Title:

Reform of Fisheries Management Arrangements - England

Lead department or agency:

Department for Environment, Food and Rural Affairs (Defra)

Other departments or agencies:

n/a

Impact Assessment (IA)

IA No: Defra 1338

Date: 25/03/2011

Stage: Consultation

Source of intervention: Domestic

Type of measure: Other

Contact for enquiries:

Bella Murfin (Tel: 020 7238 5185) Pam Mason (Tel: 020 7238 4932)

Summary: Intervention and Options

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

Fisheries play an important role in providing food, jobs, wealth, and social/cultural benefits, particularly in some coastal communities. The small scale (under-10m) fleet has failed to thrive under successive management regimes, and it faces major challenges. Specifically, the current regime has encouraged an imbalance between capacity and fishing opportunities, putting pressure on smaller businesses. Without Government intervention, further decline is likely, reducing the viability of the surrounding infrastructure and communities. Social, cultural and economic benefits may be lost. The costs to Government associated with centrally managed quota pools for parts of the fleet are likely to rise, or effectiveness of this administration will reduce.

What are the policy objectives and the intended effects?

A more profitable, sustainable, unified fishing industry in the long term. The new management system will empower fishermen to take control of their businesses, plan for the future, and make best use of fishing opportunities. This will bring greater economic reward, and allow greater focus on environmental and social objectives. Benefits associated with small-scale businesses will be preserved (with no specific targets for vessel numbers), whilst minimising impact on the larger scale fleet ("the Sector"). Dispensing with micromanagement will mean lower costs for Government. This policy should improve English fleet management within the current Common Fisheries policy, in ways consistent with UK objectives for CFP reform and has been discussed with key stakeholders who are broadly content with the direction of travel.

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

Two options have been considered against the baseline of doing nothing (maintaining the current fisheries management system):

Option 1 - Modify the system: Facilitate the movement of some under-10m vessels into the Sector and some re-distribution of quota to the remaining under-10m fleet.

Option 2 - Reform the system: Allocate individual access-rights to all vessels; some re-distribution of quota to incentivise community quota groups in order to safeguard the small-scale fleet.

Option 2 is preferred - analysis shows that the benefits associated with this option exceed those with the baseline or option 1.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 7/2011 What is the basis for this review? PIR. If applicable, set sunset clause date: Month/Year

Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?

Yes

<u>Ministerial Sign-off</u> For consultation stage Impact Assessments:

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

Signed by the responsible Minister:

Richard Senya. Date:

29th March 2011

Summary: Analysis and Evidence

Description:

Modify the current fisheries management system

Price Base	PV Base	Time Period	Ne	Net Benefit (Present Value (PV)) (£m)			
Year 2008	Year 2008	Years 10	Low: £1.7m	High: £7.5m	Best Estimate: £4.3m		

COSTS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	-		£116k	£961k
High	-		£1.2m	£9.6m
Best Estimate	£143k		£694k	£5.8m

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

Decrease in revenue/profits to the Sector associated with a re-distribution of Fixed Quota Allocation units (FQAs) (and the related fishing opportunities for quota stocks) held by this part of the fleet, to the remaining under-10m fleet. These costs involve a reduction in operating profit of approximately 2.5% under the best estimate, which amounts to £0.7m or £2.7k per vessel. A one-off transition cost associated with allocating individual FQAs to higher catching vessels.

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

For higher catching vessels in the under-10m fleet, transition into Producer Organisation (PO) membership would require payment of a levy (typically 2-3% of landings value).

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-		£963k	£8.4m
High	-		£1.3m	£11.3m
Best Estimate			£1.1m	£10m

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

Temporary increase in revenue/profits for vessel businesses in the under-10m fleet due to re-alignment of FQAs associated with un-fished quota, plus a re-distribution of FQAs on key target stocks. This represents £0.5-0.7m, or an average benefit of £0.4-0.65k per vessel for the remaining vessels. Cost reductions and increased profits to higher catching vessels, due being allocated individual FQAs represent £0.5m, or an average benefit of £3.8k per higher catching vessel.

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

Management of the under-10m pool likely to be easier and therefore cheaper and more effective in initial years, owing to the additional FQAs secured through the re-alignment of un-fished quota plus a redistribution of FQAs on key target stocks. However, benefits expected to diminish in long term. Small potential benefits to existing members of POs due to additional flexibility associated with new members and the additional FQAs they bring to the PO.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Assumptions: 1. Higher Catching Vessels (HCV) allocated FQAs assumed to benefit from 10% decrease in costs. Scale of this benefit is sensitive to this assumption (decreasing % savings reduce benefits in proportion) but benefits unequivocally positive. 2. Benefits of quota re-alignment/redistribution without management reform will be lost within 5 years due to ongoing overcapitalisation. Benefits relatively sensitive to this assumption but sensitivity analysis shows that relative benefits of options are robust. Risks: POs do not take on new members jeopardising benefits; temporary benefits dissipate more quickly due to reducing Total Allowable Catch and increasing operating costs; could lead to increased discards

Risks: POs do not take on new members jeopardising benefits; temporary benefits dissipate more quickly due to reducing Total Allowable Catch and increasing operating costs; could lead to increased discards across fleet due to change in quota availability in different sectors.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?	England	_					
From what date will the policy be implemented?	01/01/20	01/01/2012					
					Marine Management Organisation (MMO)		
What is the annual change in enforcement cost (£m)?	£0						
Does enforcement comply with Hampton principles?	Yes	Yes					
Does implementation go beyond minimum EU requirements?				N/A			
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)						raded: 6 (2a)	
Does the proposal have an impact on competition?			Yes				
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?				Costs: Ber n/a		efits:	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	Micro	< 20	Small 100%	Med	lium	Large	
Are any of these organisations exempt?	No	No	No	No		No	

Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on?	Impact	Page ref within IA
Statutory equality duties ¹	No	44
Statutory Equality Duties Impact Test guidance		
Economic impacts		
Competition Competition Assessment Impact Test guidance	Yes	43
Small firms Small Firms Impact Test guidance	No	43
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	Yes	43
Wider environmental issues Wider Environmental Issues Impact Test guidance	Yes	44
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	44
Human rights Human Rights Impact Test guidance	No	45
Justice system Justice Impact Test guidance	No	43
Rural proofing Rural Proofing Impact Test guidance	No	45
Sustainable development Sustainable Development Impact Test guidance	Yes	45

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¹ Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Summary: Analysis and Evidence

Description:

Reform the fisheries management system

Price Base	PV Base	Time Period	Net Benefit (Prese	nt Value (PV)) (£m)	
Year 2008	Year 2008	Years 10	Low: £17.5m	High: £18.9m	Best Estimate: £18.2m

COSTS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	-		£116k	£961k
High	-		£1.1m	£9.6m
Best Estimate	£143k		£694k	£5.8m

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

Decrease in revenue/profits to the Sector associated with a re-distribution of FQAs (and the associated fishing opportunities for quota stocks) held by this part of the fleet, to support community quota groups. These costs involve a reduction in operating profit of approximately 2.5% under the best estimate, which amounts to £0.7m or £2.7k per vessel, and reflect a trade-off with the benefits identified below. A one-off transition cost associated with allocating individual FQAs to all under-10m vessels.

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

For higher catching vessels in the under-10m fleet, transition into Producer Organisation membership would require payment of a levy (typically 2-3% of landings value). Transition costs for other vessel businesses in terms of adapting to the new regime of individual FQAs and the development and membership of Community Quota schemes, constitute the other key non-monetised cost.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)			
Low			£2.4m	£20m			
High			£3.3m	£27.3m			
Best Estimate			£2.9m	£24.2m			

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

Majority of additional benefit generated by businesses allocated FQAs and joining Community Quota schemes (£1.5-2.3m, or £1.3-2k per vessel). Allocating FQAs to all other vessels generates bulk of remaining monetised benefits; in addition to the £0.5m benefits to HCVs as in option 1, there are benefits of £0.2-0.3m, or just over £100 per vessel for under-10m vessels not joining community schemes. Small reduction in management costs to Government from dissolving the pool systems, contributes £92k.

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

Potential reduction in discards by under-10m vessels due to greater control and flexibility over fishing activity through individual FQAs; promotion of environmentally and socially sustainable activity through incentives to Community Quota groups focussed on these benefits; potential upstream benefits including in tourist and hospitality industry through maximising unique selling points associated with community fleets.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Assumptions: 1. As option 1 (1). 2. 50% of vessel businesses will join Community Quota schemes. 3. 25% price premium for Community Quota schemes. Sensitivities: Net benefits sensitive to price premium assumption; if low, there is a net financial cost of transferring quota from the sector. The assumption of 25% benefits is thought to be conservative provided that fishermen capitalise on the significant opportunities this option presents (whether as individuals or in community groups).

Risks: Benefits dissipate due to reducing TACs and increasing operating costs; increased pressure on nonquota species; re-allocation of under-fished quota has negative impact on stock levels; Community Quota groups don't realise potential benefits or there is no appetite for them.

Direct impact on bus	iness (Equivalent Annu	In scope of OIOO?	Measure qualifies as	
Costs: n/a	Benefits: n/a	Net: n/a	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?	England						
From what date will the policy be implemented?			01/01/20	01/01/2012			
				Marine Management Organisation (MMO)			
What is the annual change in enforcement cost (£m)?	£10k						
Does enforcement comply with Hampton principles?	Yes						
Does implementation go beyond minimum EU requirements?				N/A			
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)				Traded: Non-trade Annex 6 (2a)			
Does the proposal have an impact on competition?			Yes				
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?					Ben n/a	efits:	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	Micro	< 20	Small 100%	Med	lium	Large	
Are any of these organisations exempt?	No	No	No	No	No No		

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Evidence Base (for summary sheets) – Notes

References - For references, please refer to the footnotes in the Evidence Base.

