

Title: Directive on Recreational Craft and Personal Watercraft IA No: BEIS005 (F) -17-RD RPC Reference No: RPC-3964(2)-BEIS Lead department or agency: Department for Business, Energy & Industrial Strategy Other departments or agencies:	Impact Assessment (IA)			
	Date: 9 June 2017			
	Stage: Final			
	Source of intervention: EU			
	Type of measure: Secondary legislation			
Contact for enquiries: Kevin Lane 020 7215 1774				
Summary: Intervention and Options				RPC Opinion: 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
£m2.36m	-£m2.22m	£m0.3m	Not in scope	n/a

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

The Directive on Recreational Craft 94/25/EC as amended regulated the safety and certain environmental requirements for recreational craft within the EU. This EU Directive has been revised and has been replaced by a new Directive 2013/53/EU on Recreational Craft and Personal Watercraft. The new Directive aims to improve the safety, set stricter exhaust emission limits and align with the New Legislative Framework (NLF). The NLF provides a unified framework for implementation of product safety rules by clarifying obligations for importers, distributors and authorised representatives, and strengthening administrative processes in order to improve traceability of products through the supply chain. The UK has to implement the Directive in order to meet our obligations under the Treaty.

What are the policy objectives and the intended effects?

The Government supports the principles of safety of recreational craft and personal watercraft. The measures are in line with UK policy to improve environmental protection by reducing emissions from engine exhausts. Industry proposed the new emissions limits to go in the Directive which to align with current US limits. Stakeholders consider that this alignment of the emissions limits will be beneficial to UK industry in that it will assist in setting a global limit which will create many more opportunities for UK exporters to export to markets such as the US, than there are at present. The NLF alignment for this Directive is consistent with the alignment of a number of other Directives which is consistent with UK Government Policy.

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

Options for reducing the exhaust and noise emissions with some mitigating action have been considered as set out below. **Option 4 is the preferred option as this meets the policy requirements with minimal cost to business.**

Other options such as:

- self regulation for exhaust emissions (a voluntary code for industry) or
- discontinuing existing EU regulation by repealing the exhaust and noise emission limits from the Directive and having a labelling requirement only were discarded at an early stage by the European Commission as not suited to provide a common legal obligation across the Union internal market.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 07/2022						
Does implementation go beyond minimum EU requirements?			No			
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: n/a		Non-traded: n/a	

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Signed by the responsible Minister:

Margot James

Date

11th July 2017

Summary: Analysis & Evidence

Policy Option 1

Description: Introduction of stricter exhaust emission limits to align with those in the US with no mitigating factors and alignment to the NLF

FULL ECONOMIC ASSESSMENT

Price Base Year 2009	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -5.48	High: 14.22	Best Estimate: 1.47

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.6	0.2	2.6
High	1.8	0.6	6.7
Best Estimate	1.2	0.4	4.6

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

Costs solely comprise of compliance costs faced by manufacturers of CI (Diesel) and SI (Petrol) engines, which incorporate both fixed and variable costs per unit. These costs relate mainly to fixed costs such as testing and re-certification of engines and increased manufacturing costs for some firms. These figures are scaled down by a factor of one eighth, of the relevant EU figures which are taken from the European Commission's Impact Assessment which is considered to reflect the UK share. (See 'Risks and assumptions' section below).

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

Some job losses – up to 20 – may occur as a result of these compliance costs being imposed on manufacturers. There are also a number of potential costs for economic operators (i.e. manufacturers, authorised representatives, distributors and importers) in view of the new responsibilities contained in the NLF but in the case of recreational craft these are believed to be minimal. Further details are set out in Sections 5 and 8 of the Evidence Base. (The number of job losses in Option 2 is only 10 as it contains a flexibility scheme to improve access to the market)

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	0.1	1.2
High	0.0	2.0	16.8
Best Estimate	0.0	0.7	6.1

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

Benefit calculations solely comprise of the estimated volume of emissions saved as a result of regulatory change as set out in the EU IA and scaled again to reflect the UK's market share. These emissions include nitrous oxide (NOx) and particulate matter (PM); values for which are extracted from Defra air quality Green Book (See 'Risks and assumptions' section below).

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

Manufacturers that comply with the Directive are expected to benefit from the proposed improvements in transparency and traceability because it should be more difficult for others to place non-compliant products on the market. The further restrictions on unfair competition should benefit UK manufacturers by removing more non-compliant and unsafe products from the internal market which undercut compliant manufacturers. The NLF alignment will bring benefits to both consumers and manufacturers in making legislation clearer, more consistent and more understandable. Greater traceability for goods will help Enforcement Authorities by assisting in removing non-compliant products from the market and improving consumer confidence.

