Title: Prohibition on Landing Egg-Bearing Lobsters and Crawfish **IA No:**Defra1993 **Lead department or agency:** Department for Environment, Food and Rural Affairs **Other departments or agencies:**	**Impact Assessment (IA)** **Date: 13/09/2016** **Stage:** Pre-Consultation **Source of intervention:** Domestic **Type of measure:** Secondary Legislation **Contact for enquiries:** **Paul Little**

Summary: Intervention and Options

RPC Opinion: Fit for purpose

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2014 prices)	**In scope of One-In, Measure qualifies as Three-Out?**	
£-28.55m	£-28.37m	£2.29m	Yes	IN

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

The nature of fisheries means that without government intervention, most stocks would be over-fished. Even though there are management measures (e.g. Minimum Conservation Reference Sizes) in place which aim to ensure the continuation of some spawning activity, current stock assessments on European lobster and landing trends on crawfish in English waters indicate that these stocks are being overfished, with no lobster stocks being exploited at levels associated with Maximum Sustainable Yield (MSY). If this over-exploitation is not addressed, not only would there be a risk to the future availability of this fishery but this would also jeopardise the UK's ability to meet its EU obligations to ensure that harvested shellfish species are being exploited at MSY levels by 2020.

What are the policy objectives and the intended effects?

Fisheries are a devolved responsibility in the UK. For England, the policy objective is to improve stock health in order to ensure the future viability of these fisheries and that stocks are exploited at MSY in line with our EU obligations. Currently female lobsters and crawfish that are carrying fertilised eggs, also known as 'berried', are allowed to be landed into England, although there are some regional inshore bans in place by Inshore Fisheries and Conservation Authorities (IFCAs). Introducing a national ban on the landing of all berried lobsters and crawfish should increase stock biomass and in the long term, increase the amount available to be caught by fishers. The national ban will also be seen as a positive step by those who already support the current local bans and should reduce enforcement issues with these local bans.

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

The two options considered in this IA are a 'do nothing' scenario and introduce a national ban through secondary legislation. The preferred option is to introduce a national ban on the landing of berried lobsters and crawfish by making a Statutory Instrument (SI) as it has sufficient spatial coverage to provide the expected conservational benefits and addresses the enforcement issues with current local bans. National legislation is already in place to support voluntary action by fishers to return berried lobsters and crawfish to the sea but there has been insufficient uptake so it's unlikely any further voluntary schemes will be successful. Introducing a full inshore ban through IFCA byelaws was considered however, as both lobster and crawfish stocks extend beyond IFCA districts, it wouldn't provide sufficient protection to the stocks.

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

Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** Yes	**< 20** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** N/A	

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

Signed by the responsible: Minister ..... Date: _____

Summary: Analysis & Evidence

Policy Option 1

Description: Introduce a national ban on landing any egg-bearing lobsters and crawfish through national legislation

FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2016	Time Period Years 15	Net Benefit (Present Value (PV)) (£m)		
			Low: -28.55	**High: -27.25**	**Best Estimate: -28.55**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.03	1	2.27	**27.25**
High	0.03		2.39	**28.55**
Best Estimate	0.03		2.39	**28.55**

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

Costs to private businesses: revenue lost from not landing berried lobsters (annual costs of £2.36m), revenue lost from not landing berried crawfish (annual costs of £0.01m), familiarisation costs (one-off costs of £0.03m).

Costs to public sector: costs to MMO and IFCAs of implementing and enforcing ban (average annual costs of £0.01m)

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

Fishers may incur additional costs in order to sort berried lobsters or crawfish from non-berried lobsters or crawfish at sea, but these are considered to be minimal. Processors and others in the supply chain may be negatively affected by a short-term reduction in supply of lobsters and crawfish. These effects are indirect and have not been monetised due to a lack of evidence.

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

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

None

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

Long-term benefits to fishers from increased landings of lobster due to stock recovery. These benefits are uncertain, but modelling results for a generic lobster stock indicate that landings of lobster would be 3-43% higher fifteen years after implementing a ban on landing egg bearing lobsters than in the baseline. The range in estimated benefits reflects baseline fishing patterns, with stocks more highly fished yielding greater benefits. Higher landings would have further benefits for others in the supply chain, such as processors. Benefits for crawfish are expected to follow a similar trend.

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

Key assumptions: Full compliance with existing bans on landing berried lobsters in some inshore areas (0-6 nautical miles); under-10m fishers fishing in these areas do not land berried lobsters, but over-10m vessels do as they fish further out to sea. The proportion of lobsters caught which are berried is the same for all vessel sizes. There is no voluntary discarding of berried lobsters. Landings and prices based on 2011-2014 averages. Appraisal period is 15 years due to long-term benefits of population recovery.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OI3O?	Measure qualifies as
Costs: 2.29	**Benefits: Unquantified**	**Net: -2.29**	Yes	IN

Evidence Base: Prohibition on Landing Egg-Bearing Lobsters and Crawfish

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1. Policy Background

1.1 Background

1.1.1 The English shellfish sector is one of our most important fisheries, which has consistently produced very high value of landings to English ports. Landings of European lobster (*Homarus gammarus)* into English ports alone were worth £17.7 million in 2014[1] which made it the third most valuable species landed into England. The crawfish (*Palinurus elephas*) fishery is far smaller and more localised compared to lobster with around 12 tonnes[2] and 18,000 tonnes[1] landed into England in 2014 respectively. Nevertheless, crawfish is a very lucrative fishery fetching the highest price per kilogram amongst all shellfish species resulting in landings into England being worth £218,115 in 2014[2]. How this relates to employment can be inferred from the number of vessels using certain gear. Vessels using pots and traps (gear primarily used for catching lobsters and crawfish as well as crabs) employed 4000 people in 2013[3], and supports shellfish processors who employed a further 4000 people in 2014[4]. Lobsters and crawfish are caught using other gears, the most significant being fixed nets to catch crawfish however it's difficult to quantify employment from this.

1.1.2 Management of shellfish fisheries is largely devolved in the UK. In English Waters, management and enforcement is split between the Marine Management Organisation (MMO) which covers 0-200 nautical miles (nm) and the 10 Inshore Fisheries and Conservation Authorities (IFCAs) which cover coastal waters inside 6nm. IFCAs are responsible for ensuring *"that the exploitation of sea fisheries resources is carried out in a sustainable way"*[5] and can implement management measures through introducing byelaws for their district.

