What is the problem under consideration? Why is Government intervention necessary?
Fisheries suffer from market failures such as common good problems and negative externalities. One mechanism for dealing with this is the EU Common Fisheries Policy (CFP). Under the reformed CFP the pelagic landing obligation will come into force in 2015. The landing obligation will remove the wasteful practice of fish discarding. Pelagic fisheries have the lowest levels of discarding, and so the impacts of the pelagic landing obligation will be relatively small. Government must intervene to ensure appropriate implementation in England. Successful implementation will ensure that discarding is prevented, fish stocks (a common good) are protected and industry is supported in this transition to a new management regime.

What are the policy objectives and the intended effects?
The objectives of the policy are to address the issues which arise from implementing the pelagic landing obligation in England. To ensure that discarding is prevented, fish stocks are protected and the English pelagic industry are supported in the transition to the new fisheries management regime under the landing obligation while ensuring that costs to business are minimised. In addition, the changes proposed are designed to maximise potential benefits to industry. If there was no Government intervention the English pelagic industry would incur significant costs, impacting on industry profit, as they would be operating under a management regime that would be inappropriate under the reformed CFP.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)
There is only 1 viable policy option as doing nothing, or going further than EU requirements, would incur significant risks or cost on both industry and Government. Non-regulatory approaches are not appropriate as to ensure compliance an effective system of enforcement should be established. Option 1 is a proportionate response to meet the objectives of the pelagic landing obligation while not gold plating and ensuring minimised costs to business. The proposals are also designed to maximise potential industry benefits. This policy proposes interventions across 4 key areas of fisheries management, including changing from a land based to at sea monitoring and enforcement system.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 07/2022

Signed by the responsible SELECT SIGNATORY: ____________________________ Date: ____________
Summary: Analysis & Evidence

**Description:**

**FULL ECONOMIC ASSESSMENT**

<table>
<thead>
<tr>
<th>Price Base Year</th>
<th>PV Base Year</th>
<th>Time Period</th>
<th>Net Benefit (Present Value (PV)) (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2015</td>
<td>10</td>
<td>Low: Optional</td>
</tr>
</tbody>
</table>

**COSTS (£m)**

<table>
<thead>
<tr>
<th></th>
<th>Total Transition (Constant Price)</th>
<th>Average Annual (excl. Transition) (Constant)</th>
<th>Total Cost (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>High</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>0.0</td>
<td>0.0002</td>
<td>0.002</td>
</tr>
</tbody>
</table>

**Description and scale of key monetised costs by ‘main affected groups’**

Industry will incur a small cost as a result from the proposed changes to enforcement activities. This is estimated to cost industry £11,70 (£390 each for the 3 vessels affected). Over the appraisal period this cost will be incurred in 2015 and 2020 (as the CCTV monitoring systems have a 5 year lifetime).

The majority of Government commitments will be met by redirecting current budgets to the new processes or through reprioritising of resources, therefore Government will not incur an additional cost.

**Other key non-monetised costs by ‘main affected groups’**

Those vessels involved in the monitoring reference fleet may incur a small inconvenience burden of hosting an observer onboard and collecting data to meet EU requirements under the landing obligation. This does not pose a financial cost as it does not disrupt fishing activities and all direct costs are met by Government. Additionally, observer trips already occur.

Government may incur a minimal cost from undertaking targeted information campaigns with industry. However this cost is expected to be minimal as it will be carried out in line with current engagement activities.

**BENEFITS (£m)**

<table>
<thead>
<tr>
<th></th>
<th>Total Transition (Constant Price)</th>
<th>Average Annual (excl. Transition) (Constant)</th>
<th>Total Benefit (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>High</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Description and scale of key monetised benefits by ‘main affected groups’**

Increased opportunity for the pelagic industry to access potential uplift in total allowable catch (TAC) agreed at EU level as discarding will no longer be occurring. This is estimated to provide additional turnover of £0.8 - £1.4 m, but has not been included above due to uncertainty.

**Other key non-monetised benefits by ‘main affected groups’**

Industry will have improved access to flexibilities within the landing obligation, which will give fishermen more scope to align fishing activity with what is most profitable for their business model. In addition, there may be access to specific exemptions where there is evidence that full compliance will result in a disproportionate cost. Industry will also benefit more generally from more appropriate fisheries management rules provided under the proposed policy option.

**Key assumptions/sensitivities/risks**

Discount rate (%) 3.5

Although we are confident there will be costs and benefits resulting from our interventions, in some cases it has been difficult to monetise these. For example, there is a degree of uncertainty surrounding industry need for and access to flexibilities and exemptions within the pelagic landing obligation. This is because the evidence base is still developing and some elements will be subject to agreement with other countries. We do not expect the costs to industry to increase after consultation as previous discussions with industry have confirmed that the scale of the problem resulting from the pelagic landing obligation in England will be minimal due to the historically low discard rates.

**BUSINESS ASSESSMENT (Option 1)**

<table>
<thead>
<tr>
<th>Direct impact on business (Equivalent Annual) £m:</th>
<th>In scope of OITO?</th>
<th>Measure qualifies as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs: 0.0002</td>
<td>Benefits: 0.0</td>
<td>Net: -0.0002</td>
</tr>
</tbody>
</table>
# Table of Contents

1. Introduction .................................................................................................................. 4  
   1.1 Background .............................................................................................................. 4  
   1.2 The landing obligation .............................................................................................. 4  
   1.3 Issues under consideration ..................................................................................... 5  
   1.4 Issues not under consideration .............................................................................. 5  
   1.5 Fisheries management ............................................................................................. 5  
   1.6 Rationale for Government intervention ................................................................ 8  
   1.7 Policy objectives and intended effects ................................................................... 9  
2. Analysis of options ......................................................................................................... 11  
   2.1 Option 0 - baseline ................................................................................................. 11  
   2.2 Option 1 – proposed implementation option .......................................................... 13  
3. Costs and benefits of proposed policy option .............................................................. 16  
   3.1 Assumptions ........................................................................................................... 16  
   3.2 Costs ....................................................................................................................... 16  
   3.3 Benefits .................................................................................................................. 19  
   3.4 Summary of option 1 costs and benefits ............................................................... 22  
4. Conclusion ...................................................................................................................... 25  
   Annex A: Discarding and the English pelagic industry ............................................... 27  
   Annex B: Other policy options not analysed in this Impact Assessment ..................... 32  
   Annex C: Possible EU Commission sanctions for non compliance to the landing obligation .................................................................................................................. 34  
   Annex D: Risks and mitigation of the pelagic landing obligation ............................... 36
1. Introduction

1.1 Background

The Common Fisheries Policy (CFP) is the EU’s instrument for the management of fisheries and aquaculture. The CFP is made up of three regulations, the CFP basic regulation, the Common Market Organisation of Fishery and Aquaculture Products (CMO) and the European Maritime and Fisheries Fund (EMFF). Reforms to the CFP basic regulation and the CMO came into force on the 1 January 2014, with support being made available under the EMFF from 2015. The reformed CFP basic regulation can be accessed here (Reformed CFP Regulation) and the reformed CMO regulation can be accessed here (Reformed CMO Regulation).

The ultimate purpose for the package of reforms is to deliver sustainable fish stocks, a prosperous fishing industry and a healthy marine environment. These reforms will help to meet the Government’s priorities of growing the rural economy and protecting the environment.

On 31 March 2014 we launched a package of consultations relating to three areas of the reformed CFP. The three consultations specifically cover:

- Proposals to implement the pelagic landing obligation in England;
- The UK’s proposed strategy to implement the EMFF; and

For each consultation we have produced an associated Impact Assessment. As far as possible we have kept the assumptions and methods used across the three Impact Assessments consistent.

1.2 The landing obligation

The new CFP basic regulation makes changes to the way that Europe’s fisheries are managed, with the aim of managing fish stocks sustainably to ensure a prosperous fishing industry as well as reducing waste. One of the most significant changes relates to the introduction of a landing obligation. The landing obligation is a ban on discarding fish which are subject to catch limits, so that all catches must be brought ashore, except where they are subject to specific exemptions. Discarding is the return of a proportion of catch to the sea. Discarding is a negative externality as much of the catch returned to the sea does not survive.

The landing obligation will be implemented in phases, beginning with pelagic fisheries on 1 January 2015. All other fisheries will be covered from January 2016 – 2019 and the process of implementing these in England will be evaluated at a later date in separate Impact Assessments.

---

1 Pelagic fish generally occupy the surface waters of the oceans or lakes, in depths between 20-400 metres.
There are a number of reasons why discarding occurs including fishermen accidently catching fish which they do not have quota for and are therefore unable to land and sell, catching fish which are damaged or less profitable, and catching undersize fish which are not legally permitted to be landed and sold. We must therefore consider the best policy to implement the landing obligation in a proportionate way, with minimum cost and disruption to the fishing industry.

