wage increases. This could be tackled in a number of ways, such as passing these costs on to customers via ticket prices or the potential for operators to look for other areas to cut costs within the contracts. Increased tickets prices would increase the cost of freight and pass the cost further along the supply chain to consumers. As above, many operators already pay NMW, so it is unlikely that it would be competitive for those operators not currently paying minimum wage to pass on these costs to consumers through a ticket price increase. However given that all operators are likely to face the same constraints, there is only a low risk that these additional costs may result in further actions such as a loss of jobs in the sector, where operators may look to run services with fewer seafarers, or run fewer services. This will need ongoing monitoring to ensure that there are no knock-on implications such as safety risks.

Avoidance of customs

3.5. Thirdly, there is evidence that some hauliers travelling between the continent and Ireland are opting to circumvent Great Britain as a "land- bridge" and opting for a longer sea route to avoid additional costs from EU Exit customs requirements. If the additional costs are passed on to hauliers through pricing, then this may result in an increase in this avoidance approach. This would decrease profitability on UK routes and potentially lead to the withdrawal of some services with the impacts discussed in the first risk. However, this is considered a low risk given that, as above, a large number of operators on these routes are already paying NMW so it is unlikely for the costs to be passed on to hauliers.

Effectiveness of the policy

3.6. Fourthly, there remains a risk around the efficacy of the policy intervention and we recognise the limitations of the regulation, which are also discussed above. On a voyage of which a large proportion is spent on the high seas outside territorial waters, there might be too much scope for employers to adjust the respective wage-rates in such a way that the efficacy of any limit on the rate attributable to the portion of time spent in UK waters could be largely or wholly nullified. This could be as a result of operators paying the NMW equivalent for the portion of the journey spent within UK territorial waters, and then readjusting pay for seafarers when outside of territorial waters in order to regain any losses.

4. Wider impacts

Small and Micro Business Assessment (SaMBA)

4.1. We do not expect small or micro businesses to be impacted by these regulations in either Option 1 or Option 2 because firms impacted are unlikely to have fewer than 50 staff.

4.2. For the cost-benefit analysis, it was assumed that ro-pax vessels have an average crew size of at least 100. This would rule out all ro-pax vessels (which account for the large majority of total costs) from belonging to small businesses. Ro-ro and container vessels were assumed to have average crew sizes of 30 and 20 respectively, meaning it is technically possible a company could own one of those vessels and be a small business. However, due to the facts that (a) very few such vessels will be operated by companies owning just one vessel and (b) companies also employ shore-based staff, it is believed there will be no or very few small businesses in scope.

4.3. If any small or micro businesses are impacted, they will have the same requirements for their staff costs as medium or large firms. The overwhelming majority of the total costs (>99.9%) consists of wage costs, and these scale linearly with number of seafarer hours, meaning firms with fewer employees will not be disproportionately affected. Compliance and familiarisation costs could disproportionately affect smaller businesses, but these are such a small proportion of the overall costs that the effect will be insignificant.

Equalities Impact Assessment

4.4. We do not expect these measures to have a negative impact on any groups with protected characteristics for either Option 1 or Option 2. A full equalities impact assessment will be published alongside the final impact assessment.

Competition Assessment

4.5. This creates a level playing field compared to the counterfactual scenario. For example, some competitors pay minimum wage and some currently don't – this new regulation will allow firms who pay a fair wage to compete better with firms who previously weren't paying minimum wage.

5. Post implementation review

1. **Review status:** Please classify with an ‘x’ and provide any explanations below.

	Sunset clause		Other review clause		Political commitment	X	Other reason		No plan to review

Regulations to be reviewed every five years to ensure continued suitability.

2. **Expected review date** (month and year, xx/xx):

0	7	/	2	7	Five years from when the Regulations come into force

3. **Rationale for PIR approach:**

A PIR will be conducted to evaluate the impact of these regulations. The level of resourcing will be low.

Compliance data from the relevant authorities will be used along with an informal consultation with stakeholders.

Key Objectives, Research Questions and Evidence collection plans

Key objectives of the regulation(s)	Key research questions to measure success of objective	Existing evidence/data	Any plans to collect primary data to answer questions?
Increase minimum wage for seafarers in scope of the regulations	Compliance data from inspection authority to indicate levels of compliance. Informal stakeholder consultation to gather views on the impact on firms. Any market adjustments that we see on routes, and any proactive industry statements/actions.	N/A	There are no plans currently in place for DfT to collect primary data. Compliance data will be collected through the relevant inspection authority.