Key assumptions/sensitivities/risks See 'Risks and assumptions' section below.	Discount rate (%)	3.5
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BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 0.6	Benefits: 0.0	Net: -0.6	

Summary: Analysis & Evidence

Policy Option 2

Description: Introduction of stricter exhaust emission limits which will be lower for marine engines to align with those in the US. Use of a flexibility scheme as foreseen in Directive 97/68/EC on Non-road Mobile Machinery, which would allow engine manufacturers to place on the market a fixed limited number of marine engines compliant with the previous emissions limits, after the entry into force of the new emission limits and with alignment to the NLF.

FULL ECONOMIC ASSESSMENT

Price Base Year 2009	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -3.58	High: 11.22	Best Estimate: 2.24

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.3	1	0.1	1.2
High	1.1		0.4	4.5
Best Estimate	0.7		0.2	2.4

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

Costs solely comprise of compliance costs faced by manufacturers of CI (diesel) and SI (petrol) engines, which incorporate both fixed and variable costs per unit. These costs relate mainly to fixed costs such as testing and re-certification of engines and increased manufacturing costs for some firms. These figures are scaled down by a factor one eighth of the EU figures which are taken from the European Commission's Impact Assessment which is considered to be the UK share. See 'Risks and assumptions' section below.

Other key non-monetised costs by main affected groups

There are a number of potential costs for economic operators (i.e. manufacturers, authorised representatives, distributors and importers) in view of the new responsibilities contained in the NLF. Further details of the costs to economic operators are set out in Sections 5 and 8 of the Evidence Base.

Some job losses – up to 10 – may occur as a result of the Directive's compliance costs being imposed on manufacturers. (The job losses are the same as Option 3 but more than Option 4).

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0		0.1	0.9
High	0.0		1.4	12.4
Best Estimate	0.0		0.5	4.4

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

Benefit calculations solely comprise of the volume of estimated emissions saved as a result of regulatory change as set out in the EU IA and scaled again to reflect the UK's market share. These emissions include nitrous oxide (NOx) and particulate matter (PM); values for which are extracted from Defra air quality Green Book (see 'Risks and assumptions' section below).

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

Manufacturers that comply with the Directive are expected to benefit from the proposed improvements in transparency and traceability because it should be more difficult for others to place non-compliant products on the market. The further restrictions on unfair competition should benefit UK manufacturers by removing more non-compliant and unsafe products from the internal market which undercut compliant manufacturers. The NLF alignment will bring benefits to both consumers and manufacturers in making legislation clearer, more consistent and more understandable. Greater traceability for goods Enforcement Authorities by assisting in removing non-compliant products from the market and improving consumer confidence.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

See 'Risks and assumptions' section below

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 0.3	Benefits: 0.0	Net: -0.3	

Summary: Analysis & Evidence

Policy Option 3

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2009	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -2.44	High: 11.50	Best Estimate: 2.36

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.2	1	0.1	1.1
High	0.3		0.3	3.4
Best Estimate	0.5		0.2	2.2

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

Costs solely comprise of compliance costs faced by manufacturers of CI (diesel) and SI (petrol) engines, which incorporate both fixed and variable costs per unit. These costs relate mainly to fixed costs such as testing and re-certification of engines and increased manufacturing costs for some firms. These figures are scaled down by a factor one eighth of the EU figures which are taken from the European Commission's Impact Assessment which is considered to be the UK's share. See 'Risks and assumptions' section below.

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

There are a number of potential costs for economic operators (i.e. manufacturers, authorised representatives, distributors and importers) in view of the new responsibilities contained in the NLF. Further details of the costs to economic operators are set out in Sections 5 and 8 of the Evidence Base. Some job losses – up to 10 – may occur as a result of these costs being imposed on producers. The relative impact on manufacturers is mitigated by allowing a transitional period to facilitate cost absorption over time, however. (Same number of job losses as Option 2 but more than Option 4).

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0		0.1	0.9
High	0.0		1.5	12.6
Best Estimate	0.0		0.5	4.6

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

Benefit calculations solely comprise of the volume of estimated emissions saved as a result of regulatory change as set out in the EU IA and scaled again to reflect the UK's market share. These emissions include nitrous oxide and particulate matter; values for which are extracted from Defra air quality Green Book (see 'Risks and assumptions' section below).

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

Manufacturers that comply with the Directive are expected to benefit from the proposed improvements in transparency and traceability because it should be more difficult for others to place non-compliant products on the market. The further restrictions on unfair competition should benefit UK manufacturers by removing more non-compliant, unsafe and cheap products from the internal market. The NLF alignment will bring benefits to both consumers and manufacturers. In making legislation clearer, more consistent and more understandable. Greater traceability for goods will help Enforcement Authorities by assisting in removing non-compliant products from the market and improving consumer confidence.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5
See 'Risks and assumptions' section below.		

BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: n/a
Costs: 0.3	Benefits: 0.0	Net: -0.3	

Summary: Analysis & Evidence

Policy Option 4

Description: Introduction of stricter exhaust emission limits for marine engines with use of a transitional period for all engine manufacturers and a specific transitional period for a small and medium sized engine manufacturers placing on the EU market the petrol outboard engines less than or equal to 15kW until 20th January 2020 and with alignment to the NLF.