A detailed analysis of discarding in the pelagic industry, and the reasons for it, is included in Annex A. Discard rates in the pelagic fishery are very low, as indicated by the available data from the Scientific, Technical and Economic Committee for Fisheries (STECF) (Table 1, Annex A) and evidence direct from the pelagic industry. The reasons why discard rates in the pelagic industry are low are two-fold. Firstly, the nature of the pelagic fishery means that it is relatively simple to minimise catch of unwanted species as pelagic fish tend to shoal together. Secondly, the pelagic industry is already operating under high grading and slipping bans for most quota species which prevents discarding of fish through these processes. The low discard rates mean there will be a minimal volume of unwanted catch being brought ashore under the pelagic landing obligation.

1.3 Issue under consideration
This Impact Assessment focuses solely on the implementation of the pelagic landing obligation in England, and the impact of this on English industry and public bodies. This covers all sizes of English businesses (Micro, Small, Medium and Large) because it is a directly applicable EU regulation to all businesses, and micro businesses cannot be exempted due to the nature of the fishing industry and the CFP regulation.

1.4 Issues not under consideration
This Impact Assessment does not cover:
- The implementation of the pelagic landing obligation in other UK administrations (i.e. Scotland, Wales and Northern Ireland). Fisheries management is a devolved issue and is being dealt with individually by each administration.
- The introduction of the demersal landing obligation in England. This will be the subject of a separate Impact Assessment and Consultation with industry.

1.5 Fisheries management
Fisheries management is a complex combination of different processes. The 4 areas of fisheries management which are key to effective management of a landing obligation are quota management, regionalisation (or access to exemptions), monitoring and enforcement and catch management.

2 High grading is the practice of selectively fishing so that only the best quality fish are brought ashore.
3 Slipping occurs in purse-seining fisheries, where fish are scooped into large nets. Fish can be deliberately released from the net instead of being brought onboard the ship.
a. Quota management

Quota management is the method of allocating quota to individual vessels, and the management of this quota individually or across groups of vessels. There are currently two arrangements which are used for the management of quota in England. Arrangements that allow a degree of autonomy for groups of vessel owners are currently in place for vessels that are members of Producer Organisations (POs). All remaining vessels fish against a pool of quota managed by the Marine Management Organisation (MMO).

b. Regionalisation

Regionalisation enables EU Member States to form regional groups in order to better manage those fisheries in which they have a shared interest. The scope of what these regional groups can do is defined in the CFP basic regulation⁴. Regions can come together, in consultation with relevant EU stakeholder Advisory Councils (ACs), to produce joint recommendations for achieving the objectives of the CFP. This includes recommendations for Discard Plans for the Commission to consider and adopt, as well as Multiannual Plans which will be co-decided. Member States may also agree jointly to adopt national measures simultaneously as an alternative method of implementation.

Member States can access scientifically justified exemptions to the landing obligation through regionalisation⁵. These exemptions exist to help the fishing industry operate under the landing obligation, but their use will impact upon the agreed levels of total allowable catch at EU level, including any potential uplift in total allowable catch as industry are no longer discarding. The possible exemptions are the high survivability and de minimis exemptions.

⁴ Article 18 of the CFP basic regulation
⁵ Article 15(2) of the CFP basic regulation
• **High survivability exemption**

Species that have been scientifically proven to have a high rate of survival after discarding, taking account of gear characteristics, fishing practices and ecosystem influences, may be discarded if agreed regionally and set out in a regional Discard Plan.

• **The *de minimis* exemption**

Under the CFP basic regulation the application of the *de minimis* exemption can be outlined in a Multiannual Plan, a Discard Plan, or directly by the Commission through a delegated act. The *de minimis* allows up to 5% of total annual catches of all species subject to the pelagic landing obligation to be discarded in the following cases:

i. Where scientific evidence indicates that increases in gear selectivity are very difficult to achieve; or

ii. To avoid disproportionate costs of handling unwanted catches, where the unwanted catches do not represent more than a certain percentage of total annual catch for each fishing gear.

For a transitional period of four years, the percentage of catch which can be discarded under the *de minimis* exemption can be:

i. Up to 7% in 2015 and 2016; and

ii. Up to 6% in 2017 and 2018.

The Commission can only set the *de minimis* exemption when no measures have been adopted through a Multiannual Plan or a regional Discard Plan. The Commission is only able to set the *de minimis* level at an annual maximum of 5% of the total annual catch of all species.

c. **Monitoring and enforcement**

Monitoring and enforcement covers how we, Defra and its arms length bodies, enforce fisheries rules and monitor compliance. From 1 January 2015 this will include how the pelagic landing obligation is enforced.

d. **Catch management**

Catch management covers how fishermen handle, store and manage catches while at sea and onshore. This includes the relevant regulations for catch entering the human and non human consumption market.

From 1 January 2015 the Minimum Landing Size (MLS) of all quota species will be amended to the new Minimum Conservation Reference Size (MCRS). The MCRS is the minimum size of catch which can enter the human consumption market. The MCRS for each species will be established at EU level, under the updated Technical Conservation Regulations. Negotiations on the MCRS for pelagic species are currently ongoing. Industry will be required to comply with any future amendments to the Technical Conservation Regulations.

Under the pelagic landing obligation catches of all quota species below the agreed MCRS must be retained onboard, landed and counted against quota. Whilst at sea fish below MCRS will have to be stored and recorded separately. Once onshore, fish below MCRS will have to be sold into the not for human consumption markets. This will allow fishermen to make some money from these fish, but also deter potential targeting of juveniles.

1.6 Rationale for Government intervention

Fisheries are a classic example of a common good problem resulting in the tragedy of the commons. The tragedy of the commons occurs as the private cost of exploitation is not equal to the social cost leading to the depletion of a shared resource by individuals who act independently and rationally according to each one's self-interest, despite their understanding that depleting the common resource is contrary to the group's long-term best interests.

Previous EU intervention to correct this market failure and prevent excess exploitation of fish stocks was through the allocation of quotas controlling the weight of fish that could be landed. The focus of quotas on the weight of fish that can be landed onshore has however led to some perverse incentives whereby fisherman may discard catch at sea to ensure they do not overshoot their quota limit.

Discarding is a negative externality. Negative externalities occur when damage to the marine environment is not fully accounted for by users (i.e. throwing back dead or damaged fish). In many cases no monetary price is attached to marine goods and services therefore the cost of damage is not directly priced by the market. Even for those goods that are traded (such as fish), market prices often do not reflect the full economic cost, which ends up being borne by other individuals and society. Discarding is also wasteful as useable fish are discarded when they could be brought to market and sold.

The reformed CFP has intervened remove this negative externality, by implementing a series of landing obligations. The pelagic landing obligation, banning discarding in pelagic fisheries, will come into force on 1 January 2015. This will mean quota will now apply to what is caught at sea, rather than that is landed onshore. As previous EU intervention to protect fish stocks applied quotas to the weight of fish landed onshore, a system of fisheries management and regulation reflecting this was established. The movement to a system of quotas which now control what is caught at sea means that the management regime needs to be adjusted to suit these new arrangements, and it is how the government chooses to do this that is the subject of this IA and the associated consultation.

Government must intervene to ensure appropriate implementation of the EU rules on the pelagic landing obligation in England. To do so we propose to make targeted interventions in 4 key management areas, quota management, regionalisation, monitoring and enforcement and catch management.

Successful implementation will ensure that discarding is prevented, fish stocks are protected and the English pelagic industry is supported in the transition to a new management regime. If

---

7 A common good is rivalrous but non-excludable; the supply can be depleted, but people are not restricted in their use of the good.
there was no Government intervention the English pelagic industry would incur significant costs, as they would not have access to a number of flexibilities or exemptions under the landing obligation. There would also be an increased risk of EU sanctioned penalties on both Government and industry due to failure to comply with the CFP regulation.

The specific rationale for Government intervention for each of these key areas is:

**a. Quota management**

Although Producer Organisations (POs) and fishing businesses are themselves responsible for optimising their use of quota, Government has a role to ensure English quota is used effectively to maximise public benefit.

**b. Regionalisation**

Although the new regional decision making processes allow input from stakeholders, Government is ultimately responsible for agreeing the UK position on fisheries issues in international talks with other Member States. Government is also responsible for ensuring that there is a level playing field across all Member States.

**c. Monitoring and enforcement**

Government is responsible under EU treaties for appropriately enforcing the requirements of the new CFP basic regulation, including the landing obligation.

**d. Catch management**

Government has a responsibility to ensure that implemented changes to catch management, both at sea and onshore are the minimum necessary to meet EU objectives. We are also responsible for informing the fishing industry of any new requirements.

### 1.7 Policy objectives and intended effects

The overall objective of the proposed policy is to amend the current fisheries management regime to reflect the new arrangements under the reformed CFP and enable the cost effective and proportionate implementation of the pelagic landing obligation in English pelagic fisheries. This will allow the pelagic fishing industry to most effectively transition to operating under the pelagic landing obligation, while ensuring that costs to business are minimised. We will not go further than the basic CFP requirements, enforcing the landing obligation in a proportionate way rather than adding any additional rules, burdens or gold plating. These overarching objectives can be divided into objectives for each of the 4 key fisheries management areas where changes are proposed.