Annual profile of monetised costs and benefits* - (£m) constant prices

	Y ₀	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉
Transition costs	0.14	- 1	- 2	- 3	- 4	- 5	- 6	- 7	- 0	- 9
Annual recurring cost	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Total annual costs										
Transition benefits										
Annual recurring benefits										
Total annual benefits	2.01	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24

^{*} For non-monetised benefits please see summary pages and main evidence base section

1. INTRODUCTION

Problem under consideration

- 1.1. The English 10m and under (referred to hereafter as under-10m) fishing fleet provides an important source of food and supports local communities. It can be economically, environmentally and socially sustainable, but it is not consistently so, and a current imbalance between available quota and fishing capacity makes it difficult to manage quota within the under-10m pool. This pool provides a source of quota, held by Government, which is accessed via catch limits (usually monthly) by anyone with a commercial under-10m fishing licence. The imbalance is leading to lower monthly catch limits per vessel, some early fisheries closures, and is providing a less stable environment in which to operate.
- 1.2. Fundamental shortcomings in the under-10m fleet management are the main cause of these problems. The resulting low profitability has been accelerated by low quota availability, and further compounded by factors such as high fuel prices and other costs. The shortcomings relate primarily to the nature of the pool system, meaning individual fishermen do not have a right to a predictable share of the allowed catch. This means that they need to be ready, and have the vessel capacity available, to catch amounts of fish that fluctuate unpredictably from one month to the next given the risk that the fishery will close early.
- 1.3. This uncertainty makes it hard for fishermen to effectively plan their businesses. It is difficult for them to get the best prices for catches as they cannot always target stocks at times when market prices are higher. It often leaves fishermen with little time and energy to devote to developing new or better markets. Nor does the pool system go far enough to account for regional differences in fisheries and catching styles. There is an increased incentive to 'fish around the rules' which places a burden on enforcement resources, and puts pressure on fish stocks.
- 1.4. The system also leads directly to over-capacity within the fleet. The need for vessel owners to be able to catch fluctuating quantities, often at speed because of the lack of a given share of the quota allocation, means that vessels' capacity needs to be much higher than it would be if they could plan their catch over the year, taking it at times and in ways that minimise costs. This causes vessels to be underutilised, costs of production to be higher than necessary and therefore lower profitability. This incentive has led to the development of vessels that through modern equipment and technology are able to fish for longer time periods, to further distances, and in more adverse weather conditions than more traditional under-10m vessels. They can catch significantly more fish than some of their larger counterparts in the over-10m fleet and do not appear to embody the spirit of 'small-scale' or artisanal vessels for which the 10m line was originally defined. The fact that access to pool quota is free for the (arbitrarily defined) under-10m fleet has combined with this incentive to produce very high catching vessels at just under the 10m mark.

- 1.5. Data analysis¹ shows that there is likely to be insufficient quota in the under-10m pool for all active English vessels to be economically reliant solely on quota stocks. In order to supplement the quota available to the under-10m fleet, the Marine Management Organisation (MMO) (who manages pools on behalf of the under-10m and non-sector fleets) continually explores options for swaps and gifts from Producer Organisations (POs) and other Member States. However, this over-reliance on in-year trading to keep fisheries open is not sustainable, particularly with year-on-year reductions in the Total Allowable Catches (TACs) for key quota stocks. For example, in 2010 there were particular difficulties in relation to North Sea Sole, where failure to secure the usual post-Council swaps with other Member States, led to the premature closure of the fishery. The MMO then had to work extremely hard to secure more quotas during the year to reopen the fishery, albeit at a limited level.
- 1.6. The situation facing the fleet has been further compounded by rising fuel and other operational costs, competition for fishing grounds with the development and expansion of renewable energy sites and marine protected areas, and continually reducing quotas. The lack of scientific data around inshore fisheries and the lack of representative groups for under-10m vessels have also added to the difficulties in finding effective and practicable solutions.
- 1.7. The current European Common Fisheries Policy (CFP) also provides critical context, as it is under this Regulation that fishing in the waters around the UK and other European Union countries is managed. Defra is working to reform the CFP, which is ineffective and has failed to deliver its key objective an economically viable fishing industry which minimises impacts on marine ecosystems. This needs to change. Negotiations are now underway within the EU and the UK is calling for radical reform that will lead to a simplified, regionalised CFP with incentives for fishermen to operate sustainably and profitably. But as will be discussed, there is an opportunity, and an imperative, to act in advance of this to reform English fisheries management arrangements.
- 1.8. In December 2008, a package of measures was implemented to relieve some of the pressure on the under-10m fleet, including a decommissioning and licence capping scheme, together with the extension of quota leasing for a further year. Building on this package of measures, the Sustainable Access to Inshore Fisheries (SAIF) project was set up to explore options for a long term strategy for fisheries management reform, in order to secure a more sustainable and profitable future for the fishing industry. These options are the focus of this Impact Assessment.
- 1.9. Defra is also undertaking other projects to look at improving the marketing of inshore fisheries; the up-skilling of fishermen to enable them to run their businesses more effectively; greater collaboration between fishermen and scientists in order to improve the scientific evidence for inshore fisheries; and how inshore fishermen could be more engaged in the decision making process.

Reasons for Government Intervention

Fisheries management: the need for an effective system

- 1.10. Regulation of access to fisheries is a fundamental requirement. Without a rationing access, not only would all potential benefits be lost as fishermen are forced to waste resources competing with each other to catch the fish, but the resource itself would be quickly exhausted. However, commercial fishing has historically been a highly regulated, centrally micro-managed, when compared with many other industries operating in the UK. The introduction has outlined why the current management system is failing to deliver the potential benefits. The UK Government has made clear, not least in discussions on CFP reform, this must change. The changes proposed here represent the beginning of this change, within the framework of the current CFP.
- 1.11. Profits are thus being lost through uncertainty, over-investment in catching capacity, and lack of time and resources to focus on marketing. Without intervention to reform the current management system, the fleet is likely to experience further decline, in turn reducing the viability of the supporting infrastructure. Social, cultural and economic benefits discussed below may be lost. Moreover, the chance to reduce Government expenditure on micro-management will be missed.

¹ 'An economic approach to long term reform of access to fisheries for the inshore fleet: extension' – Vivid Economics, January 2010

Social benefits: a missed opportunity

- 1.12. The UK fishing industry (including catching and fisheries related sectors), contributes to both national and regional economies; the catching sector employs nearly 13,000 people, processing over 17,000 and aquaculture more than 3,000. Whilst this accounts for only a small percentage of the national workforce (0.7% in Scotland, 0.1% in England and Wales) the industry makes a significant contribution to local economies.
- It has long been perceived that along with providing employment (around 65% of the full time employment within the industry) and supporting local economies, the small-scale fishing industry provides a range of social and environmental benefits. Fishermen are seen locally as being emblems of, and major contributors, to the distinctiveness of the local community, although the social benefits of the under-10m fleet vary across the country depending on the inherent infrastructure.²
- Small-scale fishing contributes particularly to tourism, adding character and activity to the harbour side and acting as an 'icon' of the traditions of the area. However, it can also have a social impact in terms of its relationship to local businesses. The loss of small scale fishing vessels can threaten the viability of small 'upstream' businesses, such as providers of gear, boats, fuel and ice. The loss of these businesses in turn affects the viability locally of the under-10m fleet.
- The social research referred to above identified missed opportunities in terms of the social and economic benefits which small scale, community based fleets could deliver. Initiatives to reinforce the links between fleets and local people could galvanize communities and improve profitability. Some of this is already happening, but strong evidence suggests that the independent nature of fishermen, and their desire to focus on catching³, will leave many of these opportunities untapped without both freedom from the constraints of the current management system, and help/incentives to take opportunities.

Environmental performance: a chance to improve

- 1.16. There can be environmental benefits associated with those under-10m vessels using gear and vessel types that reduce discards and minimise the damage to the surrounding marine environment, compared with more intensive vessels. Further benefits of smaller vessels fishing closer to shore and using passive gear include reduced fuel consumption per tonne of fish landed, and lower discards compared with other vessel segments⁴. Approximately 75% of gears used by the under-10m are nonmobile.5
- 1.17. However, some vessels can fish at high levels using intensive gears, as found during the Environmentally Responsible Fishing Pilot scheme⁶. Research also shows that under-10m vessels are responsible for around 25% of discards, whilst catching about 15% of the volume of landings in England & Wales. Therefore, there is scope to improve environmental performance in this fleet, and this Impact Assessment considers ways to make this happen.

Big Society and Local Opportunities

1.18. Supporting community based initiatives would be in tune with the Government's desire for greater localism as part of the 'Big Society' agenda. This would allow Government to step back, empowering fishermen and their communities to have greater responsibility and accountability for the management of their industry, in return for greater reward and a renewed focus on environmental and social benefits.