FULL ECONOMIC ASSESSMENT

Price Base Year 2009	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -2.44	High: 11.50	Best Estimate: 2.36

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.2	0.1	Optional 1.1
High	0.8	0.3	Optional 3.4
Best Estimate	0.5	0.2	2.2

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

Costs solely comprise of compliance costs faced by manufacturers of CI (diesel) and SI (petrol) engines, which incorporate both fixed and variable costs per unit. These costs relate mainly to fixed costs such as testing and re-certification of engines and increased manufacturing costs for some firms. These figures are scaled down by a factor of one eighth of the relevant EU figures which are taken from the European Commission's Impact Assessment, which is considered to be the UK's share. See Risks and assumptions section below.

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

There are a number of potential costs for economic operators (i.e. manufacturers, authorised representatives, distributors and importers) in view of the new responsibilities contained in the NLF. Further details of the costs to economic operators are set out in Sections 5 and 8 of the Evidence Base. Job losses are considered unlikely, as a result of the transitional period afforded to SMEs. This facilitates more time to absorb cost changes, mitigating the impact on these types of manufacturers that might otherwise be affected quite severely. (Fewer job losses than the other options)

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	0.1	0.9
High	0.0	1.5	12.6
Best Estimate	0.0	0.5	4.6

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

Benefit calculations solely comprise of the volume of estimated emissions saved as a result of regulatory change as set out in the EU IA and scaled again to reflect the UK's market share. These emissions include nitrous oxide (NOx) and particulate matter (PM); values for which are extracted from Defra air quality Green Book (see Evidence Base section 8.1).

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

Manufacturers that comply with the Directive are expected to benefit from the proposed improvements in transparency and traceability because it should be more difficult for others to place non-compliant products on the market. The further restrictions on unfair competition should benefit UK manufacturers by removing more non-compliant and unsafe products from the internal market which undercut compliant manufacturers. The NLF alignment will bring benefits to both consumers and manufacturers in making legislation clearer, more consistent and more understandable. Greater traceability for goods will help Enforcement Authorities by assisting in removing non-compliant products from the market and improving consumer confidence

Key assumptions/sensitivities/risks

Discount rate (%) **3.5**

See risks and assumptions section below

BUSINESS ASSESSMENT (Option 4)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 0.3	Benefits: 0.0	Net: -0.3	

Evidence Base (for summary sheets)

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2) Rationale for intervention	p13
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1) Problem under consideration

The Recreational Craft Directive 94/25/EC (the Directive), as amended, regulated the placing of craft intended for recreational purposes on the EU market. It laid down essential safety requirements, specific requirements for exhaust emissions from marine engines and craft noise emissions.

A proposal to revise the Directive was published by the European Commission in July 2011. The new Directive 2013/53/EU was published in the Official Journal on 28th December 2013. Member States were required to transpose the Directive into national laws by 18th January 2016.

The proposal to revise the Directive took into account the vulnerable position of some smaller enterprises to identify the most effective and proportionate way to reduce exhaust emissions without putting micro business at economic risk. The recreational craft sector consists mainly of micro businesses (around 75% in the UK are micro businesses).

A small number of players in the industry are manufacturers of high value craft such as luxury motor yachts. They are less affected by changes in legislation to the extent that they are better able to absorb costs.

The recreational craft industry is a niche sector consisting of around 3,000 businesses employing approximately 30,000 people.

Environmental

The contribution of recreational craft to the overall levels of air pollution in the UK is not significant. However, at certain peak times in summer and in certain locations (particularly marinas, lakes and some sea shores), there is often a higher concentration of exhaust emissions and any reduction will be helpful to reduce environmental pollution. The concentration of nitrogen oxide (NO_x) especially, can exceed the environmental quality standards (EQS) in these areas, as required by the Water Framework Directive.

US legislation regulating the exhaust emissions is stricter than the current EU rules. EU engine manufacturers have made a business case to adopt these. In order to better protect the environment and ensure a global market for recreational craft, the European Commission considered it necessary to assess whether:

- (i) the exhaust and noise emissions should be strengthened at EU level; and
- (ii) should be aligned with the emission levels in the US.

New Legislative Framework alignment

In 2006 the European Commission conducted a review of the way that the internal market for goods was working. The Commission found that though the harmonised legislation was working effectively across and within EU Member States, experience showed that it could be significantly improved. They identified three main problems including:

- (i) the number of products that were on the EU market that did not comply with product safety legislation;
- (ii) the unsatisfactory performance of some Notified Bodies (the bodies which determine whether a product meets the essential requirements of the legislation); and
- (iii) difficulties in using and understanding the current legislation. The Commission proposed a Decision to provide a framework to be used in future Union legislation to address these issues.