**a. Quota management**

- To implement quota management which maximises the socio-economic benefit to the English economy while ensuring compliance with the CFP basic regulation.
- To allow the English pelagic industry to more easily match their catch with available quota under a landing obligation.
b. **Regionalisation**
- To ensure that the opportunity to employ the new regionalisation processes to secure any of the permitted exemptions to the landing obligation (*de minimis* and high survivability) is taken, so that the English fleet can operate effectively under the pelagic landing obligation.

c. **Monitoring and enforcement**
- To ensure the optimal balance of monitoring and surveillance measures, drawing on the science relating to the effectiveness of different methods, that will deliver compliant fishing behaviour for English pelagic vessels and other pelagic vessels operating in English waters.
- To collect appropriate evidence of non-compliant actions of sufficient quality to facilitate appropriate sanctions.
- To ensure that the enforcement measures used across the fleet are proportionate and aligned to the degree of real or potential risk of non-compliance and overall impact on fishing mortality.
- To maximise opportunities to access any uplift in total allowable catches due to the removal of discarding by ensuring compliance with the landing obligation (see Section 2.2 for more details).

d. **Catch management**
- To minimise the burden on industry of handling and sorting catch while at sea.
- To maximise the benefit industry can receive from landing and selling additional fish, including fish sold in to the non human consumption food chain.
- To ensure the English pelagic industry and onshore partners are aware of their responsibilities when landing catch in England under the pelagic landing obligation such as the requirement to send catch below the minimum conservation reference size to non-human consumption.
- To avoid any nugatory public investments in onshore infrastructure and controls which ensure that a waste at sea problem does not become a waste on land problem that is resolved using landfill.
2. Analysis of options

In Summary there is only 1 viable policy option, which is to amend the current fisheries management regime to allow for the implementation of minimum EU requirements in England, as doing nothing, or going further than EU requirements, would incur significant risks and cost to industry and Government. Here we present our preferred policy option (Option 1) and the do nothing (Option 0) for comparison.

- Policy Option 0: Continue with current policy (i.e. baseline option).
- Policy Option 1: Provide a tailored and proportionate policy response based on some managed interventions across the 4 key fisheries management areas. This is our preferred policy option.

Non-regulatory approaches are not appropriate for implementation of the landing obligation. The CFP basic regulation states that in order to ensure compliance with the rules of the CFP basic regulation Member States must establish an effective and proportionate system of control, inspection and enforcement which includes proportionate and dissuasive penalties for non-compliance.

For completion, in Annex B we also outline additional policy options that were considered and discuss why these were not deemed fit for purpose and therefore not analysed further.

2.1 Option 0 – baseline

a. Quota management

Under the baseline option there would be no change to the quota management rules for the English pelagic industry. Those vessels within a Producer Organisation would continue to be able to swap and lease quota internationally and between other groups, allowing them to match their catches with quota. The MMO, who manages quota for the under 10 metre and non-sector vessels, would continue to set catch limits for the vessels it manages. These catch limits are generally set on a monthly basis, but this varies for particular species. Under this system a vessel managed by the MMO will lose any quota it does not catch within the specified time limit. The MMO also has limited ability to lease quota with other groups.

Therefore, continuing with the current system could lead to significant problems for the under 10 metre and non sector vessels being able to access necessary quota, and remain economically viable under the pelagic landing obligation.

Under the new CFP basic regulation, a fundamental change will be made to the way total allowable catches (TACs) will be calculated. Currently, scientific advice on the health of fish stocks (stock assessments) builds in assumptions about the amount of fish being discarded, meaning that the fishing industry ultimately receives quotas which are lower than total allowable catch. To reflect the landing obligation, and the assumption that fish are no longer being discarded, it is expected that at EU level TACs will be set at a higher level to account for the pelagic fishing industry no longer discarding. Any additional quota will be allocated to the
Member State in line with relative stability\(^8\), and England will receive a proportion of the UK quota uplift in line with current quota allocation arrangements. Once received, the uplift in quota will be allocated in line with fixed quota allocation units. However, under the baseline option the possibility of accessing any uplift in TAC is greatly reduced, as our enforcement regime would not be robust enough to ensure compliance with the landing obligation.

**b. Regionalisation**

Under the baseline option the UK would not seek to take part in regional fisheries management. This would mean Government would not seek to develop a Discard Plan (DP) or Multi-Annual Plan (MAP), to outline appropriate regional fisheries management measures for the pelagic industry, rather than a one-size-fits-all Commission led proposal.

In the absence of agreement of fisheries management at regional level (either through a DP or co-decided MAP), the pelagic fleet would not be able to take advantage of the full range of exemptions to the landing obligation available through regionalisation, including the high survivability and *de minimis* exemptions. Under this option the English pelagic fleet would be at a disadvantage compared with other Member States whose industries did have access to these exemptions.

**c. Monitoring and enforcement**

Under the baseline option the UK Government would maintain the current enforcement regime for all sectors of the pelagic fleet. The current enforcement regime was developed to monitor landings of fish, as quota controlled the weight of fish that could be landed. This regime includes the completion of fishing e-logs for all pelagic vessels over 12 metres, paper logbooks for vessels between 10-12 metres in length and landing declarations and sales notes for vessels under 10 metres in length. These documentary checks are augmented by a programme of surveillance and inspection at port and at sea provided by the Royal Navy, and inspections of landing in port by Marine Enforcement officers as well as by limited aerial surveillance.

For all sectors of the pelagic fleet (including both the under and over 10 metre vessels) maintaining the current monitoring regime will not provide sufficient resolution or confidence in relation to the landing obligation requirements, and would provide little or no incentive for fishermen to alter their current behaviour. It would be extremely unlikely that illegal discarding would be detected, introducing a significant risk of non-compliance to the landing obligation. This would lead to possible depletion of fish stocks through overfishing.

Furthermore, the CFP basic regulation\(^9\) states that in order to ensure compliance with the rules of the CFP an effective system of control, inspection and enforcement should be established which includes the establishment of effective, proportionate and dissuasive penalties. Failure to appropriately alter the English monitoring regime would be viewed as a failure to implement this requirement, introducing a risk of infraction proceedings by the Commission, and the risk of heavy fines on Government and industry.

---

\(^8\) TACs are shared between EU countries in the form of national quotas. For each stock a different allocation percentage per EU country is applied for the sharing out of the quotas. This fixed percentage is known as the relative stability key.

\(^9\) Article 36 CFP basic regulation
d. Catch management
Under this policy option industry would be required to do the minimum necessary to comply with the relevant EU regulations for separate storage and recording of fish below MCRS whilst at sea.

Catches will be subject to specific regulations depending on the market they enter. Under the baseline option there would be no intervention by Government, leaving the market to adapt to the changes brought by the pelagic landing obligation. Fishermen would continue to have responsibility to ensure compliance with all relevant legislation, such as those applicable for each market. Ports and fish markets will also be left to make any necessary adaptations to their handling procedures and infrastructure to take account of the changes in the composition and size distribution of fish that are landed and the associated regulation. It is expected that the necessary adaptation for the pelagic industry will be limited as there will be only small volumes of additional fish being brought ashore due to the low levels of discarding in pelagic fisheries.

2.2 Option 1 – proposed implementation option
This option is a proportionate response to meet the objectives of the pelagic landing obligation while not gold plating. It will allow the pelagic fishing industry to most effectively transfer to operating under the pelagic landing obligation while ensuring that costs to business are minimised. The changes proposed also intend to maximise potential benefits to industry, allowing fishermen to benefit from landing, and selling, their entire catch instead of discarding a proportion.

a. Quota management
Under this policy option we will make changes to the quota management for those vessels within a PO and those whose quota is managed by the MMO. POs will continue to manage its collective quota holdings across its member vessels, including exchanging quota with other groups and internationally.

To increase the flexibility in the quota management system for the under 10 metre and non sector vessels, whose quota is managed by the MMO, we propose to increase the time period over which catch limits are allocated, on a stock by stock basis. This will give fishermen more flexibility in their fishing activity while still allowing managers to retain a degree of control over total fishing activity. We also propose to make quota leasing arrangements more transparent via the MMO website so that sources of quota are more easily identifiable to those who need to access additional quota. Quota leasing will be allowed following landing in instances where the catch limit set for that stock has been exceeded.

Quota flexibilities
Under this policy the English pelagic POs and the MMO, will have full access to the additional quota flexibilities outlined in the CFP basic regulation. This includes:

- Provisions to bank and borrow up to 10% of quota for all species subject to the pelagic landing obligation between consecutive years.
- Access to the 9% interspecies flexibility for species which are within safe biological limits.
These flexibilities were created to help fishermen match their catch to quota, allowing them to land and sell their entire catch. The interspecies flexibility will also help address problems with choke species, where fisheries could be closed if quota for a particular species is exhausted.