²'The Social Impacts of England's Inshore Fishing Industry' – Countryside and Community Research Institute & Centre for Rural Economy, Newcastle University (publication pending)

³ 'A Fishermen's Tale, Being a Fisherman in England in 2009' - Creative Research, 2010 http://www.defra.gov.uk/foodfarm/fisheries/policy/saif/research.htm

⁴'2008 Economic Survey of the UK Fishing Fleet', Seafish, 2010

⁵ MMO Fish Statistics Unit, 2010

⁶ The Environmentally Responsible Fishing Pilot Scheme ran during 2008-2009, and limited vessel activity of 30 under-10m vessels in 3 areas through a days-at-sea limit rather than using quota. 'Environmentally Responsible Fisheries Project - Final Summary Report' - Cefas & Seafish, 2010. http://www.defra.gov.uk/foodfarm/fisheries/policy/saif/research.htm

⁷ 'An indicator of sustainability for marine fin-fish stocks around the UK: 1990 – 2008', Cefas and MMO Fish Statistics Unit, 2010

2. BACKGROUND INFORMATION

Fisheries Management

Common Fisheries Policy & Council of Ministers

2.1 Commercial fishing in the UK is carried out under the CFP Regulation. Quotas are set annually based on scientific advice from the International Council for the Exploration of the Sea (ICES). Stock assessments are used to establish safe levels of catch to ensure healthy, sustainable stock levels. This information feeds into negotiations between Member States at a Council meeting held annually in December, where the final catch levels (total allowable catch (TAC)) are agreed. Each member state is then allocated a certain fixed percentage for each quota species to maintain 'relative stability'⁸, based on historic activity.

Fixed Quota Allocation units

- 2.2 It is for Member States to decide how their share of the TAC is distributed. In the UK, a system of Fixed Quota Allocation (FQA) units was established in 1999, based on vessel's historic landings (track record) during a fixed reference period (1994-1996 for most stocks). These FQAs are used to share out the annual quota allocations.
- 2.3 At present, UK quotas are shared out amongst the following groups:
 - Individual fish producer organisations (POs), who manage quota for the vessels in their membership. Often described as "the Sector";
 - The "non-sector", a group comprising all those vessels over 10 metres in length which are not fishing against quota allocations managed by POs; and
 - The 10 metres and under fleet, comprising those vessels of 10 metres and under in length and not fishing against quota allocations managed by POs.

Marine Management Organisation (MMO)

2.4 The MMO is an executive non-departmental public body (NDPB) established and given powers under the Marine and Coastal Access Act 2009. They have responsibilities for implementing a marine planning system and marine licensing regime; helping to create and manage a network of Marine Protected Areas (MPAs); responding to marine emergencies; collation of marine information; and managing/enforcing the UK fishing fleet capacity and fishing guotas.

Under-10m pool

- 2.5 The under-10m fleet quota pool is managed by the MMO on behalf of members, with FQAs held collectively for this part of the fleet. Some underpinning also takes place, setting a minimum quota allocation for the under-10m fleet on some stocks. Access to this pool is equal, meaning anyone with a full quota licence can fish up to catch limits (usually monthly) set according to catch profiles developed using historical data, the available quota, and taking into account the views of industry about how quota should be managed throughout the year. Under current arrangements, this means that the quota is caught in different proportions by different vessels, with a small number of vessels consistently catching at high levels and up to the limits, and many catching below this level. A group of limited quota licence holders are permitted to land up to 300kg of quota stocks annually, but not more than this.
- 2.6 Mechanisms such as Hague Preference⁹ and the Economic Link Condition¹⁰ can provide some additional flexibility in the total amount of under-10m pool quota available although their application is subject to strict guidelines. In addition, the amount of quota for particular stocks can be increased (albeit at the expense of others) by using other stocks as swap 'currency', or by individual vessels leasing quota from the Sector. However, the initial total amount of quota remains a proportion of the UK's share of TAC, which is set at EU level. There has been a general decline in the amount of UK quota, and therefore fishing opportunity for these stocks, over the past ten years.

⁸ Relative stability is a system whereby EU Member States are consistently allocated the same proportion of particular stocks, based on historic levels of catch.

⁹ A mechanism that allows the UK to receive additional quota above that provided from the 'normal' share.

¹⁰ A vessel licence condition that requires holders to demonstrate an economic link with the UK, e.g. an accepted link mechanism has been donating a proportion of quota which has been used to augment the under-10m pool allocation.

Non-Sector pool

2.7 The MMO also manage quota on behalf of over-10m vessels that do not belong to a Producer Organisation – classed as the 'non-sector'. The FQAs allocated to individual non-sector vessels are pooled together and catch limits set by the MMO accordingly. Underpinning of certain key species is also used for the non-sector quota allocations. Any vessel leaving the non-sector would take its FQAs with it.

Producer Organisations (POs)

- 2.8 The recognition and responsibilities of POs are established in the European Common Market Organisation (CMO) Regulation¹¹. The key idea behind them is that the producers themselves are best placed to influence markets to their benefit. Although not stipulated in the regulations, UK POs (and those in many other Member States) fulfil a quota management role for their members, operating a system of individual transferable quotas (ITQs¹²), a pool system, or a mixture of both.
- 2.9 At present, most PO members have vessels over 10m in length. However, there are a small number of under-10m vessel owners (9¹³) that have chosen to relinquish their rights to fish against the pool, instead joining POs and adhering to their quota management rules. There are also a significant number of under-10m vessels (just under 100) that are 'associate' members of POs. They benefit from organisational representation and improved marketing capabilities, but still fish against the pool.

Other Organisations

- 2.10 The eleven Sea Fisheries Committees (SFCs) operating in England manage all marine fish and shellfish fisheries in inshore waters out to the 6 nautical mile limit, through local byelaws and granting Several and Regulating Orders for shellfish¹⁴. They are also responsible for the protection of European Marine Sites and Marine Conservation Zones from fishing activities in their Districts. SFCs will be replaced with Inshore Fisheries and Conservation Authorities (IFCAs) in April 2011. Although the new IFCAs will retain the best of the SFCs (e.g. local democratic input), they will have to ensure that the exploration of sea fisheries resources is done in sustainable way, balancing the different needs of those engaged in such exploitation. In addition they will have a much broader environmental remit, including making a contribution to sustainable development, furthering the conservation objectives of Marine Conservation Zones, estuary management and protecting the marine environment from the exploitation of sea fisheries resources.
- 2.11 Salmon and sea trout are managed by the Environment Agency, until IFCAS are vested, and it also exercises the powers of the SFCs in many of the estuaries of England and Wales. Natural England also has a role to play by advising Government and industry on marine conservation and seascape issues in England's territorial waters (up to 12nm).

Demographics¹⁵

- 2.12 The UK fishing fleet is diverse, ranging from high-activity whitefish vessels, some of which are at sea for over 300 days a year with earnings of well over £1million, to low-activity under-10m vessels with average earnings of less than £10,000¹⁶. Even with the decline in the number of vessels over time, there remains a widespread geographical split of different vessel types across the country.
- 2.13 The UK fishing fleet is made up of just over 5000 under-10m vessels, almost 1000 Sector vessels, and just over 500 non-sector vessels. England has the largest number of vessels, accounting for 49% of the total UK fleet. However, Scotland has the highest share of fleet capacity (61% of the total UK fleet's Gross Tonnage) and 50% of total power (kilowatts). The table 17 below shows the breakdown of vessels within England by the same metrics. Further information about the geographical spread can be

¹¹ Council Regulation (EC) 104/2000. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32000R0104:EN:HTML

¹² A dedicated portion of the Total Allowable Catch allocated to individuals via FQAs which can then be traded. When vessels join a PO, they bring FQAs with them and either fish the associated quota, sell it, or trade it for quota that is more valuable/useful for them.

¹³ Information supplied by MMO and is correct as of 31/12/2009. Figures relate to England.

¹⁴ Regulating orders are granted by Ministers to Sea Fishery Committees or the Environment Agency to allow more effective management of natural shellfisheries. Ministerial Several Orders give to the grantee an exclusive right in respect of an area of fishery specified in the order to take or cultivate specified shellfish.

¹⁵ Information comes from the MMO Statistics Team and is correct for 2009 data.

¹⁶ 2008 Economic Survey of the UK Fishing Fleet, Short Report', Seafish, July 2010

¹⁷ Figures based on data taken from the 2009 survey from English administration ports, MMO.

found in Annex 2.

2009	England					
	Under-10m	Non-Sector	Sector	Total		
No. of vessels	2599	264	306	3169		
% of total by gross Tonnage	15%	11%	74%	100%		
% of total by power (kWs)	45%	14%	41%	100%		
% of total full time employment	60%*	13%*	27%*	100%		
% of vessels in category which are active	69%	71%	77%	~70%		

Landings & Economics

- The total volume of recorded fish landings by UK vessels in 2009 at home and abroad was 580,600 tonnes with a value of £674.3m. This is a 1.3% decrease in landings compared to 2008 (588,000 tonnes) and an increase in value by 5.8% (£646 million). The average level of fishing income for 2008 varies significantly across different segments, ranging from £47,580 for vessels in the under-10m 'passive gear' segment, to £4.4 million for vessels in the pelagic over 40m segment. 18 Overall, the greatest volume and value of landings are in the South East (in 2009, some 6400 tonnes; £11.1m).
- Despite being fewer in numbers, 9.5 10m vessels are landing significantly more than the remainder of the under-10m fleet combined. They represent just 17% of this fleet, catching some 10,000 tonnes of quota stocks at a value of £16.7m, compared to 7400 tonnes at a value of £15.5m for the total remaining vessels in 2009.
- 2.16 Non-quota stocks make up a significant proportion of this fleet's catch (approx 76% in volume and 67% in value). These proportions have been fairly consistent over the last 4 years.
- 2.17 Quota stocks make up a significant proportion of the over 10m fleet's catch (approx 89% in volume and 87% in value), whereas the non-sector differs from the under-10m fleet in that the majority of their landings (98% by volume) are non-quota species. Further information about landings can be found in Annex 2.