The New Legislative Framework (NLF) which resulted is a common set of principles which aims to make legislation on the Single Market for Goods clearer, more consistent and more understandable. It was adopted as an EU Regulation 765/2008/EC and an EU Decision 768/2008/EC in July 2008. Over time all new approach directives are to be aligned to the NLF

as they are revised. In addition, an “Alignment Package” was introduced to align nine existing EU Directives to the NLF. Since technical changes (such as stricter exhaust emissions), were required for the Recreational Craft Directive, this Directive was revised separately from the Alignment Package.

The main provisions of the NLF are to introduce common definitions and responsibilities for Economic Operators i.e. manufacturers, importers and distributors. The NLF also clarifies what economic operators must do when a product is non-compliant e.g. distributors who suspect a product does not comply must take corrective action to make it compliant or take steps to recall it.

2) Rationale for intervention

Under the Treaty the UK is obliged to implement the new Directive into UK law. The Directive supports the proper functioning of the single market and promotes safety of recreational craft and personal watercraft and the UK fully supports these objectives. The UK also agrees that there is a case to reduce exhaust emissions to further protect the environment.

As the UK had not transposed the Directive by the deadline set by the legislation (18 January 2016) the UK risks proceedings being pursued against it by the Commission which is likely to result in a fine if there is any further delay in transposition. The Directive does not allow for a non-regulatory approach and if we did not implement by way of transposing legislation, we would also risk putting UK business at a competitive disadvantage.

On 23 June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until the 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. The assumptions used in this impact assessment were chosen accordingly.

3) Policy objective

There is a need to improve the environmental performance of recreational craft and personal watercraft, by revising exhaust emission limits for engines. There is also a need to improve safety of recreational craft and personal watercraft and there have been some small changes to the essential requirements to make this possible. However, generally speaking the old directive worked well and the revision has made only minimal changes to the technical requirements. The other main changes have been in aligning with the NLF.

The revised Directive is intended to enhance the functioning of the single market while at the same time protecting vulnerable economic operators, in particular micro businesses from a potentially difficult position in the market and potential job losses because of the need to comply with the new legislation. Micro businesses will, however, have more difficulty in absorbing extra costs and some may not gain from any benefits. However, without aligning the emission limits for engines to the US limits which are becoming the global norm, UK industry, including micro businesses will be disadvantaged in its ability to export products which are acceptable in the EU to the standard which is rapidly becoming the global norm.

The new Directive was aligned to the NLF which is consistent with UK Government policy. The requirements of the NLF are being introduced in all product sectors regulated under EU harmonisation legislation and it would be inconsistent and potentially confusing not to introduce them in this sector. The transposition will be carried out by way of copy out. There is no intention in transposing into national legislation to go further than is required by the Directive.

4) Description of options considered

The options that were considered by the European Commission and Member States to tackle the problem identified above.

1. Introduction of stricter exhaust emission limits with no mitigating factors and with alignment to the NLF;
2. Introduction of stricter exhaust emission limits with the use of a flexibility scheme as foreseen in Directive 97/68/EC on Non-road Mobile Machinery and with alignment to the NLF;
3. Introduction of stricter exhaust emission limits for marine engines with use of a transitional period for all engine manufacturers until 20th January 2017, and with alignment to the NLF; [Note: as the transitional period has now passed this option is no longer viable]
4. Introduction of stricter exhaust emission limits for marine engines with use of a transitional period for all engine manufacturers and a specific transitional period for a small and medium sized engine manufacturers placing on the EU market the SI (petrol) outboard engines less than or equal to 15kW until 20th January 2020 but with alignment to the NLF.

'Do nothing' was not considered as the European Commission had a legal obligation to align the Recreational Craft Directive to the NLF, which was the minimum change that could be done. The NLF was agreed in 2008 three years before the proposal to revise the RCD appeared. The UK has Treaty obligations to implement Directives into UK law.

Alignment of the new Directive with the New Legislative Framework (NLF)

The new Directive will be brought in line with the principles of the NLF. This means the inclusion of obligations in the Directive for manufacturers and other economic operators, such as importers, authorised representatives and distributors. There will also be improved traceability of products (back to the point of manufacturer). Appointment procedures for Notified Bodies will be harmonised with those for other product safety directives. All the options 1-4 include these aspects.

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

Monetised

A. Impact of exhaust emissions limits

Option 1 – Stricter (lower) Exhaust emission limits introduced

Whilst bringing EU emissions limits for recreational craft in line with those in the US will bring benefits for consumers in the form of reduced emissions (see below for further detail) they will also entail potentially significant compliance costs for those manufacturers who are not currently selling into the US market. These costs, based on the technology needed to meet the new emissions targets, will vary by type of engine (petrol or diesel), size of engine and production volumes, as well as the extent to which emission reduction technologies can be adopted from other applications.