1.1.3 Even though shellfish management is devolved in the UK, we share the same EU obligations. The UK is required under the reformed Common Fisheries Policy (CFP) and Marine Strategy Framework Directive (MSFD) to ensure that all commercially exploited shellfish are fished at levels associated with Maximum Sustainable Yield (MSY) and stocks must be exploited at this level to attain Good Environmental Status (GES) by 2020. MSY is the highest theoretical equilibrium yield that can be continuously taken on average from a stock under existing average environmental conditions, whilst maintaining optimum reproductive capacity. MSY can refer to biomass (BMSY) or exploitation rates (FMSY), also known as Fishing Mortality (F). The MSY level varies amongst species and stocks; further details on how this specifically relates to lobsters are included in paragraph

1.1.4 Crawfish was added to the list of UK Biodiversity Action Plan (UK BAP) species when it was reviewed in 2007. The UK BAP represented the UK Government's response to the Convention on Biological Diversity and outlines the UK's biological resources in most need of priority conservation action. The UK BAP is now focused at a country-level rather than a UK-level and the current Biodiversity 2020 strategy has been developed from this. The objective of this strategy in relation to species is "*By 2020, we will see an overall improvement in the status of our wildlife and will have prevented further human-induced extinctions of known*

[1] Marine Management Organisation, UK Sea Fisheries Annual Statistics 2014. https://www.gov.uk/government/statistical-data-sets/uk-sea-fisheries-annual-statistics-report-2014
[2] Marine Management Organisation, Fisheries Activity Database (FAD)
[3] European Commission Scientific Technical and Economic Committee on Fisheries. Annual Economic Report on the EU fishing fleet 2015. https://stecf.jrc.ec.europa.eu/documents/43805/1034590/2015-07_STECF+15-07+-+AER+2015_JRC97371.pdf
[4] Seafish Industry Authority. Seafood Processing Industry Report. http://www.seafish.org/research-economics/industry-economics/processing-sector-statistics
[5] Marine and Coastal Access Act 2009 section 153 (2)(a).

threatened species"[6]*.* How this will be taken forward for commercially exploited marine species such as crawfish is currently under review however, key tasks have been identified for crawfish. The most relevant task to fisheries management is to better regulate fisheries as it's likely that recruitment to stocks in England, are now coming from populations that are at a 'residual' level through over-exploitation.

1.2 Problem Under Consideration

1.2.1 National stock assessments on European lobster in English waters conducted by the Centre for Environment, Fisheries and Aquaculture Science (Cefas) in 2011[7] and 2014[8] indicate that these stocks are being overfished, with none being exploited at levels associated with MSY. For some stocks the stock size (spawning stock biomass) is below the limit reference point, which is considered to be the limit at which the stock is still sustainable. If this over-exploitation is not addressed, not only would there be a risk to the sustainability of this fishery which could result in detrimental socio-economic consequences but this would also jeopardise the UK's ability to meet its EU obligations. There are regulations[9] already in place at EU, national and local level (IFCA Byelaws) to support the sustainable exploitation of lobsters and crawfish however, the evidence suggests that these are not sufficient to ensure these stocks are exploited at MSY[10].

1.2.2 In addition to being on the list of UK BAP species, crawfish are also classed as "Vulnerable" under the International Union for Conservation of Nature (IUCN) designation system, meaning that it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future. Although there are no scientific stock assessments undertaken, the long term trends in fishery statistics point to significant overfishing even though overfishing limits currently can't be identified. For example, landings into England have been falling from its peak in 1969 at over 100 tonnes[11], reducing to only 12 tonnes in 2014[2]. The fishery also seems to be less widespread than it was historically with sightings apparently no longer occurring in previous locations and the fishery in English waters is now only located in the South West.

1.2.3 The majority of management measures currently in force that apply to lobsters and crawfish are technical measures such as Minimum Conservation Reference Sizes (previously known as Minimum Landing Sizes), which aim to ensure the continuation of some spawning activity. There are no instances of lobster or crawfish fishery management through quota (e.g. Total Allowable Catch) and measures to restrict fishing activity (effort) are generally non-restrictive. One technical measure that is already implemented by six of the ten IFCAs but not

[6] Biodiversity 2020: A strategy for England's wildlife and ecosystem services.
https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services
[7] Cefas European lobster stock assessments 2011.
http://webarchive.nationalarchives.gov.uk/20150203151336/http://www.cefas.defra.gov.uk/our-science/fisheries-information/commercial-species/shellfish.aspx
[8] Cefas European lobster stock assessment 2014.
https://www.gov.uk/government/publications/lobster-homarus-gammarus-stock-status-report-2014
[9] Council Regulation (EC) No. 850/98 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms.
Sea Fisheries (Conservation) Act 1967
Sea Fisheries (Shellfish) Act 1967 (as amended)
Fisheries Act 1981
Marine and Coastal Access Act 2009
SI 2000 No 874 The Lobsters and Crawfish (Prohibition of Fishing and Landing) Order 2000
SI 2000 No 1503 The Undersized Lobsters Order 2000
[10] See footnotes 7 and 8.
[11] Hepper, B.T. 1971. Cornish Crawfish Investigations. M.A.F.F. Laboratory Leaflet (new series) No. 22

throughout England, is the prohibition on landing egg-bearing lobsters with two of these IFCAs also extending this prohibition to include crawfish (a map is included at Annex B). Female lobsters and crawfish carry their fertilised eggs on the underside of their abdomen which look like berries, hence why there are also known as berried lobsters or crawfish (photos included in Annex A). They carry their eggs externally for around 9 months, which they then release into the sea to hatch. When berried lobsters and crawfish are landed, the eggs don't tend to be used and usually get scraped off by the processor or buyers, particularly as most export markets now won't accept berried lobsters or crawfish.

1.2.4 The local bans already in place are supported by many, including some fishers, as the short term gain of landing a berried lobster or crawfish could affect the future viability of the fishery as it prevents viable eggs from hatching and increasing the stock biomass. There haven't been any assessments on the effectiveness of these local bans and it would be difficult to attribute any improvements in the stock to this specific management measure. Nevertheless, IFCAs have received several anecdotal reports of an increase in the lobster population and it is recognised as good fisheries practice to protect spawning stock. The consultation will ask whether respondents can provide evidence of the effects of existing local IFCA bans on landing berried lobster.

1.3 Rationale for Intervention

1.3.1 Fishing is an example of a common good[12] problem where the private cost of exploitation is not equal to the social cost. This is because where a fisher extracts a fish from the fish stock (a common resource), this imposes an external cost on other fishers, who can no longer extract that fish or any future offspring from that fish. This leads to the depletion of a shared resource, as individuals act independently and rationally according to their self-interest, despite understanding that this is contrary to the long-term best interests of the group of fishers. This is a market failure, whereby there is an incentive to fish intensively and maximise profits without any corresponding incentives to refrain whilst stocks are available, and leads to inefficient outcomes with the fish stock being over-exploited. Over-exploitation of fish stocks also affects other ecosystem services by disrupting the food chain, leading to a further market failure.