**Quota uplift**

Under the new CFP basic regulation, a fundamental change will be made to the way total allowable catches (TACs) will be calculated. Currently, scientific advice on the health of fish stocks (stock assessments) builds in assumptions about the amount of fish being discarded, meaning that the fishing industry ultimately receives quotas which are lower than total allowable catch. To reflect the landing obligation, and the assumption that fish are no longer being discarded, it is expected that at EU level TACs will be set at a higher to account for the pelagic fishing industry no longer discarding. This uplift would be available from 2015 for those stocks subject to the pelagic landing obligation. Any additional quota will be allocated to the Member State in line with relative stability, and England will receive a proportion of the UK quota uplift in line with current quota allocation arrangements. Once received, the uplift in quota will be allocated in line with fixed quota allocation units.

This uplift is not guaranteed, however this policy option increases the possibility in accessing an uplift in total allowable catch by ensuring adequate enforcement of the landing obligation. Under this policy option any uplift in quota will be allocated to fishermen in line with fixed quota allocation units. However, Defra reserve the right to reconsider this position if unexpected issues emerge in 2015.

**b. Regionalisation**

Under this policy option the UK Government would work with other Member States who have a direct interest in the pelagic fishery, the Pelagic Advisory Council and other relevant stakeholders to agree regional fisheries management measures. This would mean that industry will be operating under a more appropriate management regime, rather than a one size fits all approach. This will include, if scientifically justified, agreeing the use of the high survivability and de minimis exemptions in a regional Discard Plan. These exemptions are designed to help fishermen operate under the pelagic landing obligation.

**c. Monitoring and enforcement**

The current monitoring and enforcement regime is not suitable to ensure compliance with the pelagic landing obligation as monitoring is primarily focused on land based checks rather than at sea monitoring. As such, we propose that a revised system of monitoring and enforcement will be introduced from 1 January 2015 which will apply to all English vessels affected by the pelagic landing obligation. Adequate enforcement of the pelagic landing obligation, ensuring compliance, is necessary to secure any uplift in quota, as it will only be awarded if fishermen are no longer discarding.

There are no proposed changes to the recording requirements of the English pelagic industry. This includes the completion of fishing e-logs for all pelagic vessels over 12 metres, paper logbooks for vessels between 10-12 metres in length and landing declarations and sales notes for vessels under 10 metres in length. Industry will however have to comply with any changes to
recording requirements through amendments to the Control Regulation as part of the Omnibus proposals\textsuperscript{10}.

For the purposes of monitoring and enforcing the landing obligation Member States are required to respect the principle of efficiency and proportionality\textsuperscript{11}. The section of the fleet which poses the greatest risk to fishing mortality is the over 24 metre vessels as they accounted for 90\% of the catch in 2012 (Table 2, Annex A). It should be noted that one over 24 metre vessel has since left the English fishing fleet (in February 2013). The quota assigned to this vessels fishing licence was transferred to another English over 24 metre pelagic vessel. Therefore, the total annual catch and risk to fishing mortality, of the over 24 metre group will remain unchanged despite there being one less vessel operating.

As such, in our risk-based approach we propose that the 3 vessels over 24 metres in length would be required to fit and run Remote Electronic Monitoring (REM) systems. REM systems use cameras to offer a complete record of fishing levels and catch handling. A Monitoring Reference fleet and will provide sufficient data to check compliance across the remainder of the pelagic fleet, covering a proportionate percentage of the vessels under 24 metres in length. The self recording of catches and discards by those vessels in the monitoring reference fleet will be validated by additional at sea and onshore monitoring. The at sea monitoring may involve observers or REM systems.

The vessels within the monitoring reference fleet may change with the perceived risk of discarding. The information gathered through the monitoring reference fleet will be used to create a profile of catches covering the pelagic industry. This information will then be used to evaluate overall compliance with the landing obligation and inform future inspections, so that enforcement is targeted on those sections of the fleet which are thought to provide the greatest risk of non-compliance with the landing obligation.

d. Catch management

Under this policy option industry will be required to do the minimum necessary to comply with the relevant EU regulations for separate storage and recording of catch below MCRS whilst at sea.

Catches will be subject to specific regulations depending on the market they enter. Under this option Defra will issue guidance to registered landing ports on the necessary requirements for each new market. This will ensure that industry is aware of their responsibilities under a landing obligation.

As discarding in the English pelagic sector is low the need for additional onshore management in line with the pelagic landing obligation is expected to be minimal.

\textsuperscript{11} Article 15 (13) of the CFP basic regulation
3. Costs and benefits of proposed policy option

This section outlines the costs and benefits to Government and industry of the preferred policy option (option 1) compared to the do nothing option (option 0). These costs and benefits have been monetised as far as possible. Costs and benefits are calculated over a 10 year period as per Green Book guidance. Therefore, the analysis period is 2015-2024.

3.1 Assumptions

- 10 year appraisal period;
- 3.5% discount rate;
- 2013 prices and 2015 base year; and

3.2 Costs

The proposed option makes the changes necessary to implement the pelagic landing obligation on a proportionate and risk based approach, avoiding gold plating and ensuring least cost to industry. However, there are a number of limited costs incurred by industry and Government, although our analysis shows these costs to be minimal. In fact, the gross cost to industry is assessed to be far below £1 million per year and therefore meets the RPC low cost fast track requirements.

Industry

The vessels taking part in the monitoring schemes for enforcement (the 3 vessels over 24 metres in length and those vessels in the monitoring reference fleet) will be subject to additional burdens from the amended enforcement regime. There is no cost to vessels which are not directly involved. The vessels over 24 metres in length (currently 3) which are required to run REM systems will need to be docked to have the systems fitted and for the swapping of hard-drives. This can be managed around the current fishing patterns of the vessels, ensuring they are not subject to a cost from loss of fishing time. However, the presence of the skipper and/or vessel owner is required for a proportion of the REM system fitting. Expert opinion from MMO Catch Quota trials (which monitor vessel catches through REM systems) estimate that this will take 1 day (assumed 7.5 hours) per vessel which will cost industry £1,170 (£390 per vessel), based on an average wage of £52 p/h. Over the appraisal period this cost will be incurred in 2015 and 2020 (as the REM systems have a 5 year lifetime).

Those vessels taking part in the monitoring reference fleet will have to intermittently undergo at-sea observations, to validate self recorded information of catches. Expert opinion from those involved in the Cefas observer program (a program which measures the retained and discarded portions of catch by onboard observers) has shown that there is an inconvenience burden to industry of hosting an observer onboard, but this does not pose a financial cost as it does not disrupt fishing activities. To validate this assumption we are seeking additional information from industry on the costs they incurred from hosting an observer onboard through the associated consultation. All direct costs associated with an observer program such as wages, accommodation and food costs are met by Government.

12 Labour costs include NI, employer pension contributions and overheads
There are no costs to industry as a result of the proposed changes to quota management as the proposed changes involve a change to Government systems only. Industry will be given greater flexibility in how they manage their quota, but it will be done within the current operational systems.

Industry will contribute to the regionalisation process through Advisory Councils (ACs). This activity is voluntary and the Pelagic AC, which is made up of representatives from the pelagic industry, is already operational; therefore this does not pose an additional cost to industry. ACs will also receive EU funding to support their ability to contribute to regionalisation discussions.

Industry will not incur a cost from our proposals on catch management as we are proposing that industry do the minimum to comply with the various EU regulations regarding the management of catch at sea and on land as there are no additional burdens on industry compared to the baseline option 0.

Table 3: Quantified cost to business - Annual cost, present value cost and estimated annual net cost to business (EANCB).

<table>
<thead>
<tr>
<th>Description</th>
<th>£</th>
<th>£(m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost from installation of REM systems in 2015 and 2020 (2013 prices)</td>
<td>2,340</td>
<td>0.00234</td>
</tr>
<tr>
<td>Present value cost (2013 prices 2015 base year)</td>
<td>2,155</td>
<td>0.00216</td>
</tr>
<tr>
<td>EANCB (2009 prices and 2010 base year)</td>
<td>193</td>
<td>0.00019</td>
</tr>
</tbody>
</table>

**Government**

The costs to Government from this policy are either met by the reallocation or reprioritisation of current resources. As such, there are no additional costs to Government. There is the potential for opportunity costs as a result of reprioritisation, but we have prioritised to ensure that the options which give the maximum benefits receive adequate resources, reflecting the change in overall fisheries management policy. For completion we outline the detailed costing of the proposed changes to illustrate how these can be met by current resources.

This policy option proposes changes to monitoring and enforcement activities to make the regime more appropriate to the enforcement of the pelagic landing obligation. However, these changes will not represent any additional cost to government as the current enforcement budget will be redirected from the current land based monitoring scheme to more evenly cover land and at sea monitoring of catches as proposed here. The current MMO pelagic monitoring and enforcement budget is approximately £658,000 per annum. This budget will be used to enforce the new regime, including funding the REM monitoring of the 3 large pelagic vessels over 24 metres in length and the monitoring reference fleet which will cover the remainder of the fleet.