The costs will consist of both variable costs related to ongoing manufacture of new engines to meet the revised emission limits and fixed costs related to the redesign and manufacture of new engines if necessary. The figures included in this IA are drawn from the more detailed analysis undertaken by the EU¹ to consider these costs. The fixed costs are generally thought to be more significant than variable costs which are related to material, labour and energy inputs that can be more easily reflected in price adjustments for higher value engines sold into the EU and other markets. Fixed costs would be related to testing, redesign, assembly line adaptation and retooling for the manufacture of new or amended engines and recertification. For some manufacturers there may also be some additional R&D required (this represents the upper

¹

<http://www.europarl.europa.eu/document/activities/cont/201405/20140515ATT84089/20140515ATT84089EN.pdf>

bound of figures set out in the summary tables above) but for most manufacturers, especially larger ones, these costs will have been borne by engine manufacturers in other sectors. The lower bound reflects the costs of recertification and testing only and recent discussions with UK firms have confirmed that these are likely to be the main costs of the revised Directive. These fixed costs are likely to be amortised over a number of years and will therefore decline as the technology is embedded. Variable costs, reflecting increased use of labour, materials and energy to incorporate new technology, are also likely to reduce over time as manufacturers become used to these new ways of working.

Average fixed costs for SI engines (the majority of those affected) are reported as €22-61 per engine and variable costs as €1-17 per engine. Costs for CI engines are more significant (respectively €30-664 fixed costs and €14-384 variable costs though the figures are affected by a few firms with significant R&D costs which do not affect most firms).

Option 2 - Stricter (lower) exhaust emission limits introduced. Offset by the introduction of a flexibility scheme.

The alignment of EU and the US restriction of the exhaust emission levels aligning the EU and the US limits for the recreational marine engines is likely to bring an environmental improvement but also a high compliance cost for the engine manufacturers as set out above under Option 1. An option to mitigate the effects of stricter exhaust emission rules was considered by the European Commission such as the introduction of a flexibility scheme as established in Article 4 of Directive 97/68/EC on exhaust emissions from non-road mobile machinery. This would allow engine manufacturers to place on the market a fixed limited number of recreational marine engines compliant with the previous stage of emission limits, after the entry into force of the new emission limit values.

Option 3 — Stricter (lower) exhaust emission limits introduced with a transitional period for all engine manufacturers

Although the compliance costs will remain for this option a transitional period of one year for manufacturers of engines will give time to adapt to the reduction in exhaust emission limits reducing the overall cost for all manufacturers, in the new Directive, and which are already applicable in the US.

Use of a transitional period allows companies to mitigate the negative economic impacts meeting the US limits and provides a minimal burden in terms of administration. However, as the sector is dominated by small and micro businesses this level of mitigation is not considered likely to fully allow for the special needs of these enterprises.

The SME test has revealed that complying with the new emission limits entails proportionately higher compliance and administrative costs. Smaller enterprises have limited liquidity and access to the finance that is required for modifying current engine design to meet their requirements.

Previous consultations by the European Commission in 2009 with stakeholders showed that smaller or micro petrol engine manufacturers producing low power engines will be those that have greatest difficulties in complying with the new stricter limits.

Option 4 – Stricter (lower) exhaust emission limits introduced with a transitional period (one year) for all engine manufacturers + a longer transitional period (additional 3 years) for small and medium sized engine manufacturers placing on the EU market SI (petrol) outboard engines ≤ 15 kW.

With the additional transitional period of 3 years, small and medium sized SI (petrol) engine manufacturers would have longer to adapt their business models as necessary, making the impact less severe.

The likely UK net economic benefits for each of the options, based on the EU analysis, are summarised below. It should be noted that whilst the EU IA provides detailed figures for both fixed and variable costs faced by small and large manufacturers across a range of engine types and size it is not entirely clear how these figures have been combined to produce the average cost estimates reported in the EU IA for each option and the extent to which these represent fixed or variable costs. However, on the basis of the per engine figures provided by the EU IA (and taking a mid-point of the indicated range of likely costs) the fixed costs appear to represent around 75% of total costs for SI (petrol) craft and 60% for CI (diesel) craft. As SI craft represent 5 in 6 of all craft sold we therefore assume that 75% of the reported costs are fixed and 25% are variable costs with fixed costs occurring in the first year and variable costs applying to the full 10 year assessment period.

The EU IA estimates of the costs for each of the four scenarios are then used to calculate the UK costs using the assumptions set out below regarding UK market share, exchange rate, etc. The benefits due to reduced emissions are calculated in a similar way based on the EU's analysis of likely emission reductions across engine size and type but using the latest Defra estimates of the economic value of such reductions (see further detail in the assumptions section below) to calculate total benefits. The net benefit of each option is summarised in the table below.