1.3.2 In the case of landing berried lobsters or crawfish, this imposes a particularly large external cost to both industry and society. This is because berried lobsters and crawfish are essential for the future health of the population. Berried lobsters and crawfish carry a large number of fertilised eggs which are not yet able to survive independently. Removing berried lobsters or crawfish from the population means that these eggs cannot grow into mature lobsters or crawfish to augment the population in the future. This increases the risk of low recruitment in future years resulting in less being available to be caught by other fishers in the future. Section 4.5 considers the benefits from resolving the market failure from this external cost.

1.4 Policy Objectives and Intended Effects

1.4.1 The overall policy objective is to ensure lobster and crawfish stocks in English waters are exploited sustainably to safeguard their health and support the UK's commitments under the MSFD and the reformed CFP. Introducing a national ban in England on the landing of berried lobsters and crawfish should lead to an increase in stock biomass which would contribute to our efforts to ensure the stocks are exploited at MSY in line with our EU obligations, as well

[12] A common good is rivalrous but non-excludable; the supply can be depleted, but people are not restricted in their use of the good.

as support the future viability of both fisheries. It will also assist the UK in progressing its Biodiversity 2020 commitments for crawfish.

1.4.2 An additional benefit has been highlighted by the MMO and those IFCAs who already have a ban on landing berried lobsters or crawfish: having a national ban in place will reduce some enforcement issues, as currently there can be difficulties with determining whether a berried lobster or crawfish has been caught within or outside an IFCA district.

1.5 Other Relevant Policies

1.5.1 There are a number of other policies currently being considered or implemented that are relevant to introducing a ban on the landing of berried lobsters and crawfish which will need to be taken into account. However, we don't expect these to have any implications for this proposed ban. Specifically:

1.5.2 **Landing Obligation:** One of the changes introduced by the reformed CFP was the implementation of a landing obligation, often referred to as the discard ban. Previously limits (i.e. quota) were set on the amount of fish landed at port, rather than caught, meaning vessels could return a proportion of their catch to the sea, a practice known as discarding. The Landing Obligation is a ban on discarding fish which are subject to EU catch limits and was introduced from January 2015 for pelagic species. The demersal Landing Obligation is being gradually phased in from January 2016 to January 2019 at which point all fish stocks subject to catch limits will come under the Landing Obligation. The Landing Obligation has been introduced because much of the catch returned to the sea does not survive, thereby reducing the spawning population for no economic value. The Landing Obligation doesn't apply to lobsters or crawfish as they are not subject to catch limits. However, whilst the obligation does apply to the related Norway lobster (also known as Nephrops), we don't expect there to be an issue with this proposed ban on berried lobsters and crawfish as it specifically excludes Nephrops, which are usually targeted with different fishing gear compared to lobsters and crawfish.

1.5.3 **Review of EU Technical Measures:** The European Council Regulation 850/98 includes technical measures for the protection of juvenile marine organisms such as Minimum Conservation Reference Sizes. A European Commission proposal to update the technical measures and replace the current EC Regulation 850/98 was released in March 2016 and includes the provision to prohibit the landing of berried lobsters and crawfish throughout the EU. Nevertheless, there is no guarantee that this provision will remain in the final regulation, as the proposal is currently under the consideration of Member States and is yet to be debated; it will also need to go through the EU legislative process. This overhaul may also take up to two years to complete and could be subject to further delays. Therefore, we have decided to continue our implementation through national legislation to ensure a ban is in force in English waters.

2. Options Rejected

2.1 Background

2.1.1 These options were considered but have been rejected and will not be included in the consultation. They were considered as alternatives to introducing national legislation but were found to not be fit for purpose.

2.2 Voluntary Scheme

2.2.1 There is already national legislation[13] in place which supports voluntary action by fishers to return berried lobsters and crawfish. It prohibits the landing of lobsters and crawfish with a notch shaped like a 'V' in their tail fan: this is commonly known as a v-notch, and is done voluntarily by fishers to identify breeding lobsters and crawfish, staying visible for at least 2 moults (approx. 2-3 years). This practice allows fishers to voluntarily v-notch any berried lobsters or crawfish they catch, return them to the sea which then prohibits their landing by anyone else who catches it thereafter, whether berried or not. Therefore, if enough fishers were to adopt this practice then this would effectively prevent the majority of berried lobsters and crawfish being landed. This legislation addresses fishers' concerns that returning a berried lobster or crawfish voluntarily could enable another to catch and land it, gaining the profits from it.

2.2.2 However considering this legislation has been in place since 2000, the level of uptake of v-notching by fishers is not sufficient as a large number of berried lobsters and crawfish are still landed. Cefas portside sampling of landings shows that berried lobsters make up around 14% of the total lobster landings per year (further details in analysis of costs in paragraph 4.3.4). Therefore, any further voluntary scheme is unlikely to be successful. One of the reasons for the lack of uptake could be that berried lobsters and crawfish can account for a high proportion of the catch at certain times of the year and so the fishers may be reluctant to lose this income. The consultation will ask for evidence of where there is evidence of the success of voluntary action by fishers.

2.3 Introduce a Full Inshore Ban through IFCA Byelaws

2.3.1 Under this option, the four remaining IFCAs that do not already have a ban would be encouraged with Defra support, to introduce IFCA byelaws to ban the landing of berried lobsters. This would result in a blanket ban on all vessels fishing within the 0-6nm zone round the English coast. We would also encourage them to include crawfish in the ban although the main focus would be those IFCAs that have a crawfish fishery and have no ban on landing berried crawfish.

2.3.2 This option would be less resource intensive for government both in terms of implementation and enforcement compared to bringing in national legislation. Even though byelaws still require an impact assessment and consultation, the process tends to be shorter and is not subject to the same governmental scrutiny. There would also be fewer resources needed for offshore enforcement or monitoring as the ban would cover a smaller area. However, IFCA powers only extend to 6nm so this option would leave the 6-12nm zone and beyond unregulated. Therefore, this would only provide limited conservational benefits to the stocks as lobster and crawfish stocks extend beyond 6nm and vessels fish beyond the 6nm limit of

[13] The Lobsters and Crawfish (Prohibition of Fishing and Landing) Order 2000

application of an IFCA byelaw. This also doesn't address the issues that both the MMO and IFCAs experience when enforcing a ban in circumstances when vessels fish both within 6nm and beyond 6nm which is one of the factors deterring the remaining IFCAs to adopt a ban.