The costs associated with using an REM system for monitoring and enforcement on a typical over 24 metre vessel are shown in Table 4. These costs have been separated into repeated annual and ‘one off’ costs. As the REM systems have a 5 year lifetime Government will incur a cost in years 1 and 6 of the pelagic landing obligation of £31,500 cost in 2015 and 2020 of £31,500 (£63,000 in total) from purchasing and installing the REM systems on the 3 over 24
metre vessels. As this occurs every 5 years it is not treated as a transition cost. Government will also incur an annual cost of £20,070 from running the 3 REM systems and analysing 10% of the footage to enforce the landing obligation.

Table 4. REM purchase, running and analysis costs per vessel.

<table>
<thead>
<tr>
<th>REM/CCTV costs</th>
<th>Cost per vessel (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Years 1 and 6</td>
</tr>
<tr>
<td>Cost of the REM v4.5 system hardware and peripherals (cameras, cables, sensors etc)</td>
<td>8,000</td>
</tr>
<tr>
<td>Installation cost</td>
<td>2,100</td>
</tr>
<tr>
<td>Portable hard drives</td>
<td>400</td>
</tr>
<tr>
<td><strong>Total purchasing and instillation cost</strong></td>
<td><strong>10,500</strong></td>
</tr>
<tr>
<td>Annual software licence for REM record and EM interpret</td>
<td>1,690</td>
</tr>
<tr>
<td>Estimated annual maintenance costs</td>
<td>450</td>
</tr>
<tr>
<td>Cost of analysis based on average hours spent to undertake 10% analysis at cost of £45/hr plus 30% to cover non-labour costs such as overheads and employer contributions such as pensions and National insurance</td>
<td>4,550</td>
</tr>
<tr>
<td><strong>Total annual costs</strong></td>
<td><strong>6690</strong></td>
</tr>
<tr>
<td>Total cost per vessel</td>
<td>£17,190</td>
</tr>
<tr>
<td><strong>Total for 3 vessels</strong></td>
<td><strong>£51,570</strong></td>
</tr>
</tbody>
</table>

Source: MMO Catch quota trails

To monitor the remainder of the pelagic fleet Government will undertake at-sea observations to validate the self recorded catch data from the fishermen. As the vessels under 24 metres in length accounted for only 10% of the total fishing mortality in 2012, we will only observe up to a 10% sample of the fishing activity of these vessels\(^\text{13}\). The cost of observing 5-10% of the fishing activity is estimated to be in the range £65,626 - £131,250 annually (Table 5). This is based on an average cost of £350 per observer per trip, which is the cost incurred by Cefas as part of the observer program. This covers all costs associated with placing an observer onboard a fishing vessel including wages, accommodation and food. To further focus our monitoring and enforcement on those sections of the under 24 metre fleet which pose the greatest risk we are likely to observe a larger proportion of vessels over 10 metres in length, as they accounted for 8% of fishing mortality, than the under 10 metre vessels, which accounted for only 2% of fishing mortality. Therefore, our best estimate, based on observing 5% of under 10 metre vessels and 10% of 10-25 metre vessels, is £78,855. These are not additional costs to Government and will be met through a reallocation of costs between the old monitoring and enforcement regime to this new one. This analysis is only to show the scale of the costs of the proposed monitoring regime.

It is anticipated that up to 90% of these costs could be co-financed through EU funding, through the European Maritime and Fisheries Fund (EMFF) and Data Collection Framework (DCF).

\(^{13}\) We will be analysing 10% of the REM footage obtained from the over 24 metre vessels, which accounted for 90% of fishing mortality in 2012.
However, as the EMFF and DCF are still being negotiated this IA assumes that these costs will have to be met by government.

Table 5. Cost of observing vessels in the monitoring reference fleet based on 2012 fishing activity.

<table>
<thead>
<tr>
<th>Vessel length</th>
<th>No. Of vessels landing &gt; 5t</th>
<th>No. of key fishing days*</th>
<th>Cost to Government per trip</th>
<th>Cost of observing sample of key fishing days per annum</th>
<th>5% sample of key fishing days</th>
<th>10% sample of key fishing days</th>
<th>5% &lt; 10m and 10% for &gt; 10m sample (best estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10m</td>
<td>60</td>
<td>2994</td>
<td>£350</td>
<td>£52,395</td>
<td>£104,790</td>
<td>£52,395</td>
<td></td>
</tr>
<tr>
<td>10.0-11.99m</td>
<td>3</td>
<td>153</td>
<td>£350</td>
<td>£2,678</td>
<td>£5,355</td>
<td>£5,355</td>
<td></td>
</tr>
<tr>
<td>12-23.99m</td>
<td>6</td>
<td>603</td>
<td>£350</td>
<td>£5,335</td>
<td>£21,105</td>
<td>£21,105</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>3,750</td>
<td>NA</td>
<td>£65,625</td>
<td>£131,250</td>
<td>£78,855</td>
<td></td>
</tr>
</tbody>
</table>

* Key fishing days are the number of fishing days in months which account for more than 10% of total landings

Source: MMO analysis of 2012 UK fisheries activity data (IFISH).

The proposed changes to the quota management system for all sectors of the pelagic industry are proportionate to current quota management. As such, the new quota management schemes will be implemented by redirecting resources from the current, to the new quota management scheme representing no additional cost to Government. For example, instead of the MMO setting and managing monthly catch limits they may set and manage catch limits over 2 months or longer.

The proposed catch management measures will not present an additional cost to Government. The information campaigns and engagement activities with industry to raise awareness of the effects of the pelagic landing obligation will align with pre-planned events, making optimal use of current resources and limiting Government cost and any additional burden will be met through reprioritisation of current resources.

3.3 Benefits

Industry

Under the new CFP basic regulation, a fundamental change will be made to the way total allowable catches (TACs) will be calculated. Previously, the agreed TAC accounted for an assumed level of discarding. This meant that the fishing industry received quotas which were less than total allowable catch. Under the landing obligation, as discarding will no longer be occurring, the TAC is likely to be set at a higher level (known as a quota uplift). The English pelagic fishing industry will benefit from this quota uplift as they will be able to land and sell more fish. This uplift would be available from 2015 for those stocks subject to the pelagic landing obligation. This uplift is not guaranteed, however this policy option increases the possibility in accessing any uplift in total allowable catch by ensuring adequate enforcement of the landing obligation.
To illustrate the potential benefit the English pelagic industry could gain from an uplift in TAC at EU level we have considered the STECF English discard rates. Initial estimates suggest the total quota uplift for pelagic species could result in an additional 1,078-1,437 tonnes of fish being landed and sold (Table 6). This range is based on fishermen receiving an uplift equal to 75-100% of the discard rate. The turnover that fishermen could gain from the additional landing is estimated to be £0.8 - £1.4 million depending on the average market price and magnitude of quota uplift. This analysis does not include quota uplift from sprat or sardine as no STECF discard data is available for these species in 2012. Therefore, this analysis is likely to be an underestimate of the total benefit. As this benefit is not certain the figures in Table 6 are presented for illustrative purposes and are not included in the net present value calculations.

Under the landing obligation even undersized fish will be sold into the ‘not for human consumption’ food chain, although at a price to ensure that a market is not incentivised. Industry will be supported in the transition to operation under the pelagic landing to maximise turnover compared with the do nothing approach.

Table 6. Estimated quota uplift and annual expected turnover benefit.

<table>
<thead>
<tr>
<th>Species name</th>
<th>Pelagic catches (t)</th>
<th>STECF discard rate (%)</th>
<th>Estimated quota uplift (t)</th>
<th>Average annual price per t (£)</th>
<th>Estimated turnover from quota uplift (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>75% 100% Min Max</td>
<td>75% 100% Min Max</td>
<td></td>
</tr>
<tr>
<td>Mackerel</td>
<td>19,540</td>
<td>5.8</td>
<td>850 1,133 863 897</td>
<td>734 762 978 1,017</td>
<td></td>
</tr>
<tr>
<td>Herring</td>
<td>23,184</td>
<td>1.0</td>
<td>174 232 369 733</td>
<td>64 127 86 170</td>
<td></td>
</tr>
<tr>
<td>Horse Mackerel</td>
<td>13,156</td>
<td>0.5</td>
<td>49 66 320 474</td>
<td>16 23 21 31</td>
<td></td>
</tr>
<tr>
<td>Blue Whiting</td>
<td>1,590</td>
<td>0.4</td>
<td>5 6 222 -</td>
<td>1 0 1 0</td>
<td></td>
</tr>
<tr>
<td>Sprat</td>
<td>4,945</td>
<td>-</td>
<td>0 0 160 198</td>
<td>- - - -</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>-</td>
<td><strong>1,078 1,437</strong></td>
<td><strong>815 912 1,078 1,437</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source landings data: Analysis of 2012 UK fisheries activity data (IFISH).
Source average price data: Analysis of 2012 UK fisheries activity data (IFISH).
STECF: Scientific, Technical and Economic Committee for Fisheries

More appropriate quota management, as proposed under this policy option, will benefit all sectors of the pelagic fishing industry by introducing greater flexibility in how quota is allocated and managed. This will ultimately lead to higher turnover for the pelagic industry than would be the case under the baseline option. The added flexibilities may allow vessels to fish their full quota allocation, and avoid the risk of losing quota at the end of each month or year. It will also give them the opportunity to fish at the optimal time and under optimal conditions. Industry will also be granted full access to the available quota flexibilities available under the reformed CFP basic regulation. These flexibilities will help fishermen to more easily match their catches with quota, and allow them to operate under a landing obligation. The uncertainty surrounding the volume of catch affected and the market conditions means it is not possible to quantify these benefits.
Industry will benefit from the proposed regional fisheries management under this policy as the management rules will be more appropriate to the pelagic fishery, improving efficiency and turnover. For example, rules on discarding will be developed by Member States operating in the pelagic fishery and will therefore be more tailored to the English pelagic industry. Faster decision making at regional level will also reduce the time needed to renegotiate changes to inappropriate rules.