Net economic benefit (savings/costs analysis)

	Net benefit
Option 1 – Stricter exhaust limits	£1.47M
Option 2 – Stricter exhaust limits + Flexibility Scheme	£2.24M
Option 3 – Stricter exhaust limits + Transitional period	£2.36M
Option 4 – Stricter exhaust limits + Transitional period + Specific transitional period for SME SI (petrol) engine manufacturers	£2.36M

Non-monetised

Comparisons of the social impact measured in units/year

	Total job losses ²
Option 1 – Stricter exhaust limits	<20
Option 2 – Stricter exhaust limits + Flexibility Scheme	<10
Option 3 – Stricter exhaust limits + Transitional period	<10
Option 4 – Stricter exhaust limits + Transitional period + Specific transitional period for SME SI (petrol) engine manufacturers	0

Options 1-4 meet the objectives of the new Directive as they firstly lead to the decrease of air pollutants in the environment and secondly they provide a common legislative framework for engine manufacturers operating within the UK market and thirdly ensure the alignment of engine emission requirements with the US. The use of a flexibility scheme envisaged in Option 2 was not considered suitable for the sector. It is designed for a special situation where an original equipment manufacturer needs additional lead time for adjusting the machinery design to new developed engines but not for the engine manufacturer as such. Option 3 does not sufficiently meet the specific objective to protect small vulnerable enterprises and as discussed above is no longer a viable option. Option 4 takes account of the impact on small and micro

² Rounded to nearest 10.

enterprises and is likely therefore to lead to fewer job losses than other options whilst delivering similar or greater levels of environmental benefits.

Option 4 with the additional transitional period for SME engine manufacturers is considered the most efficient compromise in terms of environmental effects and providing better protection for jobs in smaller firms in terms of environmental effects. **Therefore it is the preferred option.**

Impact of the measures aligning the Recreational Craft & Personal Watercraft Directive with the New Legislative Framework (NLF)

(i) Harmonisation

It is expected there will be some benefit from clarification and harmonisation of definitions for businesses across all Member States. Harmonising of duties of those in the supply chain and clarification of those duties across the EU will improve the free movement of goods in the internal market with potential positive implications on competition.

(ii) Labelling

There is a new labelling requirement on the products within scope that will increase costs for business especially for smaller businesses which make up the costs for the majority of business in this sector.

(iii) Retention of information

There will be a duty on all economic operators to keep information for ten years as to who supplied them with a product within scope and to whom they have supplied the product.

(iv) Change of Directive number

There will be a new directive number and these will inevitably lead to costs being incurred for manufacturers and notified bodies necessitating the re-drafting and re-issue of documents and manuals to include the revised number. There will be a transitional period before these requirements will come into force hence any alterations could be incorporated more broadly into periodic updating so any additional cost should be marginal.

(v) Notification process

Notified Bodies (NBs) for the recreational craft and personal watercraft industry could be affected due to reinforcement of the notification requirements and information obligations – strengthened obligations on information sharing among NBs would lead to some on-going costs. There are already some occasions when NBs are required to exchange information but the obligation has been widened and will need to be more frequent.

(vi) Familiarisation

Enforcement authorities, industry and government will need to ensure that importers, distributors and manufacturers are aware of the changes to the legislation and this could lead to some one-off costs.

(v) Traceability: benefits

Clearer duties on economic operators throughout the supply chain may also bring some minor benefits in that an enforcement authority will be able to target more directly those not complying with the requirements. There may also be some reduction in enforcement costs due to the improved traceability requirements and increased co-operation between Notified Bodies.

(vi) Traceability: costs

Economic operators will incur costs in keeping records as required by the by the new traceability requirements.

In summary there is likely to be some increased costs for all economic operators because of the implementation of the NLF, although these might be partially off-set by some benefits. However, the EU IA noted that most of the provisions from the NLF codify the current practice within the industry and are therefore unlikely to add additional costs. It has not therefore been possible to quantify these costs despite significant consultation through the NLF implementation process and the consultation regarding the RCD.

The response to the consultation on the implementation of the NLF alignment package suggested that there would be increased costs for some businesses. However there was no information provided on this in the consultation responses for Recreational Craft. We believe any costs to business are likely to be one-off only. Additionally, recent discussions with industry members specifically on this point have not provided any information that would allow us to quantify the costs of these changes given that many are minor and reflect business as usual for many in the industry

The recent discussions we have had with representatives of a small number of businesses (2 larger 1 micro) UK businesses suggest that the main cost to business is the need to re-certify recreational craft engines (as expected) that are already compliant with the essential requirements (including exhaust emissions) but need updated certification for the new RCD. We believe that these costs are already captured in the analysis above as they formed part of the EU IA analysis.

This cost varies greatly and will depend on how many different product types a manufacturers needs to re-certify. The cost is because the manufacturer will need to engage a Conformity Assessment (Notified) Body to carry out this work. Although this is not wholly representative of the industry it provides a useful snapshot of likely costs to be faced by many other businesses regarding re-certification of engines. For some manufactures the increase will be nominal and for others much more significant. Other documentation such Declarations of Conformity will also need to be re-issued. The indication from the discussions we have had is that these costs for engine re-certification are one off only and are not likely to be passed on customers.