3. Options Considered

3.1 Option 0 – Do Nothing

3.1.1 This option would allow the landing berried lobsters and crawfish into England to continue, although the current IFCA byelaws would remain in place. It's very unlikely that without additional management measures that we will meet our EU obligations to ensure shellfish stocks (including lobster) are exploited at MSY by 2020, leading to less certainty over their future sustainability. A failure to implement measures to conserve lobster and crawfish stocks is likely to lead to lower populations and reduced landings of these species. This will also reduce the likelihood of meeting our objectives for crawfish under the Biodiversity 2020 strategy and increase the risk of stock collapse. Section 4.5 on the benefits from the preferred option discusses this further.

3.2 Option 1 - Introduce a National Ban through a Statutory Instrument (Preferred Option)

3.2.1 It is proposed that an order (SI) be made to make it an offence to fish for or land[14] a berried lobster or crawfish in England using the power under Sections 5 and 6 of The Sea Fish (Conservation) Act 1967. The ban would apply to all relevant British fishing vessels registered in the UK, any other relevant British fishing vessel (including those exempt from licensing requirements) and Scottish fishing vessels, fishing in English waters (0-200nm) and/or landing into English ports. The order applies within British fishery limits excluding; Scottish waters, Northern Irish waters and territorial sea adjacent to Wales, Isle of Man, Bailiwick of Jersey and Guernsey. We plan to implement this national ban through amending the current SI[9] that prohibits the landing of v-notched lobsters and crawfish rather than make a new separate order. The provisions of the existing order will remain the same with the new provisions on berried lobsters and crawfish added to it and applying to the same vessels currently regulated by the existing order. This should help with the familiarisation of this new regulation and will support the Government's agenda on simplifying the legislative landscape.

3.2.2 This option should provide the expected conservational benefits as it has sufficient spatial coverage and addresses the enforcement issues currently experienced by the MMO and IFCAs enforcing local bans. The ban wouldn't apply to foreign vessels, as only a small amount of lobster and crawfish is landed by foreign vessels into England (only 206kg in 2014[15]). The small level of landings by foreign vessels means that the ban not applying to them shouldn't impact the conservational benefits.

3.2.3 We had considered bringing in a seasonal ban, using the same mechanism of a SI, as it may reduce the loss of catch compared to a full ban as landings of berried lobsters and crawfish would only be prohibited for part of the year. The seasonal ban would apply ideally during the main breeding season to offer protection to the majority of the eggs. However in the case of lobsters and crawfish, determining an appropriate period of time and time of year for a seasonal ban may be difficult, particularly on a national scale, as lobsters and crawfish can carry their eggs for up to 10 months in variable periods around the coast. In addition, a seasonal ban may not provide the expected conservational benefits, particularly when considering the length of time lobsters can carry their eggs.

[14] As specified under section 5 and 6 of the Sea Fish (conservation) Act 1967

[15] Marine Management Organisation, Fisheries Activity Database (FAD)

4. Costs and Benefits of Preferred Option

This section explains the costs and benefits of this policy and the methodology used to estimate them.

4.1 Methodology and Baseline

4.1.1 As mentioned above, several IFCA districts already have a ban on landing berried lobsters and crawfish from within 0-6 nm. Annex B shows where a ban on landing berried lobsters or crawfish is already enforced.

4.1.2 Estimates for the impacts on fishers of a loss of landing for berried lobster and crawfish have followed a similar methodology. This has involved making several simplifying **assumptions**, which will be tested during consultation:

- **Vessels subject to a ban on landing berried lobsters (i.e. those fishing in IFCA districts where bans are in place) or crawfish comply with this ban, and all other vessels continue to land berried lobsters or crawfish.** The IA assumes full compliance with existing regulation. Therefore the impact of the policy will only extend to vessels fishing in areas which do not currently have restrictions on landing berried lobsters or crawfish. As mentioned above, some fishers voluntarily choose not to land berried lobsters, and use 'v-notching' as a means to ensure that the lobster is not landed by another fisherman after it has been returned to the sea. However, there is no evidence on how prevalent this is, and therefore this IA assumes that all vessels not subject to a ban on landing berried lobsters will continue to land them under the 'do nothing' option.

- **Vessels under 10 metres in length do not fish for lobster or crawfish outside of 6nm, and vessels longer than 10 metres only fish for lobster or crawfish outside of 6nm.** The available data on lobster and crawfish landings do not contain information about where they were caught, meaning that it is not possible to tell whether lobsters or crawfish were caught within or outside of 6nm. Data are only available for the size of the vessel landing lobsters/crawfish. As a result, it is necessary to make assumptions about where vessels of different sizes fish. As smaller vessels are less likely to fish further away from the coast, this IA has assumed that under 10m vessels only catch lobsters or crawfish within 6nm, and over 10 metre vessels only catch lobsters or crawfish beyond 6nm. In reality, vessels in both size groups are likely to expend effort inside and outside of the 6nm limit.

- **The analysis uses average annual landings data from 2011-2014, and therefore assumes that the volume of lobster and crawfish landings do not change over the fifteen-year appraisal period.** Data from 2011-2014 is used, as data earlier than this is not considered robust, and there is insufficient evidence to estimate future trends in landings of lobsters and crawfish. Fishers may make several responses to adapt to a ban on landing berried lobsters and crawfish, including changing the level of fishing effort, changing the frequency with which they check their fishing pots and targeting areas known to have lower densities of berried lobsters or crawfish. However, there is insufficient evidence to know how these reactions would affect costs for fishers. Familiarisation costs for fishers to consider how to adjust their fishing effort are considered in Section 4.2.

- **The proportion of lobsters and crawfish caught by under 10m vessels and over 10m vessels which are berried is the same.** There is insufficient data to show whether under 10m vessels are more or less likely than over 10m vessels to catch berried lobsters or crawfish, and therefore this IA assumes that both under 10m and over 10m vessels catch the same proportion of berried lobsters and crawfish. This assumption will be tested during consultation. As described above, it is also assumed that fishers will land any berried lobsters or crawfish they catch if they are not subject to an existing ban.