In addition, industry will be able to access specific exemptions to the landing obligation under regionalisation if they are scientifically justified. These include the high survivability and de minimis exemptions. Under the de minimis exemption fishermen can discard up to 5% of total annual catches of quota species if scientific evidence indicates that increases in gear selectivity are very difficult to achieve, or to avoid disproportionate costs of handling unwanted catches. Again, this will benefit industry by allowing them to more easily operate under a landing obligation and prevent the closure of fisheries.

In addition to the increased possibility of accessing any uplift in TAC, adequate enforcement of the pelagic landing obligation will also significantly reduce the risk of EU sanctioned penalties, as stated under the Control Regulation\(^14\), for non compliance on industry. It is not possible to illustrate the magnitude of these sanctions, as there are no previous examples of Commission infractions for similar non compliance in England. For illustrative purposes we have included examples in Annex C.

**Government**

There is no financial benefit to Government from implementing the new enforcement regime as it is merely a reallocation of resources from the previous regime (land based) to the new one (sea and land based) and therefore the overall impact is zero cost to Government. Under this policy option the UK Government will be adequately enforcing the pelagic landing obligation, and therefore significantly reducing the risk of EU sanctioned infractions. If the EU is not satisfied with the level of enforcement the UK is applying the Commission could apply to the European Court of Justice to recommend a financial sanction\(^15\). Detail of the level of possible penalties is included in Annex C.

Government will benefit from more informed and simpler fisheries management that will result from the changes proposed under regionalisation. More efficient and quicker negotiation of fisheries issues at regional, rather than EU level, will maximise Government efficiency in fisheries management. We are confident that this will represent a benefit to Government although we are unable to monetise the magnitude of this benefit.

---


\(^15\) In accordance with guidance set out in its Communication reference SEC (2005)1658 as amended by SEC (2010) 923. This guidance remains current although an amending Communication is proposed to update and amend slightly the financial sanction figures.
3.4 Summary of option 1 costs and benefits

Table 7: Summary costs and benefits of option 1 against baseline (option 0)

<table>
<thead>
<tr>
<th>Intervention areas</th>
<th>Costs</th>
<th>Benefits</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross cutting (from the proposed changes in a combination</td>
<td>No additional costs</td>
<td>More efficient fisheries management through appropriate control fishing mortality through newly</td>
<td>Increased opportunity to access any uplift in TAC. This is estimated to</td>
</tr>
<tr>
<td>of fishery management areas)</td>
<td>No additional costs</td>
<td>agreed limits of total allowable catch, and aligned incentives.</td>
<td>provide additional turnover to the English pelagic industry in the range</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>£0.8 - £1.4 million, depending on the average market price and magnitude of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>quota uplift.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Significant benefits come from minimising risk of EU Commission penalties.</td>
<td></td>
</tr>
<tr>
<td>Monitoring and enforcement</td>
<td>Reallocation of costs</td>
<td>Significant benefit from minimising risk of EU Commission infractions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>from land based to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>land and sea based</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>regime and so no</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>additional costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small cost from compliance with monitoring schemes estimated to be £1,170 in 2015 and 2020.</td>
<td></td>
</tr>
<tr>
<td>Quota Management</td>
<td>No additional costs</td>
<td>No additional costs</td>
<td>There will be a benefit to all sectors of the pelagic industry from</td>
</tr>
<tr>
<td></td>
<td>No additional costs</td>
<td>No additional costs</td>
<td>increased flexibility in the quota management systems, allowing industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No additional costs</td>
<td>to more easily match catch to available quota.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full access to the quota flexibilities, 9% interspecies and 10% banking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and borrowing will also allow industry to more</td>
</tr>
<tr>
<td><strong>Regionalisation</strong></td>
<td>No additional</td>
<td>No additional</td>
<td>Small benefit to Government through more efficient, and quicker, negotiation of fisheries issues at regional rather than EU level.</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Significant but non monetised benefit as fishermen are operating under more appropriate regional management measures, rather than a ‘one size fits all’ approach.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>In addition, access to the <em>de minimis</em> and high survivability exemptions, were scientifically justified will allow industry to more efficiently operate under a landing obligation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>This will result in a significant financial benefit to industry from avoiding disproportionate costs, but it is currently not monetised due to uncertainty surrounding which exemptions will be granted or needed by the pelagic industry.</td>
</tr>
</tbody>
</table>

| **Catch management** | No additional as will use existing opportunities. | No additional | No additional | Small non monetised benefit from optimal use of additional catch landed. |
Small firm impact
No firms are exempt from this policy as it is intended to ensure that the regime the industry is working under reflects the landing obligation, an EU objective, and that it is implemented in the most cost effective and efficient way.

One in Two Out status
The pelagic landing obligation is an EU obligation as defined in the reformed CFP basic regulation, with no further implementing legislation necessary. The policy objectives are to implement the pelagic landing obligation in the most efficient and cost effective way, ensuring minimum cost to industry, and is therefore not gold plating. As such, this measure does not fall under one in two out rules.

Risks and mitigation
A series of potential risks that could prevent successful implementation of the proposed policy option and details of how we will mitigate these are included in Annex D.

Associated public consultation
This Impact Assessment will accompany a consultation which can be found on Defra’s consultation website: www.gov.uk/defra. The questions in the consultation which are specifically related to this Impact Assessment are:

Q. Do you expect to incur new costs from the new monitoring and enforcement regime? If so, please provide details on expected costs and any supporting evidence.

Q. Do you have any comments or evidence on the costs and benefits presented in the associated Impact Assessment. This includes, but not limited to, any costs or benefits associated with:
- hosting an observer onboard;
- familiarisation with the new monitoring and enforcement regime; and
- accessing non human consumption markets for fish below MCRS.
If so, please provide details and any supporting evidence.
4. Conclusion

The analysis in this Impact Assessment indicates that the scale of the issues involved in implementing the pelagic landing obligation in England are relatively small. This is because the discard rates in the English pelagic fishery are very low as indicated by the available Scientific Technical and Economic Committee for Fisheries (STECF) data (Table 1, Annex A) and evidence direct from industry. The reasons why the discard rates are low are two-fold. Firstly, the nature of the pelagic fishery means that it is relatively simple to minimise catch of unwanted species as pelagic fish tend to shoal together. Secondly, the pelagic industry is already operating under high grading and slipping bans for most quota species which prevents discarding of fish through these processes. The low discard rates mean there will be a minimal volume of unwanted catch being brought ashore under the pelagic landing obligation.

Our preferred policy option (option 1) is a proportionate response to the issues which arise, changing the current system to fit the new CFP rules, while not gold plating and ensuring minimal cost to industry. The Regulatory Policy Committee have agreed that the gross annual cost to industry of our proposed policy is less than £1 million, and therefore meets the requirements of the low cost fast track. The cost to industry is £1,170 in 2015 and 2020 (years 1 and 6 of the pelagic landing obligation) from the instillation and replacement if the REM systems on the over 24m vessels.

In addition, the changes proposed are designed to maximise potential benefits to industry. Although we are confident of the benefits that will be gained it has not been possible to monetise many of those received by industry. The most tangible example is the uplift in quota that effective implementation can help us secure. This will allow the English industry to land and sell, more fish, effectively converting fish that would have been thrown away dead into onshore turnover when the pelagic landing obligation comes into force.

All decisions on which policy option will be undertaken will be supported by a revised Impact Assessment that takes into account the full range of evidence gathered through consultation.
Contents page of Annexes

**Annex A**: Discarding and the English pelagic industry.

**Annex B**: Other policy options not analysed in this Impact Assessment.

**Annex C**: Possible EU Commission sanctions for non compliance to the landing obligation.

**Annex D**: Risks and mitigation of the implementation of the pelagic landing obligation.
Annex A: Discarding and the English pelagic industry

Introduction to discarding

Discarding is the return of a proportion of catch to the sea. This includes returning catch to the sea once it has been brought onboard the vessel and releasing catch from fishing gear while still in the water (known as slipping).