Quota Allocations

The UK under-10m fleet holds FQAs equivalent to 1.7% of the total UK quota; 2% if excluding stocks for which they receive a 0% allocation (there was no track record of catches when FQAs were established); and 3% if you focus on stocks where English vessels have an interest. However, this is not consistent across all stocks. Examples of larger shares of the UK allocation include:

Stock	% of Total UK TAC allocated to under-10m vessels (2009)
VIId Sole	38.1%
VIIb – k Cod (VIIb-k excluding d from 2009)	24.9%
VIIde Plaice	21%
VIIfg Plaice	20.8%
North Sea Mackerel	20.7%

The non-sector fleet holds FQAs equivalent to a similarly small percentage (1%) of the total UK quota, with the Sector holding to majority (97%)¹⁹.

3. POLICY OPTIONS

- The costs and benefits of the identified policy options have been compared to the baseline case of not intervening to address the failures of the current management system, or tackle the imbalance between capacity and opportunity that exists within the under-10m fleet.
- For the purposes of this IA, we have looked at several ways to deliver effective reform. By analysing the strengths and weaknesses of each of these, we have identified the strongest elements. Combined, these elements make up the package under each option, the costs and benefits of which

¹⁸ MMO Annual Statistics Report 2009

¹⁹ Data for 2010- MMO Statistics Team, 2011

have then been tested.

3.3 Options have also been considered against the principles of "one in, one out" (OIOO), which means that no new regulation can be introduced without removing one. Since the fisheries management system is not governed by Regulation, it is considered that this Impact Assessment is outside the scope of OIOO. However, the principles of simplification are very much embedded in proposals for reform, with transition and ongoing costs to industry being tested through the consultation process.

BASELINE

3.4 This option looks at the baseline case of continuing with the current situation. This means keeping the current national system of fisheries management, using quotas based on FQAs to a UK pool for under-10m vessels, and not intervening to address the issue of imbalance of capacity and opportunity within the fleet.

Costs²⁰

- 3.5 The current situation for the under-10m fleet is one of low profitability, increasing uncertainty and economic decline. This is due to a number of factors, but the nature of the current fisheries management system makes a significant contribution. Continued centralised micro-management, through the setting of UK monthly catch limits, will lead to continued low profitability for the fleet due to over-investment in vessel capacity, racing to fish and a lack of opportunity to secure the best prices as it is difficult to fish at times when prices are high.
- 3.6 The imbalance between fishing opportunity and fleet capacity is likely to get worse in the short term as total UK TACs are reduced further this will compound the difficulties associated with the pool management system.
- 3.7 As small-scale fishermen are forced out of business through low profitability, the infrastructure supporting this part of the industry diminishes with it. Furthermore, younger generations and other non-fishermen are discouraged from entering the industry²¹. Together with the undesirable hardship that would be faced by parts of the under-10m fleet if the current situation were to continue, benefits associated with parts of the fleet could be lost.
- 3.8 As mentioned earlier, the under-10m fleet can deliver social benefits, as well as additional economic benefits associated with tourism and up-stream services. Cultural heritage, in particular, has been identified in social research as having particular value in coastal communities. Whilst under-exploited at the moment as an economic tool (for example, through tourism) there is nevertheless a desire in these communities to secure the future of these fleets.²²
- 3.9 There could also be an environmental cost associated with the potential increased discard rates if those under-10m vessels catching quota using fishing practices that have a lower environmental impact (those using low impact, more targeted gears, with lower carbon emissions) leave the industry, and the quota is caught by higher impact vessels in the future. Equally there could be benefits associated with more inefficient vessels leaving the industry. However, any costs or benefits would be difficult to quantify as it is extremely difficult to estimate which, if any, of these vessels may leave the industry.
- 3.10 It is assumed that the fisheries management costs associated with Defra, the Environment Agency, Natural England, the Sea Fisheries Committees (and Inshore Fisheries and Conservation Authorities when vested) and the Centre for Environment, Fisheries and Aquaculture Science (Cefas), as well as other stakeholder bodies, will remain constant in the future despite the decline in fishing opportunities and irrespective of any potential fisheries management reform.
- 3.11 The MMO's costs, however, may change over time and under different options for reform. At present, the costs associated with the management of the under-10m and non-sector pools, including

²⁰ Figures used to calculate costs and benefits are based on 2008, as a key source has been the Seafish Economics Study conducted in 2008.

²¹ 'A Fishermen's Tale, Being a Fisherman in England in 2009'- Creative Research, 2010 http://www.defra.gov.uk/foodfarm/fisheries/policy/saif/research.htm

²² As footnote 2

quota management, licensing, enforcement and data entry costs, are approximately £1.7m/year²³. The breakdown of these costs is approximately 15% for quota management, 62% for enforcement and 23% for licensing.

In the short term, the MMO will come under increasing pressure to set higher catch limits so that under-10m fishermen can maintain the same level of activity. But as TACs are reduced, this will increase the likelihood that fisheries will close earlier and increase the burden on the MMO to secure swaps. The risks of overfishing will also increase, in turn meaning the need for greater enforcement activity, but this is likely to be mitigated by a reduction in the number of operators. As such, management costs are expected to remain constant.

Benefits

- 3.13 The English under-10m fleet, although in decline, will continue to provide some ongoing economic benefits to the UK. This is particularly the case in areas where the fleet is viewed as 'emblematic'24 - providing direct economic benefits, as well as associated economic impacts through links to tourism and the hospitality industry. Catch limits may creep up as vessel numbers decrease, but as the incentive in the pool system is for levels of catches to increase to take up any excess, the impacts are likely to be widely distributed and small.
- The current average operating profit for different segments of the English fleet is shown in the table below²⁵.

Baseline operating profit	Higher catching vessels	Medium & low activity vessels	Sector	Non- Sector	Total
Annual	£1.5m	£1.7m	£28.9m	£3m	£35.1m

Risks/Unintended Consequences

- The current situation could deteriorate even more quickly than is currently foreseen, for example if the TACs decrease further than expected or there is a significant increase in the price of fuel. Were the fleet to diminish to levels unable to support associated infrastructure, it would be at risk. This could lead to the value of landings available to the under-10m fleet being reduced.
- Increased associated risks of unemployment may lead to fishermen taking more drastic measures to maintain their livelihoods by fishing in unsafe conditions and/or illegally. The former may lead to the unwanted consequences of increased injuries/fatalities at sea. The latter could increase incentives to fish illegally which increases fish mortality, decreases the market value of the products, and places additional pressure on enforcement resources.
- There is a risk that Government relationships with key industry stakeholders will be damaged. 3.17 Stakeholder engagement is an important element of developing proposals for fisheries management reform, and expectations are high that positive changes will be made to help the under-10m fleet towards a long-term sustainable future. With this comes the risk of continued lobbying by those who feel that they have been ignored.

Assumptions

- 3.18 The main assumptions, which have been made for all options, are:
 - TACs set for the UK will remain stable;
 - Fuel prices will remain stable:
 - There are no changes to the Common Fisheries Policy which prescribes how the quota is distributed and managed throughout the UK; and
 - The impacts on the profitability of the under-10m fleet of increased competition for access to the marine environment e.g. from renewable energy and increased protection of the marine

²³MMO, 2011

²⁴ As footnote 2

²⁵ '2008 Economic Survey of the UK Fishing Fleet', Seafish, 2010

Costs to Business

3.19 The main costs to the industry associated with the baseline case come through compliance with catch limits and reporting Regulations. The latter places most of the burden on buyers, not catchers. Some members of the under-10m fleet also pay a small fee to representative organisations.

Wider impacts

- 3.20 Aside from the direct economic importance to households making their living from fishing, the wider community indirectly benefits economically, in relation to seaside tourism and other associated businesses. Generally, the direct impacts of small-scale fishing are social and cultural for most of the community, although a greater economic impact can be placed on it when their catch is tied in to cultural and social benefits of the area for tourists.²⁶
- 3.21 The seaside tourism industry in 2008 employed approximately 210,000 people in England and Wales, with a gross value added to county economies ranging from around £10 million to £250 million²⁷. One of the factors that attract tourists to such resorts is traditional fishing fleets. Therefore, if under-10m businesses continue to dwindle along current trends then the potential economic impact on the coastal tourism industry could be significant.
- 3.22 If the current system continues as it is, and the current trend of decreasing TACs continues, then more businesses may choose to diversify into non-quota stocks, putting more pressure on these particular species. Parallel work on the need for management of shellfish stocks, along with inshore management measures employed by IFCA's and Several and Regulating Orders, should go some way to address this risk.

Baseline Conclusions

3.23 Benefits to local communities, the tourism industry and other industries related to fishing, will decrease as the economic performance of the under-10m fleet continues to decline and the associated infrastructure cannot be sustained. The costs associated with the MMO micro-managing the under-10m fleet will increase as pressure intensifies for them to source additional quota. There will also be additional costs as profitability declines and the need to increase catches becomes more pressing.

OPTION 1 – MODIFYING THE CURRENT SYSTEM

- 3.24 This option looks at keeping the current fisheries management system, but considers ways to improve the balance between capacity and opportunity. It is made up of a set of steps.
- 3.25 Analysis shows that in 2008, 129 vessels (18% of the English under-10m fleet) accounted for around 60% of the total volume of the landings of the top 10 quota species for the under-10m fleet²⁸. This option considers how Government can facilitate the movement of such higher catching vessels (HCVs) out of the pool, whilst ensuring that the situation for the remaining under-10m vessels is not worsened and is indeed improved. Options to simultaneously address latent capacity, which risks upsetting the stability of the pool, are also explored.