There were also suggestions from those we spoke to that a few of the changes in the essential requirements (to improve safety) have been challenging for some UK manufacturers depending on what type of recreational craft they produce. This is partly linked to a delay in standards being revised to take account of the changes, as manufacturers tend to follow the various standards, as it makes it easier for them, and in the case of harmonised standards will provide a “presumption of conformity” with the Directive/Regulations. Business are working through the issues and finding solutions. While again, these may increase costs from manufacturers they will be one-off and not likely to be passed on to customers.

6) Risks and assumptions

Key assumptions

Specific to this IA:

- Baseline scenario assumes that no change to the regulatory framework in the sector. It is assumed, however, that UK firms with an interest in the US market will make changes to their engine specifications *in spite* of the absence of UK regulation. As no further information relating to this matter is available, the following assumptions are made regarding the baseline scenario:
 - That approximately 20 per cent of UK firms currently exports to the US;

- This portion of the market will implement changes to the entirety of their output (that is, not just the portion exported to the US); and
- No other UK firms will develop an interest in the US market going forward.
- The following costs and benefits are scaled down by a factor of 0.2, to account for 20 per cent of the market making the relevant adjustments in the baseline scenario:
 - Fixed and variable costs;
 - Total job losses; and
 - Volume of emissions.
- As no further information is available, the following impacts have been calculated as a function of the size of the EU market (figures for which are contained in the European Commission's IA – see link below). This scale factor has been confirmed as 5/41, **approximately one eighth**. The affected factors are as follows:
 - Number of units placed on the market;
 - Compliance costs;
 - Volume of emissions; and
 - Total job losses.
- After applying factors to accordingly scale down figures contained in the European commission's IA, the compliance cost for any given option is assumed to be a **midpoint** of the range of values provided.
- Calculations implicitly assume that the ratio of SI (petrol) and CI (diesel) engine use in the UK is 5:1, that is, equivalent to that of the EU. It is also assumed that the share of different engine sizes and type in the UK market is equivalent to that of the EU.
- Fixed costs are assumed to be 75% of the total costs reported in the EU IA with the remainder being variable costs – reflecting the costs per engine reported in the EU IA.
- Air quality damage costs, valued as per Data Supplementary Guidance (page 17, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197893/pu1500-air-quality-greenbook-supp2013.pdf) (2010 prices, midpoint used). Sensitivity analysis has been performed to validate the results. It is worth noting that the 'central estimate' is not a midpoint of the 'low' and 'high' estimates; this is reflected through a downward bias in the benefits figures, explaining why the 'best estimate' NPV figures tends towards the 'low estimate' calculations.
- GBP-EUR exchange rate used for the sake of these calculations is £0.81 = EUR1.
- Discount rate of 3.5 per cent utilised in calculating the NPV, as per HMT Green Book guidelines
- Inflation in the recreational craft sector is assumed to be the equivalent of the Consumer Price Index (CPI), as no sector-specific information is available relating to this matter.

Specific to the European Commission's IA:

- The compound (HC + NOx) is assumed to consist of 40 per cent NOx.
- The impact of CO on air quality is not incorporated into the valuation of costs.
- It is worth noting that any minor differences in cost (between options 3 and 4, for example) may not be obvious due to the degree of accuracy (one or two decimal places) employed in this document.

<http://www.europarl.europa.eu/document/activities/cont/201405/20140515ATT84089/20140515ATT84089EN.pdf>

7) Wider Impacts

Background

In the UK some manufacturers of marine engines may see some cost increase. There is a small possibility of job losses in the industry sector in response to engine manufacturers needing to

make adjustments to production in order to comply with the new requirements. Marinisers, who convert existing land engines intended for use in a marine environment, will see minimal changes as their economic activities do not alter the level of exhaust emissions.

Essential Requirements

There are some minor changes to the essential requirements in the new Directive, compared to the old one. These changes were not envisaged by the European Commission when they drew up their IA. Some businesses will be affected by these changes but it is not clear what the level of this impact on the businesses will be. The impact will also depend on the type of craft being manufactured or being put into service as the changes to essential requirements are not relevant to all watercraft in scope but all are justifiable to address advances in consumer expectations for watercraft safety. In the response to the consultation no concerns were raised about the changes to the essential requirements so overall we cannot say what the impact on the industry will be. The later discussions we had confirmed that there were no concerns from businesses about the cost of these changes.

8) Direct costs to business

NLF requirements on economic operators

(i) All economic operators

Economic operators including manufacturers, importers and distributors will all have new record keeping responsibilities and will have to provide the following to enforcement authorities on request:

- Identification of any economic operator who has supplied them with a product within scope
- Identification of any economic operator to whom they have supplied a product within scope
- Keep this information for 10 years

In addition Notified Bodies may pass on costs from their new requirements (revised notification process, obligations to share information) to UK business customers.