- **Lobster stocks correspond to IFCA districts.** Existing berried lobster bans are enforced within IFCA borders, depending on which IFCAs have chosen to implement a ban on landing berried lobsters. However, reported data on the landings of lobsters are based on the lobster stock or functional unit in which they are caught. As shown in Table 1, where functional units overlap into more than one IFCA district, the IFCA districts concerned generally have the same rules regarding landing of berried lobsters. There are two exceptions. The first is for the South-East and South-Coast functional unit, which overlaps the Southern IFCA district (which has a ban on landing berried lobsters) and Sussex IFCA district (which does not). The second is for the South-West functional unit, where this overlaps the Cornwall and Devon & Severn IFCA districts (which do have a ban on landing berried lobsters) and the Isles of Scilly IFCA district (which does not). This IA assumes that all under 10m vessels landing lobsters from the South East and South Cost and South West functional units do not land berried lobsters, even though this is not currently banned within the Sussex IFCA and Isles of Scilly IFCA districts. For crawfish, this is only caught around the South-West region where all IFCAs apart from Isles of Scilly IFCA, have a ban on landing berried crawfish within their districts.

- **Appraisal period of fifteen years.** Impacts are assessed over a longer time scale than the default IA 10 year period. The benefits of lobster population recovery will only become apparent in the longer-term, as it takes at least four years for a lobster to become mature. As a result, we have used an appraisal period of 15 years to match the available evidence on the benefits of population recovery (see section on benefits).

Table 1: Functional Units and IFCA Districts. *Italics* indicate that an IFCA district already has a berried lobster ban in place for 0-6 nm from the coast.

Functional Unit	IFCA District
North-West	*North Western*
South-West	*Cornwall*
	Devon and Severn
	Isles of Scilly
South-East and South Coast	*Southern*
	Sussex
East Anglia	*Kent and Essex*
	Eastern
Yorkshire and Humberside	North East
Northumberland	Northumberland

4.1.3 While the North-West functional unit has been included in Table 1, landings of lobsters from this functional unit are very low, making up 1% of total lobster landings into England in 2014. Due to a lack of sampling activity, there is no evidence on the proportion of lobsters in this area which are berried, and as a result it has not been possible to include lobsters from the North-West functional unit in the cost calculations below. As the North Western IFCA already has a ban on landing berried lobsters within 6 nautical miles and landings of lobster from this area are very low, this has only a very minor effect on the estimates of costs.

4.1.4 Some of these assumptions have been adjusted in sensitivity analysis when calculating costs. Table 2 shows the assumed baseline regulations used for calculating the best estimate of costs of lost revenue from landing berried lobsters in Section 4.3.

Table 2: Assumed baseline regulations on landing of berried lobsters

Functional Unit	Under 10m vessels	Over 10m vessels
North-West	Not included in cost estimates due to lack of data	
South-West	Cannot land berried lobsters	May land berried lobsters
South-East and South Coast	Cannot land berried lobsters	May land berried lobsters
East Anglia	Cannot land berried lobsters	May land berried lobsters
Yorkshire and Humberside	May land berried lobsters	May land berried lobsters
Northumberland	May land berried lobsters	May land berried lobsters

4.2 Familiarisation Costs to Fishers

4.2.1 Lobster (and crawfish) fishers may need to take some time to become accustomed to the new regulations and to reconsider where they place their fishing pots and how often they check their fishing pots. This IA assumes that each lobster fisherman takes 2 hours in the first year of operation to familiarise themselves with the new regulations and to take any adaptive actions.

4.2.2 The mean average hourly wage for marine fishers in 2014 was £8.23 per hour[16] in 2015 prices. This IA uses a 30% allowance for non-wage costs to calculate an hourly cost to businesses of £10.70.

4.2.3 In 2013 there were 1257 fishers using pots and traps in the UK[17], meaning that the estimated one-off familiarisation cost is £26,900. This is likely to be an overestimate, as many of these fishers will either not fish in English waters, will only fish in areas which already have a ban on landing berried lobsters, or target species other than lobsters or crawfish (e.g. crabs).

4.2.4 There are no additional expected costs for fishers to implement the measure, beyond the revenue they no longer receive due to not being able to land lobsters or crawfish, which are covered in Section 4.3. In particular, there are no expected costs for fishers to sort berried and non-berried lobsters or crawfish, as both berried lobsters and crawfish can be easily spotted and immediately discarded while at sea. In addition, fishers will already need to check that the lobsters and crawfish they are landing comply with existing rules such as v-notching and minimum landing sizes.

[16] ONS Annual Survey of Hours and Earnings, Table 16.5. http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-400776

[17] Seafish Fleet Economic Performance Dataset. http://www.seafish.org/research-economics/industry-economics/seafish-fleet-economic-performance-data

4.3 Costs of Lost Revenue for Fishers

4.3.1 Where fishers catch berried lobsters, they will no longer be able to land these lobsters and will lose out on any revenue they would have earned from these landings.

4.3.2 This IA assumes that there will be no cost savings to fishers from no longer landing berried lobsters. This is because lobster fishers must still incur the costs of going out to sea to check their pots to see if lobsters are contained within are berried or not. As a result, the best estimate of costs to fishers is the revenue they can no longer earn from landing berried lobsters.

4.3.3 Evidence from sampling of lobster populations has enabled Cefas to estimate the proportion of lobsters which are berried in each functional unit at different times of the year. This has then been compared to data from the MMO on landings of lobsters from each functional unit to estimate the value of berried lobsters caught by under and over 10m fishers.

4.3.4 This was then combined with the assumptions shown in Table 2 to estimate the annual value of berried lobsters landed, allowing for where existing rules require fishers to return berried lobsters to the sea. The best estimate of the value of berried lobsters landed into English ports from UK vessels is £2.36m, based on an annual average tonnage from 2011-2014 and price data from 2015. This compares to average annual landings of all lobsters into English ports worth £17.03m over the same period, meaning that berried lobsters represent around 14% of all lobster landings into English ports. [18]

4.3.5 Table 3 shows the breakdown in lost revenue between different regions and vessels:

Table 3: Best estimate of annual landings of berried lobsters from functional units. Figures rounded to nearest £1000

Functional Unit	Annual Landings of Berried Lobsters			
	<10m vessels	**10-12m vessels**	**>12m vessels**	**Total**
South-West	£0	£59,000	£121,000	£180,000
South-East and South Coast	£0	£40,000	£51,000	£91,000
East Anglia	£0	£10,000	£2,000	£11,000
Yorkshire and Humberside	£799,000	£242,000	£500,000	£1,540,000
Northumberland	£434,000	£107,000	£1,000	£541,000
Total	£1,233,000	£458,000	£673,000	**£2,364,000**
Red shaded areas are £0 due to existing IFCA bans on landing berried lobsters. Green shaded areas show estimated annual landings of berried lobsters in the best estimate of costs; in the low case estimate of costs, these values are assumed to be £0 as existing IFCA bans are assumed to also cover 10-12m vessels.				