Step 1: Create a 'Higher Catching Vessels (HCV)' category and remove these vessels from the pool, allocating them with individual fisheries access rights

3.26 There are two main reasons for moving the HCVs from the pool. Firstly, these vessels create pressure on the pool resources due to their catching capabilities, with catch limits set to accommodate the vessels, and them catching a disproportionately large amount of pool quota. Removing them with an appropriate track record will allow for more tailored catching limits for remaining vessels. Secondly, by providing HCV's with an individual user right, they will have greater flexibility in their operations, meaning they can target their activity at times when market prices are higher and returns on their catch can be

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²⁶ As footnote 2

As footnote 25

²⁸ MMO Statistic Team analysis, 2011 – based on 2008 data

maximised. They will also have more flexibility in terms of quota trading. It is estimated that providing individual user-rights could reduce fishing costs by an estimated 10%²⁹.

3.27 Annex 3 explores how HCVs could be defined, and the strengths and weaknesses of different approaches. Based on the analysis detailed in this Annex, identifying higher catchers based on volume of catch, and allocating them with individual fisheries access rights in the form of FQAs linked to track record, is the strongest option.

Step 2 – Securing additional quota for the under-10m fleet:

- 3.28 The baseline identified a number of pressures on the under-10m fleet, resulting in an imbalance between capacity and opportunity. Increasing opportunity could temporarily relieve some of the pressure in the fleet. Securing additional quota for the under-10m pool can be achieved in a number of different ways, including re-alignment of consistently un-fished quota and re-distribution from the Sector.
- 3.29 Fisheries management should aim to ensure that, as far as possible, the full UK quota allocation is fished every year to maximise the benefits to all parts of the industry. Looking across the fleet it is clear that in some cases there are significant amounts of quota which are consistently un-fished. The year on year nature of this under-fishing would imply that this is not simply caused by events such as weather restrictions, stock availability or market conditions, which may be expected to influence uptake in any given year. Re-aligning FQAs associated with consistently un-fished quota could deliver big benefits for the recipient sector, whilst having a negligible impact on the donating sector.
- 3.30 As well as re-aligning consistently un-fished quota, re-distributing a small percentage of FQAs associated with fished quota from the Sector to the under-10m pool would further improve economic viability in the fleet, at least in the short term.
- 3.31 Annex 3 explores how consistently un-fished quota might be defined, and what methodology could be applied for redistributing FQA's associated with fished quota. In addition, the overall strengths and weaknesses of these measures are further explored. Based on this analysis, re-aligning a high proportion of FQAs associated with consistently under-fished quota, and redistributing a small percentage of actively fished FQAs, would provide a source of quota to temporarily boost the economic viability of the under-10m fleet.

Step 3 - Restricting Capacity: Removing latent or active capacity

- 3.32 Reducing fleet capacity is another potential way to address the imbalance between the capacity and available fishing opportunities currently seen in the under-10m fleet. The 2009 under-10m licence capping scheme took initial steps towards this, restricting a number of licences to catching a maximum of 300kg of quota stocks per year. This scheme aimed to mitigate the risk that low activity and latent licences would be re-activated (either by the holders or through the licences being purchased using funds from the related decommissioning scheme), in turn placing additional pressure on the pool.
- 3.33 Analysis shows that there are still a number of completely inactive vessels (approximately 31% of the under-10m fleet³⁰), which if re-employed would pose a risk to the stability of a pool-based management system. Furthermore, there are a number of vessels that at present do not have a 'limited quota' (capped) under-10m licence, yet are not landing quota stocks at all, or are landing them in tiny quantities. These un-used access rights are referred to as 'latent capacity'
- 3.34 Annex 3 explores a variety of options for addressing this issue, and the strengths and weaknesses of the various approaches. Based on the analysis, latent capacity would be best addressed by capping dormant licences at zero. Options for further decommissioning schemes would be considered in partnership with industry.

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²⁹ This figure is based on a comparison between the performance of high catching under 10 vessels and similarly sized vessels in the sector (Vivid 2010) and reflects the additional certainty and flexibility provided by individual user rights.

³⁰ Source: MMO Fisheries Statistics, 2010

Model tested for Option 1

- 3.35 Having considered a range of options under each of these steps, the following model has been developed in order to assess costs and benefits:
 - Higher catching vessels defined as those catching the top 60% of the total volume of catches attributable to the English under-10m fleet.
 - These vessels would be allocated FQAs based on 100% of their track record, using an average catch percentage over a reference period 2007 2010.
 - These vessels would then be removed from the under-10m pool and would have to establish a new PO, join an existing PO, or join the non-sector pool.
 - For the remaining under-10m vessels, the pool would be bolstered with additional quota from two sources, the re-alignment of consistently un-fished quota and a re-distribution for some fished stocks.
 - Dormant licences would be capped at zero and low activity licences capped at the same levels associated with the 2009 licence capping scheme, in order to address latent capacity.

Costs

- 3.36 In terms of transition costs, there would be none for the remaining under-10m fleet as the management system would stay the same. The main transition costs would fall to HCVs who would be adapting to a new management system, and to the MMO for the resource costs associated with establishing and allocating FQAs to HCVs. An exercise to change licensing arrangements for the under-10m fleet in 2009 resulted in one-off administrative costs of approximately £143k³¹. The resourcing level is likely to be similar for FQA allocation and so this figure can be used as an estimate of the one-off costs.
- 3.37 The ideal situation would be for the higher catching vessels to join Producer Organisations in the Sector rather than to become part of the non-sector pool. As described above, the latter would potentially lead to problems for the vessels concerned. If these vessels joined the Sector then they would have to pay levies for the services provided by the PO that they had joined, typically between 2-3% of the value of landings.
- 3.38 The additional costs to the POs in taking on these HCVs are assumed to be covered by the levy that they will charge these additional members. As non-profit making organisations, there will be no netbenefit from the levy.
- 3.39 As a maximum, you might assume the costs of re-alignment of under-fished FQAs equate to some sum of the landings value of the equivalent quota. However, consistent non-use over many years significantly reduces this value. As such, an assumption has been made that the cost to the Sector is negligible.
- 3.40 The table below explores four different levels of re-distribution of FQA's, looking at the impact on the Sector and the potential benefits for the under-10m fleet. It assumes a re-distribution of FQA's from English Producer Organisations only. Given the level of additional benefit that can be secured and the fact that there is still minimal impact on the total Sector quota holdings, the preferred option would be to use a 3% re-distribution.

% re- distribution of FQA's	Total No. of FQA's re- distributed	Approx. equivalent tonnage of fish based on 2010 allocations	Approx. Estimated gross value of FQAs re-distributed	% of the value of total FQAs held by the Sector		
0.5%	5838	390	£589k	0.4%		
1%	11677	781	£1.1m	0.79%		
3%	35030	2343	£3.5m	2.38%		
5%	58383	3906	£5.8m	3.96%		
Stocks for which FQAs will be re-distributed	North Sea: Cod, Haddock, Whiting, Plaice, Sole, Hake, Nephrops, Anglers, Lemon Sole and Witches, Skates and Rays, Turbot and Brill; West of Scotland Nephrops; Pelagic stocks: Herring, Sprats, West Coast Mackerel and North Sea Mackerel; Area 7 stocks: Sole (7d and e), Plaice (7a and d-g), Cod (7b-k inc d), Whiting (7a), Anglers, Haddock (7b-k) Pollock, Skates and Rays (7d)					

³¹ 'Lessons Learned Report – Package of Measures for the English Inshore Fishing Fleet (2008)', Defra, 2010.

- 3.41 These gross values represent the decrease in revenue to the Sector implied by the redistribution. The overall and average net cost of this has been estimated using data from the Seafish Economic survey (2008) on the profitability of vessels in the English sector. The results show that the average total costs would be between £116K (for a 0.5% re-distribution) and £1.2million (for a 5% redistribution), with the central estimate for a 3% re-distribution being £694K. These are equivalent of pervessel costs of between £455 and £4.5K.
- 3.42 In terms of the net benefits, it is important to note that movement of FQAs from the Sector to the under-10m fleet could potentially lead to a lower return from these FQAs. This is because catching in the Sector is generally more efficient than that in the under-10m fleet.

Benefits

- 3.43 HCVs as defined above equate to around 8% of under-10m vessels (129 vessels)³² and these vessels already have an approximate average turnover of £50K. By allocating these vessels individual FQAs and providing them with the opportunity to operate in the same way as over-10m vessels with more certain access to an allowed share of the catch, there will be additional benefits associated with these vessels being able to fish more flexibly to meet their own business needs and the demands of the market.
- 3.44 Both the theory of fisheries management and a range of international experience³³ show that clear and secure user-rights increase significantly the profitability with which a given fishery is harvested. While FQAs are not entirely clear and secure, they represent a major improvement for vessel owners relative to fishing in the under-10m pool. Therefore, while it is not possible to estimate precisely the potential benefit of allocating track record as FQA rights, there are likely to be significant reductions in cost as well as benefits to revenue, as owners are able to plan their activity over the year, fish at the most appropriate and profitable times. Moreover, rather than using time and resources on the race to fish that a pool system encourages, they will be able to spend this time developing more lucrative markets. We have used a conservative estimate that fishing costs would reduce by 10% on allocation of FQA rights to estimate that profitability for these vessels could increase by £500K, a per vessel benefit of around £4k per year. This assumption will be tested further during the consultation.
- 3.45 The remaining vessels will benefit from the additional quota supplementing the pool through the re-alignment of un-fished quota and a re-distribution of quota from the Sector. Some catch limits may to increase, and so potential revenue for each vessel will also increase. The benefits of the re-alignment of un-fished quota and a re-distribution of quota from the Sector have been estimated as between £463k £776k of increased annual profits relative to the baseline, corresponding to the re-distribution scenarios of 0.5% 5%. These profits were estimated by using the track record of the various under-10m metiers to estimate potential uptake of additional quota, and then translating the resulting revenue increases into increased profits using profitability ratios estimated from the Seafish 2008 Economic Survey.
- 3.46 The benefits of allocating FQAs to the HCVs transferring out of the under-10m fleet and of additional quota to remaining under-10m vessels, provides the overall annual benefits of this option of £963k-£1.3m, with a central estimate of £1.1m.
- 3.47 Given that the pool system remains in place under this option, benefits will not be evenly distributed amongst the remaining under-10m vessels. It is likely that the additional benefits will be focused on the currently more active vessels; on this assumption such vessels could improve profitability by up to £3K. If benefits were spread more evenly across the fleet, they would be much lower, of the order of £400-650 per vessel. In reality it would be likely to be between these two extremes.
- 3.48 In any case, the critical weakness of Option 1 is that transferring additional quota into the under-10m fleet, without addressing the fundamental problems with the current management system, will at best provide a short term relief to the problems faced by the fleet. The incentives faced by individuals will be unchanged. The benefits of additional quota will likely be lost relatively quickly, as without certainty of

 $^{^{\}rm 32}$ MMO data to 2008 to align with other data assessing costs and benefits

 $^{^{}m 33}$ The Sunken Billions: The Economic Justification for Fisheries Reform. The World Bank, 2009.