Previously it has not been illegal for the fishing industry to discard fish, except for the pelagic industry which is already operating under high grading and slipping bans. These practices are banned as fish that are returned to the sea through high grading or slipping have been scientifically shown to have a low rate of survival. These bans have meant that the levels of discarding in the pelagic fishery are historically low, making it a relatively ‘clean fishery’. Once the various landing obligations come into force for each fishery it will be illegal to discard fish in any fishery though any process unless specific exemptions are granted.

To help determine the most effective solution to prevent discarding it is important to understand those issues that result in discarding in the first instance. Defra’s ‘Fishing for the Markets’ report published in 2011 and the EU Commission’s own Impact Assessment on Discard Reducing Policies identified the following reasons why fishermen discard:

- Catching fish which they do not have quota for and are therefore unable to land and sell;
- Catching species which are damaged or less profitable;
- Catching undersize fish which are not legally permitted to be sold;
- High grading;
- Technical regulations intended to protect stocks that have unintended consequence; and
- Absence or limited accessibility to alternative markets for fish which are unpopular or cannot be sold for human consumption.

The policy options identified in this Impact Assessment pick up on the challenges that each of these issues raised in terms of the implementation of the landing obligation and the movement from the old to the new regime.

Scientific evidence on discard rates

Scientific information on discard rates has been collected through a number of processes, covering the demersal and pelagic fishing fleets across a number of Member States. The discard rates in some fisheries, such as the demersal fishery, are relatively well understood as there are high levels of validated scientific information. However, there is a lack of extensive discard data for the English pelagic fishery. Historically the sectors were evenly observed but the low level of recorded discarding in the pelagic fishery meant that it was a better use of resources to prioritise information gathering in the demersal fishery.

---

1 High grading is the practice of selectively fishing so that only the best quality fish are brought ashore.
2 Slipping occurs in purse-seining fisheries, where fish are scooped into large nets. Fish can be deliberately released from the net instead of being brought onboard the ship.
Pelagic fisheries are known as ‘clean fisheries’ because the available scientific evidence, and information from industry, indicates that the discard rates in pelagic fisheries are very low. The reasons why discard rates in the pelagic industry are low are two-fold. Firstly, the nature of the pelagic fishery means that it is relatively easy to minimise catch of unwanted species as pelagic fish tend to shoal together. Secondly, the pelagic industry is already operating under high grading and slipping bans for most quota species which prevents discarding of fish through these processes.

The English pelagic industry

There were 644 English registered pelagic vessels operating in 2012 which caught 63,207 tonnes of pelagic fish (Table 2). This resulted in landings with an approximate value of £17m. The ports where the English fleet landed the most significant proportion of catch were Ijmuiden, Plymouth, Scheveningen, Brixham, Teignmouth and Las Palmas (Table 8). These ports accounted for over 97% by volume and over 93% by value of total landings of pelagic species by all English vessels in 2012. The majority of the landings into ports outside England are made by the large over 24 metre vessels.

In 2012 landings of herring (37%) and mackerel (31%) were the most important by weight for the English pelagic industry (Figure 1). However, mackerel is the most important pelagic stock by value due to the higher average market price (Figure 2).

Table 2: 2012 English fleet landings of pelagic species subject to the pelagic landing obligation.

<table>
<thead>
<tr>
<th>Length Group</th>
<th>Live Weight (t)</th>
<th>Value (£)</th>
<th>No. Vessels</th>
<th>No. Vessels landing &gt;5t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>landings</td>
<td>% of total</td>
<td>landings</td>
<td>% of total</td>
</tr>
<tr>
<td>0-10m</td>
<td>1,318</td>
<td>2</td>
<td>1,191,177</td>
<td>7</td>
</tr>
<tr>
<td>10.1-11.99m</td>
<td>396</td>
<td>1</td>
<td>104,365</td>
<td>1</td>
</tr>
<tr>
<td>12-14.99m</td>
<td>4,448</td>
<td>7</td>
<td>1,000,534</td>
<td>6</td>
</tr>
<tr>
<td>15-23.99m</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24m+</td>
<td>57,045</td>
<td>90</td>
<td>14,708,732</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>63,207</td>
<td>90</td>
<td>17,004,808</td>
<td>86</td>
</tr>
</tbody>
</table>

Source: MMO analysis of 2012 UK fisheries activity data (IFISH).
*These 60 vessels accounted for 75% of total landings for the under 10 metre sector.
Table 3: English fleet landings, by port, of pelagic quota species (greater than 5 tonnes per year) in 2012.

<table>
<thead>
<tr>
<th>Port</th>
<th>Volume (t)</th>
<th>% of total</th>
<th>Value (£)</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ijmuiden</td>
<td>39,072</td>
<td>62</td>
<td>8,525,207</td>
<td>50</td>
</tr>
<tr>
<td>Plymouth</td>
<td>9,374</td>
<td>15</td>
<td>3,321,800</td>
<td>20</td>
</tr>
<tr>
<td>Scheveningen</td>
<td>7,533</td>
<td>12</td>
<td>2,104,694</td>
<td>12</td>
</tr>
<tr>
<td>Brixham</td>
<td>2,812</td>
<td>4</td>
<td>778,801</td>
<td>5</td>
</tr>
<tr>
<td>Teignmouth</td>
<td>1,722</td>
<td>3</td>
<td>325,886</td>
<td>2</td>
</tr>
<tr>
<td>Las Palmas</td>
<td>1,106</td>
<td>2</td>
<td>788,885</td>
<td>5</td>
</tr>
<tr>
<td>Leigh-On-Sea</td>
<td>452</td>
<td>1</td>
<td>5,6097</td>
<td>0.3</td>
</tr>
<tr>
<td>Newlyn</td>
<td>296</td>
<td>0.5</td>
<td>278,957</td>
<td>2</td>
</tr>
<tr>
<td>St Ives</td>
<td>140</td>
<td>0.2</td>
<td>206,234</td>
<td>1</td>
</tr>
<tr>
<td>Southend-On-Sea</td>
<td>134</td>
<td>0.2</td>
<td>13,680</td>
<td>0.1</td>
</tr>
<tr>
<td>Looe</td>
<td>126</td>
<td>0.2</td>
<td>143,170</td>
<td>0.8</td>
</tr>
<tr>
<td>Mevagissey</td>
<td>112</td>
<td>0.2</td>
<td>210,579</td>
<td>1</td>
</tr>
<tr>
<td>Exmouth</td>
<td>93</td>
<td>0.1</td>
<td>20,274</td>
<td>0.1</td>
</tr>
<tr>
<td>Torquay</td>
<td>40</td>
<td>0.1</td>
<td>37,291</td>
<td>0.2</td>
</tr>
<tr>
<td>Great Yarmouth</td>
<td>29</td>
<td>0.05</td>
<td>19,782</td>
<td>0.1</td>
</tr>
<tr>
<td>Polperro</td>
<td>24</td>
<td>0.04</td>
<td>36,096</td>
<td>0.2</td>
</tr>
<tr>
<td>Felixstowe</td>
<td>22</td>
<td>0.03</td>
<td>8,702</td>
<td>0.1</td>
</tr>
<tr>
<td>West Mersea</td>
<td>18</td>
<td>0.03</td>
<td>15,367</td>
<td>0.1</td>
</tr>
<tr>
<td>Port Isaac</td>
<td>10</td>
<td>0.02</td>
<td>3,521</td>
<td>0.02</td>
</tr>
<tr>
<td>Sennen</td>
<td>10</td>
<td>0.02</td>
<td>14,751</td>
<td>0.1</td>
</tr>
<tr>
<td>Hayle</td>
<td>9</td>
<td>0.01</td>
<td>14,294</td>
<td>0.1</td>
</tr>
<tr>
<td>River Fal - Falmouth</td>
<td>8</td>
<td>0.01</td>
<td>9,640</td>
<td>0.1</td>
</tr>
<tr>
<td>Rochford</td>
<td>8</td>
<td>0.01</td>
<td>1,060</td>
<td>0.01</td>
</tr>
<tr>
<td>River Fowey</td>
<td>8</td>
<td>0.01</td>
<td>10,856</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total of vessels landing &gt;5 t</strong></td>
<td><strong>631,568</strong></td>
<td><strong>100</strong></td>
<td><strong>16,945,625</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Total of all vessels</strong></td>
<td><strong>63,207.2</strong></td>
<td><strong>99.9</strong></td>
<td><strong>17,004,808</strong></td>
<td><strong>99.7</strong></td>
</tr>
</tbody>
</table>

Source: MMO analysis of 2012 UK fisheries activity data (IFISH).
Figure 1: Volume of English fleet landings of pelagic species in 2012.

Source: MMO analysis of 2012 UK fisheries activity data (IFISH).

Figure 2: Value of English fleet landings of pelagic species in 2012.

Source: MMO analysis of 2012 UK fisheries activity data (IFISH).
Discarding in English pelagic fisheries

The available data from the Scientific, Technical and Economic Committee for Fisheries (STECF), shown in Table 1, and the anecdotal evidence provided from the industry, indicate that discard rates in the pelagic fishery are very low. Discarding is minimal in the pelagic industry as pelagic species tend to shoal together; meaning by-catch of non target species is relatively low as they are easily avoided. Also, the high grading and slipping bans mean that the pelagic fishery cannot discard through this process under the current regime.