4.3.6 The best estimate of costs to fishers of lost revenue from no longer landing berried lobsters is therefore £2.36m. It should also be noted that whilst there are two functional areas with significant losses, it does not necessarily mean that vessels exploiting the stocks are from these areas. In addition, while vessels exploiting the stocks would bear the largest costs, they would also gain the largest benefits for stock recovery.

[18] As mentioned in paragraph 3.2.1, this proposal does not include foreign vessels landing berried lobsters, as these vessels account for a very small share of lobster landings into England. As a result, this cost estimate does not include any costs to foreign vessels.

4.3.7 In the low-cost case, it is assumed that vessels up to 12 metres in length do not land lobsters more than 6nm from the coast. As a result, under this scenario in some areas 12 metre vessels would not land berried lobsters in the baseline, therefore reducing the estimate of costs from introducing a nationwide ban on landing lobsters. In this scenario, the costs are estimated to be £2.25m per year. However, it is not considered likely that vessels between 10 to 12 metres in length will be restricted to fishing within 6nm, and therefore this scenario is less likely than the best estimate scenario.

4.3.8 For crawfish, the proportion of landings which are berried are estimated to be similar to those of lobster, however there are few direct observations. The value of crawfish lost due to a berried ban was therefore estimated using the observed proportions of lobster in the South West functional unit. Cornwall IFCA and Devon & Severn IFCA already have a ban on the landing of berried crawfish and therefore the lost earnings were assumed to come from over 10m vessels landing to all ports and under 10m vessels landing to the Isles of Scilly. The total lost revenue is estimated to be £14,100, representing 6% of the value of crawfish landings into England in 2014.

4.4 Cost of Implementation to Government

4.4.1 In order to enforce the ban on landing berried lobsters, the MMO and IFCAs will need to invest in testing kits. This is so that they can test whether lobsters have had the eggs scrubbed from their bodies to hide that they have been berried. This testing should also be able to be applied to crawfish but costs have been based on existing testing kits for lobsters. Each testing kit would cost around £500, and be required to be replaced annually. There would also be an annual cost of £50 per annum per kit for replacing chemicals and other disposable materials used during testing.[19] The MMO would be required to purchase one kit per office or inspection platform and each IFCA would be required to purchase two. As there are 12 MMO coastal offices and three inspection vessels and four IFCAs which do not currently enforce the ban on landings of berried lobsters, this results in a total annual cost to government of £11,500 to purchase the testing kits, and an annual cost of £1,150 for replacing chemicals.

4.4.2 There will also be additional costs to IFCAs and the MMO for training inspectors to use the testing kits. This is estimated at £500 per MMO marine area for which there are four and per IFCA district for which there are four without a ban currently. Training is assumed to need to be repeated every two years, leading to a cost every two years of £4,000. Nevertheless, this is likely to be the highest estimate as it's likely that costs can be reduced through conducting larger training sessions for multiple areas.

4.4.3 The implementation of a national ban on berried lobsters may lead to cost savings for IFCAs which already have a ban on landing berried lobsters caught within 6nm in place. This is because IFCAs will no longer have to investigate whether any berried lobsters which are landed have been caught from within 6nm. These savings have not been quantified.

[19] MMO, personal communication, 2015.

4.4.4 There will be no other costs to the MMO or IFCAs for implementing or enforcing the ban. This is because enforcement activities will be carried out as part of routine inspection activity (for example, checking that fishers are complying with other existing technical regulations such as minimum landing sizes) and there would be no additional or specific inspection or enforcement activity associated with the ban on landing berried lobsters. This means that the total cost of enforcement and implementation to public bodies is £16,650 in years where training is needed and £12,650 in other years.

4.5 Benefits from Improved Stock

4.5.1 Restricting the removal of berried lobsters and crawfish from the lobster stock is expected to lead to healthier lobster and crawfish stocks, as the eggs the lobster or crawfish was carrying are able to develop to maturity. Cefas have used a fully dynamic population model to estimate the future impacts of a berried ban on lobsters. Annex C contains details of the model which Cefas have used. Cefas were unable to run the model for crawfish due to the lack of data available which is a common issue amongst smaller fisheries. However, it is considered that the trends shown for lobster may not be that dissimilar to what may happen in the crawfish stock.

4.5.2 The model was run until the population was stable, then the management scenario was put in place and the population was followed for a further 15 years. The model explored three possible scenarios, one scenario for Option 0 and two different scenarios for Option 1, which are explained below. In particular, the model considered two assumptions on how fishers might respond to a ban by changing how much they fish (also known as fishing effort). In particular, for lobster fishers this might mean changing the number of lobster pots they use, or the frequency with which they check the pots.

- No change (Option 0 - baseline)
- A ban on landing berried lobsters, with no change in fishing effort (Option 1 – No change in effort)
- A ban on landing berried lobsters, with a ~10% increase in fishing effort (Option 1- simulating a possible reaction by industry to try and compensate for lost revenue resulting from the ban)

4.5.3 As not all lobster stocks are fished at the same rate, two different starting rates were explored, a “high” fishing rate (F=0.9) and a “low” fishing rate (F=0.4), in order to explore what might happen in the different stock units. In England, the South-west functional unit is exploited at a low fishing rate, while the Northumberland and the Yorkshire & Humberside functional units are exploited at a high fishing rate. The analysis assumed that there were no further changes in regulations governing exploitation of lobster stocks.

4.5.4 The model was run assuming a berried lobster ban to 6 nm was already in place for the low fishing rate stock, and that vessels comply with this ban. This reflects that the IFCA districts in the South-West functional unit all have bans on landing berried lobsters. The model did not assume a berried lobster ban to 6 nm in the high fishing rate stock, as the IFCAs for the Northumberland and Yorkshire & Humberside functional units do not have bans on landing berried lobsters.