The potential benefits of a wealth-based approach to fisheries management: An assessment of the potential resource rent from UK fisheries - DEFRA Project 1210, 2010.

access to a share of the quota; businesses invest in further capacity to ensure that they do not lose out to others. The cost of this investment will, overall, be likely to offset the benefits of the additional quota. As explained below, this has been accounted for in estimating the quantitative benefits of this option.

- 3.49 Therefore, the fact that this inefficient system remains in place will mean that the re-distribution is likely to provide only a temporary 'fix' in the under-10m fleet, rather than a long term solution that will deliver sustainability. Therefore, for the purposes of quantifying the benefits of this option, we have assumed that the additional benefits provided by re-distributed quota would decrease linearly and be entirely dissipated after 5 years. This assumption is based on experience in the under-10m fleet since the introduction of the Registered Buyers and Sellers scheme in 2005³⁴, where levels of profitability have become progressively worse and feedback from industry suggests that they are now at critical levels.
- 3.50 There may also be benefits for all PO members due to additional flexibility provided by new members and new FQAs, but this is likely to be small and would be difficult to estimate.
- 3.51 By reducing the size of the pool and alleviating some of the pressures associated with the imbalance between capacity and opportunity, there may be some savings associated with the administrative costs of managing the pool. However these savings are expected to be negligible as there will still be an under-10m pool to manage, regardless of size.

Risks/Unintended Consequences

- 3.52 If POs do not take on HCVs then the administrative problem would be shifted from the under-10m pool to the Non-Sector pool. This could compound the constraints of HCVs, or place pressure on Non-Sector vessels. The latter are reliant on non-quota stocks, and the pool has low FQA allocations. Whilst these would be boosted by any entry of HCVs, this would be dissipated due to the nature of the vessels coming in.
- 3.53 The current situation could deteriorate even more quickly than is currently foreseen, for example if the TACs decrease further than currently expected or there is a significant increase in the price of fuel. This could lead to the calculation above in relation to economic viability being incorrect.
- 3.54 The reallocation of un-fished quota may have a negative impact on certain stock levels, as these stocks would likely be subject to increased pressure. However, given the levels of quota involved, and the fact that the quota allocations are still below the TAC set for the UK, this is assumed to be low risk.
- 3.55 Re-distribution of FQAs from stocks actively fished by the Sector could lead to increased discards as quota is exhausted slightly more quickly. However, the level of re-distribution is very low in order to minimise any environmental impacts in the Sector.
- 3.56 Similarly, though, it could lead to increased effort in the under-10m fleet, which brings with it a risk of increased discards. Analysis done by the MMO has modelled the potential impact on catch limits of increased quota availability. Using 2010 data, two models were analysed, one for North Sea Cod and one for area 7d Sole. Assumptions were made that HCVs would take 100% of track record, and that swaps usually taking place would no longer happen due to the re-distribution of quota from the Sector. In the North Sea Cod model, limits would rise by 500kg/month in 8 months of the year. For 7d Sole, there could be a 1 tonne increase in limits for 8 month of the year. \$^{35}\$ It is difficult to predict whether higher catch limits will result in increased trips and higher discards, or the same/fewer trips with a higher proportion of catch landed (i.e. lower discards). Nevertheless, the risk must be acknowledged that it could lead to the former.
- 3.57 Those with FQAs in the Sector would still be able to trade. There is a risk that the new entrants (HCVs) could quickly 'sell up' with these FQAs moving into other Administrations or being concentrated with just a few users. There are different views on the costs and benefits of this, but there is an acceptance that greater transparency in the system could help improve tradability. For example, an online portal for trades could allow new and existing players in the market

³⁴ The data supplied after the introduction of RBS led to the use of constraining catch limits for under 10s and for the first time institutionalised competition for fishing opportunities and thus incentives to overcapitalise. Prior to this, catch limits had not constrained activity and so there had been no race to fish.

³⁵ Source: MMO Fish Statistics Unit – catch limits were modelled using 2010 quota amounts to model a scenario where realignment and redistribution described above was conducted.

- 3.58 Whilst the boost of additional quota to the under-10m fleet will help boost the economic viability of these vessels, and help safeguard associated infrastructure, as the benefits are expected to diminish over time this would only delay risks to this infrastructure.
- 3.59 In terms of enforcement, it is anticipated that the increase in quota in the under-10m pool could temporarily reduce the enforcement burden, but there is a risk that this would then increase over time as the same problems found under current arrangements arose.

Assumptions

3.60 In addition to the assumptions set out in the baseline section, the costs and benefits of Option 1 have been estimated under the following assumptions:

- The removal from the Sector of a modest percentage of consistently un-fished quota will have no impact on the profitability of vessels in the Sector;
- The allocation of track record as FQAs will result in a reduction in vessels' fishing costs of 10%.
 This (conservative) assumption is applied to both quota and non-quota fishing because, since
 many vessels fish for quota and non-quota species simultaneously, costs are generally not
 separable, and moreover efficiency would therefore improve overall and not solely in relation to
 quota fishing.

Costs to Business

3.61 There would be no significant benefits in terms of reduced costs to businesses under this option. The 129 HCVs moving out of the under-10m fleet would no longer have to deal with the burdens associated with monthly catch limits etc. However, they would instead have obligations in terms of PO membership. We cannot currently quantify either of these effects, but this will be explored further during and after the consultation.

Wider Impacts

3.62 As discussed in the baseline case, there are some wider benefits associated with fishing which could be lost over time. In option 1, they will still be at high risk, and it is predicted the industry will eventually decline in the same way as in the baseline case. As such, the same wider impacts would be expected over a longer period.

Summary of Costs and Benefits

Annual Total Monetised Benefits (Positive Values) and Costs (Negative Values) of Option 1

Annual Total Meneral Benefite (1 Column Talace) and Code (1 Cogalite Talace) of Option 1					
Re-distribution	Higher Catching	Medium and Low	English Sector		
Scenario	Vessels	Activity Vessels			
Scenario 0.5%	£500,147	£462,547	-£115,590		
Scenario 1%	£500,147	£497,339	-£231,180		
Scenario 3%	£500,147	£636,506	-£693,539		
Scenario 5%	£500,147	£775,674	-£1,155,898		

Annual per-vessel Monetised Benefits (Positive Values) and Costs (Negative Values) of Option 1

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Re-distribution	Higher Catching	Medium and Low	English Sector
Scenario	Vessels	Activity Vessels	_
Scenario 0.5%	£3,877	£393	-£455
Scenario 1%	£3,877	£422	-£910
Scenario 3%	£3,877	£540	-£2,730
Scenario 5%	£3,877	£658	-£4,551

3.63 To make per-vessel estimates for medium and low activity vessels³⁶ requires an estimate of the number of low activity vessels that would avail themselves of the additional quota. The estimates above are made on the assumption that they accrue to all of the 1178 medium and low activity vessels. If we assumed that the benefits accrued solely to the 150 medium activity vessels, the annual average

³⁶ A vessel was deemed to be 'low activity' if it met one of the following criteria: its fishing income was not greater than £10k; or it spent less than a fifth of the average time at sea for its metier. As previously noted, higher catching vessels are defined as those catching the top 60% of the total volume of catches attributable to the English under-10m fleet. Hence, medium catching vessels are by default the remaining vessels.

increase in profit would be between £3-5K per vessel. However, it seems unlikely that profits could increase to this extent even temporarily without attracting a significant increase in activity from lower activity vessels. Therefore the actual outcome would be likely to be somewhere between these extremes.

Conclusion

3.64 As set out in the 'risks' section of this analysis, whilst this option would provide some temporary relief of the problems facing the under-10m fleet, it would not solve them in the long term. All of the conditions that make it difficult for businesses to plan, maximise profits, and dis-incentivise responsible fishing would remain, or would return over time. As a result, the limited costs to the Sector set out above would not result in long term benefits. In conclusion, this option would not deliver the objectives of a sustainable fleet in the long term.

OPTION 2 - FISHERIES MANAGEMENT REFORM

3.65 The intention of this option is to build upon option 1 and address its shortcomings, by aiming to deliver a more sustainable management system overall. The option integrates under-10m and non-sector vessels with the rest of the fleet, allocates track record as FQAs to all vessels fishing quota stocks, and dissolves the inshore and non-sector pools.