Table 1: 2012 STECF discard rates for pelagic species in the English pelagic industry.

<table>
<thead>
<tr>
<th>Species</th>
<th>Discard rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mackerel</td>
<td>5.8%</td>
</tr>
<tr>
<td>Herring</td>
<td>1.0%</td>
</tr>
<tr>
<td>Horse mackerel</td>
<td>0.5%</td>
</tr>
<tr>
<td>Blue whiting</td>
<td>0.4%</td>
</tr>
<tr>
<td>Boarfish</td>
<td>Not included in survey</td>
</tr>
<tr>
<td>Sardine</td>
<td>Not included in survey</td>
</tr>
<tr>
<td>Sprat</td>
<td>No records available*</td>
</tr>
<tr>
<td>Swordfish</td>
<td>Not included in survey</td>
</tr>
</tbody>
</table>

Source: STECF discard data 2012
* This species was included in the survey but the discard rates were not recorded.
Annex B: Other policy options not analysed in this Impact Assessment

Under some of the 4 key fisheries management areas additional policy options were considered but these have not analysed further as initial consideration demonstrated that they were not realistic. The reasons for this were that they induced a disproportionate approach for the scope of the problem under consideration including resulting in a disproportionate cost, if they were not achievable under defined time restrictions or if it represented gold plating of EU legislation.

Quota management
To ensure that all parts of the pelagic fleet are able to access the full range of quota flexibilities within the CFP basic regulation the quota management process could be overhauled for the under 10 metre and non sector vessels, with completely new management arrangements implemented. Examples of what could be done to improve quota management in these sectors:

a) Create a PO for the non sector and under 10 metre vessels. This would increase efficiency within the quota management system, allowing these sectors to benefit from increased flexibility within the system.

b) Provide annual quota allowances to those vessels with an interest in managing their own quota.

Defra consulted on similar policy options in 2010, and the response was not supportive of such wholesale changes. In any event, Defra is already supporting pilot work to enable cooperative groups of under 10 metre and non sector vessels to manage their own quotas and benefit from the increased flexibility that brings. This work, and work to consider further changes, will continue.

Regionalisation
There is no additional policy option that is achievable in the time constraints of the pelagic landing obligation.

Enforcement and monitoring
One option, not proposed in this Impact Assessment, would be to employ 100% monitoring coverage of the pelagic fleet, rather than partial or reference fleet coverage. The vessels with the largest catching capacity (currently 3 vessels over 24 metres in length) would be required to fit and run an REM system. The rest of the fleet, including the under 10 metre vessels would be required to fully document catches using logbooks (or e-logbooks). This would result in better enforcement and compliance to the pelagic landing obligation across the entire fleet as well as enforcing requirements to fish at MSY as well as providing important scientific data on catch levels and composition.

Currently the supply of logbook data is mandated by legislation for all vessels over 10 metres in length, but there is no statutory obligation for vessels under 10 metres in length to complete a fishing logbook. It would be necessary to legislate if we wished to bring in a logbook requirement for this sector of the fleet. This policy would affect around 600 English vessels
which target pelagic species. This option would be seen as gold plating and an unnecessary administrative obligation in excess of the minimum EU requirements and financial burden on the inshore fisheries sector which could adversely affect the growth of this business sector.

**Catch management**

Further assistance could be provided to the pelagic industry to prepare for the landing obligation in addition to the measures detailed under option 1. For example, the UK Government could directly intervene in markets at a local level to increase the use for catch below MCRS, or invest in the infrastructure for this catch. This could prove costly and the benefits are expected to be minimal as the impact of the pelagic landing obligation is expected to be relatively small due to low levels of discards (due to high grading and slipping bans, and the shoaling behaviour of pelagic fish) leading to a small increase in the volume of fish being brought ashore.
Annex C: Possible EU Commission sanctions for non compliance to the landing obligation

Adequate enforcement of the pelagic landing obligation will significantly reduce the risk of EU sanctioned penalties for non compliance.

Government

If the EU is not satisfied with the level of enforcement the UK is applying the Commission could apply to the European Court of Justice to recommend a financial sanction in accordance with guidance set out in its Communication reference SEC (2005)1658 as amended by SEC (2010) 923. The estimated level of fines is significant, with a minimum lump sum of €9.666m, which could be increased according to the seriousness of the breach, and possible substantial daily fines of thousands of pounds for continuing non-compliance. This estimate is based on the UK’s GDP. For perspective, in a recent French fishing case the levy applied by the EU for non compliance was a €20m lump sum fine and €58m every six months until the issue is resolved. It is estimated that the risk to Government could be on the order of millions of Euros.

Industry

The EU Commission could impose the following sanctions (under the Control Regulation4) that would pose a direct cost to industry.

i. Suspension or cancellation of EU financial aid, such as EMFF (Article 103);
ii. Closure of fisheries (Article 104);
iii. Deduction of quota (Articles 105 and 107);
iv. Deduction of effort (Article 106);
v. Commission emergency measures which include landing prohibitions (Article 108).

For example, the cost to industry that would be incurred if the Commission penalised the English pelagic fleet by deducting a 5% of quota for all pelagic species (Articles 105 and 107) would be in the range £1.5m – 2.1m, dependent on the average annual market fish price (Table 9). For illustrative purposes, we have estimated a 5% quota reduction as it would be likely that loss in quota would be based on the rate of discarding. In England, the most valuable stock is mackerel and the 2012 STECF reported mackerel discard rate in England is 5.8% (Table 1, Annex A).

---

3 This guidance remains current although an amending Communication is proposed to update and amend slightly the financial sanction figures.
Table 9. 2012 landing of pelagic species in England and annual average price per species

<table>
<thead>
<tr>
<th>Species name</th>
<th>Catches by weight (t)</th>
<th>Loss of catch under 5% quota reduction (t)</th>
<th>Annual average price per tonne (£)</th>
<th>Loss of turnover (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All pelagic species subject to landing obligation</td>
<td>63,462</td>
<td>3,173.1</td>
<td></td>
<td>1,539 – 2,087</td>
</tr>
<tr>
<td>Mackerel</td>
<td>19,540</td>
<td>977</td>
<td>863 - 897</td>
<td>843 - 876</td>
</tr>
<tr>
<td>Herring</td>
<td>23,184</td>
<td>1,159.2</td>
<td>369 - 733</td>
<td>428 - 850</td>
</tr>
<tr>
<td>Horse mackerel</td>
<td>13,156</td>
<td>657.8</td>
<td>320 - 474</td>
<td>210 - 312</td>
</tr>
<tr>
<td>Blue whiting</td>
<td>1,590</td>
<td>79.5</td>
<td>222</td>
<td>176</td>
</tr>
<tr>
<td>Sprat</td>
<td>4,945</td>
<td>247.25</td>
<td>160 - 198</td>
<td>396 - 490</td>
</tr>
</tbody>
</table>

Source: MMO analysis of 2012 UK fisheries activity data (IFISH).
Annex D: Risks and mitigation of the implementation of the pelagic landing obligation

There are a number of risks and assumptions associated with the proposed method of implementing the pelagic landing obligation. However, the proposed policy has been designed to mitigate these as far as possible.

- As fishermen are no longer allowed to discard fish the pelagic landing obligation may result in choke species, or closure of fisheries if fishermen over shoot quota. The proposed policy is designed to maximise the potential to access an uplift in available quota and the added flexibilities to the quota management system are designed to minimise this risk.

- Failure to effectively enforce the landing obligation in English waters, when taken in conjunction with quota uplifts, results in overfishing and negative impacts on stock levels. The proposed enforcement and monitoring regime is designed to limit this possibility. Additionally, it is likely that quota uplift will not be awarded if discarding is thought to be occurring.

- Fishermen, who are currently discarding unwanted fish at sea may dump unwanted fish on the quayside rather than send it to non-human use, leading to a waste problem on land instead of a waste problem at sea. The proposed engagement with industry will help to minimise this risk by informing them of their at sea responsibilities and providing targeted information on how to manage any additional catch brought ashore, such as access to new markets.

- An uplift in TAC may not be agreed at EU level for the pelagic industry. This would result in fishermen operating under catch limits within the framework of a landing obligation without the additional flexibility and incentives that are needed to change behaviours. Our proposal is designed to maximise the potential of accessing any uplift made available through adequate enforcement of the landing obligation and effective science/data collection.

- There may be delays in finalising EMFF funding, which provides financial support for fisheries management. This may mean there is insufficient time to modify English port infrastructure and fishing gear before the new landing obligation provisions enter into force. However, this does not pose a significant risk for the pelagic industry, as the level of adaptation the industry will need to undertake is relatively low due to the low level of discards.

- MMO preparations to introduce the new regulatory framework are not completed on time resulting in non-compliance when the new provisions enter into force. The proposed changes to quota management are proportionate to minimise the risk of delays.