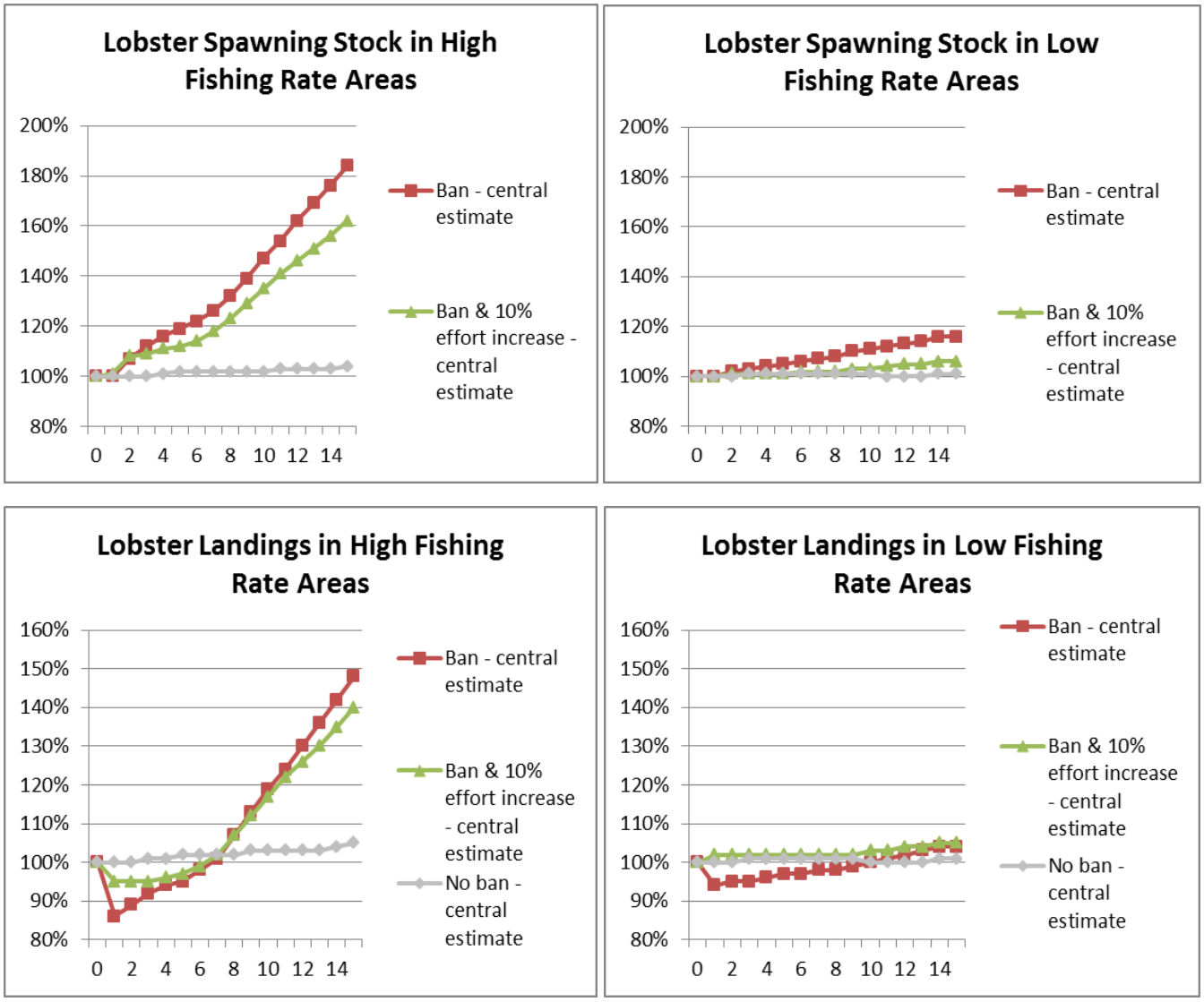
4.5.5 The model is used to illustrate the expected stock recovery of a general lobster population, based on observed characteristics of lobsters. It is uncertain how well this general lobster population corresponds to each of the individual functional units in English waters, and it is not possible to tie it to any of the functional units present in English waters. Therefore the results shown here illustrate the long-term benefits of banning the landing of berried lobsters,

but have not been monetised to formally estimate the benefits of the preferred option. The assumptions used in modelling will be tested during consultation.

4.5.6 The results of the modelling are shown below in Figure 1; this shows the central estimates of changes in spawning stock biomass and landings, with the range of estimates shown in Annex C. This shows that the stock biomass is consistently higher under the preferred option of a ban on landing berried lobsters when compared to the baseline option, even if fishing effort increases after a ban. After 15 years of a berried lobster ban, the stock biomass is 80% greater than the no-ban baseline option in a higher fishing rate scenario and 15% higher under a low fishing rate scenario. These effects are much larger for the high fishing rate scenario than the low fishing rate scenario, as the benefits from restricting exploitation of the lobster or crawfish population are higher where the population is more depleted due to over-fishing.

4.5.7 By contrast, landings of lobster initially dip before recovering as stock biomass grows. Landings under the preferred ban option surpass the no-ban baseline option both in Year 8, under the high fishing rate scenario, and also in Year 11, under the low fishing rate scenario. After 15 years of a berried lobster ban, landings are 43% higher, in the high fishing rate scenario, and 3% higher in the low fishing rate scenario, than when compared to the no-ban baseline option.

Figure 1: Results from modelling of impacts of a ban on landing berried lobsters on lobster spawning stocks and landings of lobster for a generic lobster stock



4.5.8 Table 4 shows the aggregated results of this analysis for lobster landings over the fifteen year appraisal period, expressed as a percentage of baseline landings of lobster in Year 0. This is shown for the no-ban baseline option (Option 0) and the preferred ban option (Option 1), assuming no change in fishing effort. The results are shown as both absolute totals and an estimate of the present value using a discount rate of 3.5%.

4.5.9 As shown in Table 4, in the high fishing rate scenario the model estimates that there are considerable benefits under the preferred option of a ban on landing berried lobsters, with an accumulated net present value equivalent to 80% of annual landings in Year 0 compared to the baseline option. For the low fishing rate scenario, the model shows lower landings under the preferred ban option across the fifteen year period compared to the baseline option. However, Figure 1Figure 1 suggests that the berried lobster ban is yielding higher annual landings than the baseline option at the close of the appraisal period, and therefore the difference between the two options would close if the appraisal period were extended beyond 15 years. In addition, in the scenario where fishing effort increases by ~10% due to the ban, the accumulated landings over the 15 year period would be higher than the baseline option.

Table 4: Estimated total lobster landings over the 15-year appraisal period for no-ban baseline option (Option 0) and berried lobster ban (Option 1) scenarios for high and low fishing rate stocks. Values expressed as a percentage of Year 0 baseline landings[20]

Option	High fishing rate	Low fishing rate
Baseline: Total landings	1534%	1509%
Baseline: Present Value of Total landings	1217%	1199%
Option 1: Total landings	1674%	1483%
Option 1: Present Value of Total landings	1297%	1173%
Difference between landings under Baseline and Option 1	**+140%**	**-26%**
Difference between Present Value of landings under Baseline and Option 1	**+80%**	**-26%**

4.5.10 The model results shown above assume that lobster fishers either maintain the same levels of fishing effort following a berried lobster ban or increase their effort by around 10% in an effort to compensate for reduced landings. The model does predict that the returns on fishing effort for lobster fishers will decrease in the short-term and increase in the long-term if a berried lobster ban is implemented. The economics literature indicates that the response to a short-term reduction in returns on effort or labour is uncertain; fishers may increase their effort to compensate for the loss of earnings, or may reduce their effort or switch to another fishery due to lobster fishing being less lucrative. The reverse is true if long-term returns increase following the imposition of a ban on landing berried lobsters. As a result, the effects of the ban on landing berried lobsters on fishing revenues and profits is difficult to estimate accurately due to uncertainty regarding the response of fishers to a ban on landing berried lobsters.