Step 1a/1b – Allocating individual fisheries access-rights to all vessels and establishing the level of access-rights:

- 3.66 Research and experience in other countries has shown that giving fishermen a more certain stake in fisheries, in the form of access-rights, encourages responsible fishing³⁷ and allows them to take greater control of and responsibility for their businesses. Flexible trading of these access-rights means that fishermen can make informed decisions about securing, through purchase or lease, the additional rights that would most benefit their business, or selling rights that are less valuable to them, or even to fund a move out of the catching sector.
- 3.67 Allocating individual access-rights across the whole English fleet would lay the foundations for greater individual and local control of fishing, and move away from centralised micro-management by the MMO.
- 3.68 Safeguards could be incorporated to prevent wholesale movement or concentration of rights within the wider fleet, with mechanisms in place to encourage and incentivise smaller-scale vessels to fish responsibly, and deliver social, environmental and economic benefits. In particular, the evidence described in the introduction suggests that there is potential for small-scale vessels to generate significant value by developing markets that reward particular characteristics, such as local branding, environmental performance, and social enterprises (e.g. community or co-operative management). However, if FQAs are universally tradable from the start, there is a risk that the potential benefits of small-scale businesses may never be realised, as smaller vessels may find it convenient to sell their FQAs to larger enterprises with better access to capital. Moreover, evidence shows that fishermen are often keen to continue working independently and in traditional ways meaning that if potential economic and social benefits are to be unlocked, incentives are likely to be needed to bring about changes in ways of doing business.
- 3.69 Annex 3 explores the options for how access-rights could be allocated, and the strengths and weaknesses of different approaches. Based on the analysis, allocating FQAs to all under-10m vessels, using track record from the Registered Buyers and Sellers system is considered the strongest option.

³⁷ 'The potential benefits of a wealth-based approach to fisheries management: An assessment of the potential resource rent from UK fisheries' – IDDRA Ltd, 2010.

³⁸ 'A Fishermen's Tale – Being a Fisherman in England in 2009' - Creative Research, 2010. http://www,defra.gov.uk/foodfarm/fisheries/policy/saif/research.htm

Step 2 – Re-alignment and re-distribution of quota:

- As discussed in option 1, some element of re-alignment/re-distribution of quota would also be required in option 2 to boost the economic viability of under-10m vessels and to provide a strong foundation for their integration with the wider fleet. This would see re-alignment of consistently underused quota and re-distribution of a small amount of quota from the Sector, to non-HCVs in the under-10m fleet. For the purposes of considering costs and benefits, the same methodology for moving FQAs is proposed as in Option 1. HCVs would not benefit from this additional guota, as analysis has shown that their track record is sufficient to support economic viability³⁹ (based on assumptions discussed in option 1).
- Although FQAs would be allocated to all vessels based on their track record, there are a number of methods for allocating the additional FQAs sourced from the Sector. Annex 3 explores the different ways this could be done. Directing re-aligned and re-distributed quota to community quota schemes has been identified as the strongest option in terms of generating benefits.

Step 3: Roll-out the new system - timing of change:

- Moving to a user-rights system would mean fundamental changes in quota management arrangements for some parts of the fleet in England. In turn this will require changes to UK arrangements for the under-10m and non-sector pools. It may be considered that implementation of these changes in 2012 would be too soon, and more time would be needed to establish the new arrangements.
- Annex 3 considers the strengths and weaknesses of a 'big bang' scenario compared to a phased approach. Based on this analysis, a phased roll-out has been identified as the preferred option, allowing time to establish a community quota network and also give fishermen time to adapt to the new system.

Step 4 – Establish community guota groups/schemes:

- Where FQAs are allocated, micro-management by a central body, such as the MMO, is not required. Instead regulators can focus on monitoring and enforcement and would only play a part in quota management through the facilitation of international quota swaps. The MMO would therefore undertake this role for the whole fleet following the dissolution of both the under-10m and non-sector pools. Whilst the MMO would no longer have a role in setting catch limits for a segment of the fleet, they would potentially be monitoring a more complex fleet, with a myriad of individual FQAs equating to different allowable landings for many vessels.
- However, it is expected that once the under-10m and non-sector pools are dissolved, a number of vessels unable to join an existing PO on current terms may still wish to pool their resources together with other similar vessels rather than be restricted to just their own FQA allocation.
- Annex 3 explores the different ways that FQAs could be pooled effectively. Based on the analysis, it is considered that community quota schemes offer potentially significant benefits as part of a reformed management system, and the process of establishing them should integrate community views.

Step 5: Provide incentives for creation of Community groups delivering social, environmental and economic benefits.

As mentioned earlier, an amount of FQAs could be retained by Government as an incentive for the industry to set up and manage community quota schemes. Annex 3 explores the potential sources for this quota and concludes that the FQAs obtained through re-alignment and redistribution measures could deliver maximum benefits if directed to community quota schemes.

Step 6 - Safeguard community quota and prevent concentration of rights:

Once FQAs are allocated to the whole English fleet and the under-10m and non-sector pools are dissolved, it is possible for there to be no further intervention and the trading of user-rights could be solely led by market forces. FQA holders could have the freedom to buy and/or lease additional user-

³⁹ As footnote 1

rights and quota from across the UK. However, there is a desire by many to prevent FQAs becoming wholly concentrated in the intensive fishing fleet or in a geographical area. Safeguards could allow the benefits associated with low-intensity, community quota fleets to be secured, and potentially increased in the future. Over time, there may be appetite to remove safeguards, to give a stronger small-scale fleet, and the wider fleet, more flexibility.

- 3.79 The system could prevent the sale of FQAs allocated to community quota models into the wider fleet. Similarly, member of community quota schemes could be unable to sell their individual access-rights to the wider fleet. Swaps within the community fleet network would be allowed.
- 3.80 More generally there may be concentration of fleet-wide access-rights with just a few community quota groups, individual fishermen, or within intensive fishing businesses. Safeguards (akin to restrictions on concentration of ownership in other industries) may be needed to prevent this, perhaps capping the amount of user-rights that can be held by any one fisherman or group.

Model tested for Option 2:

- 3.81 Having considered a range of options under each of these steps, the following model has been developed in order to assess costs and benefits:
 - Higher catching vessels defined as those catching the top 60% of the total volume of catches attributable to the English under-10m fleet.
 - All vessels in the under-10m fleet notionally allocated access-rights in the form of FQAs, using a calculation, based the proportion of pool quota fished by them over the reference period 2007-2010.
 - The HCVs would be formally allocated their FQAs as of 1st January 2012 and removed from the under-10m pool. They would be expected to join existing POs or to join the non-sector pool (as it exists until its dissolution on 1st January 2013).
 - The remaining vessels would continue to fish against the pool until 1st January 2013 before formally being allocated FQAs, and both the under-10m and non-sector pools dissolved.
 - These fishermen would be encouraged, during the 2011-2013 transition period, to organise themselves to form community quota groups in liaison with their communities.
 - The membership of these groups would be determined by the local community, defined in line with the guiding principles set out by Government, and focussed on social and environmental benefits, but aligned to the needs of the local area.
 - Government would provide incentives for setting up these groups by providing access to 'community FQAs' provided from the re-alignment of FQAs associated with consistently unfished allocations and a re-distribution of FQAs for some fished stocks.
 - These 'community FQAs would not be 'owned' by the community groups, and so could not be traded, but they would be fished by members through pool systems. If the group was disbanded, or members did not adhere to the guiding principles, then the FQAs would be returned to Government.
 - Initially, a one-way valve on 'community' FQAs would be introduced for these groups to protect and promote social, environmental and economic benefits in their fleets. The rationale for a cap on the concentration of FQAs would be kept under review.
 - Latent capacity would be addressed through the issuing of zero FQAs to those who do not have a track record.

Costs

- 3.82 The summarised costs to the Sector associated with re-distribution and re-alignment of FQAs are the same as those in option 1.
- 3.83 Transition costs would need to be extended to all under-10m vessels, both to adapt to the new regime of individual FQAs and the development of community quota schemes. Given the unknowns related to the size and scale of such schemes, and the lack of precedents, it would be very difficult to make a meaningful calculation of these costs. However, discussions with industry prior to finalising any reforms will allow identification of potential interest groups, and factors to make an estimation of these costs for the full Impact Assessment.
- 3.84 There will be costs for community quota groups in terms of running and managing the pooled

quota, as well as the additional 'community quota' on behalf of their members. However, once potential EFF funding is provided for start-up, these groups would be expected to be self-sustaining and therefore charge a levy from their members in order to cover these management costs.