Currently all businesses are required to keep a certain amount of information for HMRC reporting purposes for up to 6 years. The additional costs relate to the extra 4+ years of data retention.

(ii) Manufacturers

There are new requirements for manufacturers which could have a cost associated. These include:

- Keeping technical documentation and declaration of conformity (DoC) for 10 years for products that are assessed under Module G (unit verification) not previously required for this module;
- Keeping a record of the type, batch or serial number on the product or packaging;
- Carrying out sample testing following a justified request and keeping a register of complaints;
- Complying with the economic operators obligations above.

Although the Directive will require the labelling to include a product, batch or serial number, the choice between these different numbers will be left to the manufacturer. It is expected that most

manufacturers will choose to include a product number (at a relatively small cost), rather than a batch number at a much larger cost. Therefore this new labelling requirement is not expected to give rise to significant new costs for manufacturers.

(iii) Importers

New requirements for importers include:

- Keeping technical documentation and declaration of conformity (DoC) for 10 years;
- Keeping a record of the type, batch or serial number on the product or packaging;
- Carrying out sample testing following a justified request and keeping a register of complaints.

(iv) Distributors

New requirements for distributors including:

- Where distributors consider or have reason to believe that a product within scope is not in conformity with the essential requirements, they must not make that product available on the market;
- Ensuring that storage and transport conditions do not jeopardise compliance the essential requirements;
- Complying with the economic operators obligations above.

Currently we do not have any detailed analysis of the monetary costs or benefits that implementation of the NLF will have on the recreational craft and personal watercraft industry. Part of this is down to the difficulty in estimating to cost for responsibilities that were clarified in the new Directive but not previously quantified and industry not necessarily knowing what those costs were until the requirements in the Directive became mandatory. Some importers and distributors might see increased costs if they are required to provide information to enforcement authorities on products they have traded. It should be said that the recreational craft industry is a niche sector and the NLF changes do not have a significant impact on the wider economy. No information on increased cost in complying with NLF requirements was provided in the responses to the RCD consultation or in recent discussions with business stakeholders, so it is not possible to update the IA on this point. The NLF clarified a number of responsibilities on economic operators, some of which are already requirements in UK national law.

The NLF clarifies the responsibilities of notified bodies but the requirements placed on notified bodies are largely unchanged in the revised directive. Because the Directive is being revised, Notified Bodies will need to have their notification renewed. There may be some cost to notified bodies in renewing their accreditation and suitability for notification with the United Kingdom Accreditation Service.

9) Direct benefits to business

There could be marginal benefits to organisations wishing to become Notified Bodies from a clearer indication of the notification process. Additionally some benefits are expected from clarifications and harmonisation of definitions across Member States, though it is not possible to quantify these.

10) Background to Impact Assessment

This Impact Assessment has been drawn up with help from the main trade association for recreational craft the British Marine Federation (BMF). Defra has also been involved in analysis of the environmental impact. However, the IA relies heavily on the assumptions made in the EU IA, which was written sometime before the publication of the draft proposal in 2011. We have not been able to obtain clearer details on the impact on manufacturers in the UK due to the large number of independent micro enterprises (around 75% are micro businesses).

The European Commission confirmed that the Commission's IA was not updated during the negotiation of the new directive to take into account additional changes introduced as a result of the negotiation (e.g. NLF alignment). The reason for the IA being drawn up was to justify the need to revise the earlier EU Directive in terms of limits for exhaust emissions under pressure from engine manufacturers to align those limits for the international market including the United States.

11) Summary and preferred option and description of implementation plan

The preferred option is Option 4 as set out above. This will align the Directive to the NLF; achieve the objectives of the Directive with the same costs to business as Option 3 but with the mitigation of the additional transition period for small firms for certain engines and providing the greatest sensitivity to the impact on micro business. The monetary cost to UK business in order to comply with the requirements is estimated to be £0.7 million each year.

Implementation plan

- A formal consultation took place in December 2016 and BEIS asked stakeholders for their views on whether the UK Impact Assessment is an adequate estimation of the costs and benefits of implementing the Directive into UK law.
- The consultation closed on 22 January 2017.
- The IA will be revised if required in response to that consultation with aim of obtaining final clearance from the Reducing Regulation Committee in June 2017.
- Guidance on the Regulations is expected to be published in August 2017.
- The European Commission will be notified of the implementation in July 2017.
- UK Regulations to implement the Directive should be laid in July 2017 and should enter into force in August 2017.
- The Government's response to the consultation on the Recreational Craft Regulations will be published in July 2017.
- The UK must report to the European Commission on the operation of the Directive by July 2017.
- The proposed date for the Ministerial review will be August 2022.