[20] For example, this means that total estimated landings over 15 years in the baseline high fishing rate scenario are 1534% of or 15.34 times the landings in the year before implementation of the measure.

4.6 Summary of Costs and One In, Three Out Calculation

4.6.1 Table 5 shows a summary of the costs which were estimated in Sections 4.2 to 4.4. The total costs to government and businesses over the 15 year appraisal period are £35.9m, with the majority of costs borne by fishers as a result of reduced revenue from no longer being able to land egg-bearing lobsters.

4.6.2 This regulation is of domestic origin, and therefore counts towards the One In, Three Out calculation. The best estimate of the Equivalent Annual Net Cost to Business is £2.29m. Although this suggests a significant burden on business, this should be seen in the context of the un-monetised benefits to lobster fishers from implementing the regulation in the longer term. As shown in Section 4.5, modelling for a generic lobster stock estimates that lobster fishers will receive net benefits through higher landings of lobster after seven years of the regulation in highly fished stocks and eleven years in less fished stocks.

Table 5: Summary of best estimate of undiscounted costs (2015 prices, rounded to nearest £0.01m)

Cost	One-off Costs	Average Annual Recurring Costs	Total Costs
Costs to Business			
Familiarisation Costs	£0.03m	-	£0.03m
Lost Revenue from landings of berried lobsters	-	£2.36m	£35.45m
Lost Revenue from landings of berried crawfish	-	£0.01m	£0.21m
Total Costs to Business	**£0.03m**	**£2.38m**	**£35.69m**
Costs to Government			
Implementation Costs	-	£0.01m	£0.22m
Total Costs to Government	**-**	**£0.01m**	**£0.22m**
Total Costs	**£0.03m**	**£2.39m**	**£35.91m**

4.7 Small and Micro Business Assessment

4.7.1 The UK fishing fleet in 2013 had 6,399 vessels and employed 12,150 fishers[21]. Of these vessels, Seafish estimates that 1,257 fishing vessels use pots and traps, the principal fishing gear for catching lobsters.[22] However many of these vessels will instead target crabs, or already be subject to a ban on landing berried lobsters or crawfish, so this is an overestimate of the number of vessels likely to be affected.

4.7.2 The MMO reports[23] that over 99% of commercial fishing enterprises in England and Wales had fewer than 10 full-time equivalent employees in 2013, with the remainder having between

[21] Marine Management Organisation, Annual Sea Fisheries Statistics 2013. https://www.gov.uk/government/collections/uk-sea-fisheries-annual-statistics. Although this regulation only applies to English waters, in reality some vessels from other parts of the UK will also fish in English waters and be bound by this regulation.

[22] Seafish Fleet Economic Performance Dataset. http://www.seafish.org/research-economics/industry-economics/seafish-fleet-economic-performance-data

[23] Marine Management Organisation, pers. comm. 2015.

11 and 49 employees[24]. The best estimate equivalent annual net cost to business of £2.29m is assumed to therefore fall entirely on small and micro businesses. If small and micro businesses were exempted from the ban on landing berried lobsters and crawfish, then this would mean all fishers would be able to land berried lobsters or crawfish, therefore failing to achieve the objectives of this policy to protect lobster and crawfish stocks from unsustainable exploitation. In addition, exempting small and micro businesses would mean it would not be possible to realise any of the benefits of the preferred option in terms of increased future landings of lobsters. Other measures (such as partial or temporary exemptions or transitional periods) would delay or reduce these benefits.

4.7.3 Furthermore, as shown in Section 4.5, in the long-term commercial fishers will be the main beneficiaries from improving lobster and crawfish stocks which will enable them to catch more lobsters and crawfish sustainably in the future. Section 4.5 shows that the increase in landings in the long-term are expected to more than compensate for losses due to reduced revenues in the short–term, particularly where lobster stocks are currently highly exploited.

[24] Of 3267 vessels in the English and Welsh fleet, 3616 employ fewer than 10 people, and 11 employ between 11 and 49 people. Data not available for Scotland and Northern Ireland.

5. Summary

5.1.1 The evidence indicates that both European lobster and crawfish stocks in English waters are overfished which, if not addressed, could risk the sustainability of these fisheries. Introducing a national ban on the landing of berried lobsters and crawfish should lead to an increase in stock biomass which would contribute to our efforts to ensure the stocks are exploited at MSY in line with our EU obligations, as well as support the future viability of both fisheries. It will also help the UK to progress its Biodiversity 2020 commitments for crawfish and should reduce enforcement issues with current local bans.

5.1.2 The preferred option is to make an order (Statutory Instrument) to make it an offence to fish for or land a berried lobster or crawfish in England. The ban would apply to all relevant British fishing vessels registered in the UK, any other relevant British fishing vessel (including those exempt from licensing requirements) and Scottish fishing vessels, fishing in English waters (0-200nm) and/or landing into English ports. The best estimate of undiscounted total costs to Government and business over a fifteen year appraisal period is £35.9m, with an estimated Equivalent Annual Net Cost to Business of £2.29m. As discussed in Section 4.5, the benefits of the proposed policy option would mostly accrue to lobster and crawfish fishers, with landings of lobsters estimated to be between 3-43% higher in less fished and highly-fished stocks respectively after 15 years of the policy (see Annex C). The assumptions used in this analysis are discussed in Section 4, and will be tested during consultation.

5.1.3 To implement this national ban, it is proposed that an amendment will made to the current SI[9] that prohibits the landing of v-notched lobsters and crawfish rather than make a new separate order. This will support the Government's agenda on simplifying the legislative landscape. The MMO and IFCAs will continue to be responsible for implementing this regulation and we plan to work with them and build on current procedures. We will develop this further after the consultation in order to take into account any feedback received. The next step will be to hold a formal consultation on this proposal with an aim to for it to come into force in Tranche 1 (period to 31st December 2017). It is also proposed that a number of regional stakeholder workshops will be held both prior and during the consultation. To date we have extensively engaged with the MMO and IFCAs on the proposal for consideration, as well as larger stakeholders such as the Shellfish Association of Great Britain (SAGB) and National Federation of Fishemen's Organisations (NFFO). These organisations will be invited to participate in the stakeholder workshops.