Benefits

- The main benefit of this option is improved profitability for the under-10m fleet through the 3.85 allocation of individual user-rights in the form of FQAs. By giving these vessels individual FQAs and providing them with the opportunity to operate in the same way as over-10m vessels with more certain access to an allowed share of the catch, there will be additional benefits associated with these vessels being able to fish more flexibly to meet their own business needs and the demands of the market, and to minimise the impacts of new requirements such as Marine Protected Areas.
- Work done by IDDRA Ltd on the potential benefits of a wealth-based approach to fisheries management⁴⁰ indicates that by issuing a model system of user-rights, the potential additional wealth that could be extracted from the same resource could significantly increase. Similar studies, including that by the World Bank in 2009⁴¹, support this conclusion. In the proposed scenario, FQAs would be introduced instead of a free access system. Therefore, as for the benefits to HCVs in option 1, we have used a conservative assumption of 10% to calculate the reduction in costs that the under-10m fleet and the non-sector would have the opportunity to secure if they were issued with FQAs. The rationale for this was explored under option 1, and will be tested further during the consultation.
- The under-10m vessels that are defined as small-scale and join community groups will have access to the additional 'community FQAs' sourced from the re-alignment of un-fished quota and a redistribution of Sector quota. Moreover, we assume, based on anecdotal evidence⁴² of the prices that a few inshore fishermen who have managed to exploit or develop markets that capitalise on social or environmental selling points, that these groups could secure prices 25% greater than at present. This assumption will be explored further during the consultation. The resulting benefits are estimated to be an increase in annual profit of between £1.6m - £2.4m, depending on the level of re-distribution, relative to the baseline.
- 3.88 For those vessels from the under-10m and non-sector fleets being allocated FQAs, it is estimated that costs will reduce by 10% leading to greater operating profits of between £749k - £801k dependant on the level of re-distribution, and relative to the baseline.
- These three elements sum to estimated total benefits for option 2 of £2.3-3.2 million, depending on the level of re-distribution. These benefits are sensitive to the key assumptions of the percentage by which costs are expected to decrease after FQA rights are allocated. The benefits of this option are, clearly, entirely dependent on these gains. However, the assumptions made on these factors are, for reasons given above, felt to be conservative.
- In addition, it is anticipated that the unification of the fleet will lead to a small reduction in annual MMO management costs of approximately £92k. However, there will be transitional costs associated with establishing and allocating FQAs to under-10m vessels. We have not attempted to quantify these given the many variables associated with implementation. However, it is anticipated that owing to the expected easing of pressure in the pool in year one, this will balance the transition costs.
- As discussed in earlier analysis, giving fishermen a clearer, more certain stake in fisheries, and encouraging co-management of fisheries within communities, can lead to more responsible and sustainable exploitation of fish stocks. Within the proposed model, both of these conditions would apply, with community quota groups a potential key player in discussions about fisheries management with the MMO and IFCAs. The incentive to 'race to fish' within a pool system would also be removed. There may therefore be a reduction in discards and an increase in stock sustainability.
- The potential to maximise untapped social benefits within fishing communities, identified by the social research conducted for this work, would also be increased by the development of the community quota model. Potential upstream benefits including in tourist and hospitality industry through maximising unique selling points associated with community fleets.

⁴⁰ As footnote 37

⁴¹ The Sunken Billions: The Economic Justification for Fisheries Reform. The World Bank, 2009.

⁴² Anecdotal evidence suggests that some fishermen are securing prices between 2 and 6 times quayside prices.

Risks/Unintended Consequences

- 3.93 The current situation could deteriorate even more quickly than is currently foreseen, for example if the TACs decrease further than currently expected or there is a significant increase in the price of fuel. This could lead to the calculation above in relation to economic viability being incorrect.
- 3.94 Once FQAs have been allocated, there is a risk that non-quota species will be targeted further if the overall UK TAC for quota species continues to fall. There is already evidence, for example, that effort has increased significantly in the brown crab shellfishery and these species need to be monitored closely to ensure that the extension of FQAs to the under-10m fleet is not having a detrimental effect on these stocks.
- 3.95 The reallocation of un-fished quota may have a negative impact on certain stock levels. However given the levels of quota involved, and the fact that the quota allocations are still below the TAC set for the UK, this is assumed to be low risk.
- 3.96 There is a risk that individual vessels or community groups do not realise the potential benefits associated with a user-rights based system. This may be through lack of the relevant skills required to make sound business decisions or a lack of enthusiasm for setting up community groups, with all vessels operating independently without the flexibility of pooled resources. The success or otherwise, of FQA trading and expanded POs could also reduce or increase the attractiveness of community models. In addition, these groups may not be self-sustaining beyond any initial period of support.

Assumptions

- 3.97 In addition to the assumptions set out in the baseline section and in Option 1, the benefits of Option 2 have been estimated using the assumption that by joining together in Community Quota Groups, fishers will obtain an additional benefit over and above the benefit of receiving individual FQA allocations.
- 3.98 There are likely to be significant marketing benefits, as groups of fishermen will be better placed than individuals to develop and exploit higher value markets, capitalising on local and environmental-type characteristics. For the purposes of quantifying the benefits of this option, these have been estimated at a 25% increase on standard prices. This is a conservative assumption, given that there is anecdotal evidence of fishermen securing several times the standard price where they have managed to develop specialist markets.
- 3.99 There are also likely to be additional cost efficiency benefits, as fishermen are able to pool their quota in order to fish it at the lowest cost. However, there is no basis on which to quantify these and therefore they are assumed to be zero in the calculations. Likewise, additional social and community benefits would follow from the additional profitability generated from Community groups; this has not been quantified.

Costs to Business

3.100 It is anticipated that there will be transitional costs to industry of these proposals, and ongoing administrative costs under the reformed regime. These will be explored with industry as part of the consultation process.

Wider Impacts

3.101 Community quota groups will be able to use the unique selling points of their catches, such as environmentally sustainable, as a marketing tool. This has the potential to provide wider benefits, particularly for the tourist industry in the coastal communities that support these fleets.

Summary of Costs and Benefits

Annual Total Monetised Benefits (Positive Values) and Costs (Negative Values) of Option 2

Re-	Higher	Medium and	Medium and	English	English	Management
distribution	Catching	Low Activity	Low Activity	Sector	non-sector	
Scenario	Vessels	Vessels –	Vessels – in			
		not in CICs	CICs			
Scenario 0.5%	£500,147	£248,645	£1,560,339	-£115,590	£17,106	£92,000
Scenario 1%	£500,147	£254,444	£1,629,814	-£231,180	£17,106	£92,000
Scenario 3%	£500,147	£277,639	£2,025,490	-£693,539	£17,106	£92,000
Scenario 5%	£500,147	£300,833	£2,381,908	-£1,155,898	£17,106	£92,000

Annual per-vessel Monetised Benefits (Positive Values) and Costs (Negative Values) of Option 2

Scenario	Higher	Medium and	Medium and	English	English
	Catching	Low Activity	Low Activity	Low Activity Sector	
	Vessels	Vessels –	Vessels – in		
		not in CICs	CICs		
Scenario 0.5%	£3,877	£106	£1,325	-£455	£104
Scenario 1%	£3,877	£108	£1,384	-£910	£104
Scenario 3%	£3,877	£118	£1,719	-£2,730	£104
Scenario 5%	£3,877	£128	£2,022	-£4,551	£104

- 3.102 These costs and benefits reflect a trade-off between economic efficiency and social/environmental benefits. There is a clear economic cost to the sector associated with the redistribution of FQAs, which is balanced by the benefit of securing the economic viability of the under-10m fleet in the short term, and in the longer term enhanced economic value from this part of the fleet and through the community quota groups. This also includes non-monetised social benefits and indirect economic benefits of sustaining local and small-scale fishing fleets.
- 3.103 As in option 1, the per-vessel benefits are calculated on the assumption that they are distributed evenly across each fleet segment. As previously noted, potential enhanced economic value is estimated based on an assumed 25% increase in price, and efficiency savings are assumed to be 10%. Both these assumptions we will be explored further during the consultation.

4. CONCLUSION

4.1. Overall, the analysis shows that the benefits associated with option 2 exceed those associated with the baseline case or option 1. Therefore, there is an argument for Government intervention to implement option 2.

5. ISSUES FOR FURTHER CONSIDERATION DURING CONSULTATION

- 5.1. Along with further development of the cost/benefits analysis detailed in this IA, the following key issues will be explored further during and after consultation:
 - Which vessels should be defined as HCV's:
 - Process required to facilitate the movement of HCVs to POs;
 - Transition and ongoing costs to industry, including the current costs of complying with existing under-10m management regime and getting up to speed/complying with a new regime;
 - Transition and ongoing costs to Government;
 - The assumptions for potential enhanced economic value based on a 25% increase in price, and efficiency savings of 10%, associated with implementing a new regime.
 - The guiding principles/criteria under which Community Quota schemes would operate;
 - How to allocate foundation quota to Community Quota schemes;
 - Support required to establish Community Quota schemes;
 - The magnitude of potential impact on the value of under-10m licences.

Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. If the policy is subject to a sunset clause, the review should be carried out sufficiently early that any renewal or amendment to legislation can be enacted before the expiry date. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

Basis of the review:

As this is a consultation stage Impact Assessment, the policy will be reviewed in order to develop final proposals and the final IA. Following that, it is anticipated that the first post-implementation review will take place after reform of the Common Fisheries Policy.

Review objective:

The initial review will aim to select a final policy package that will meet the overall objectives of a more sustainable fishing industry, operating in harmony with other sea uses and the marine environment.

Review approach and rationale:

A full IA will be conducted, taking on board additional evidence and comments submitted during and developed during the consultation period, to develop the final policy package.

Baseline:

The baseline is detailed in this consultation stage IA.

Success criteria:

To be developed for final IA.

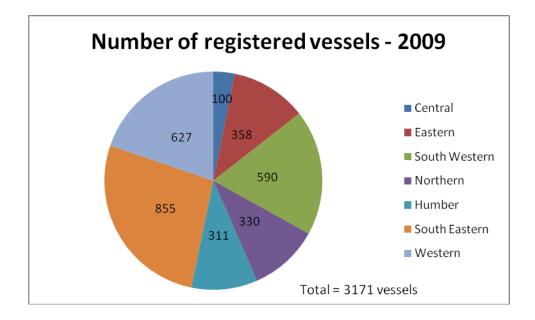
Monitoring information arrangements:

Fisheries activity is consistently monitored under existing regimes, including the Registered Buyers and Sellers Regulation, annual MMO and Seafish statistics review, and additional requirement set out in EU data Regulations.

Reasons	for	not	nlanning	а	review:
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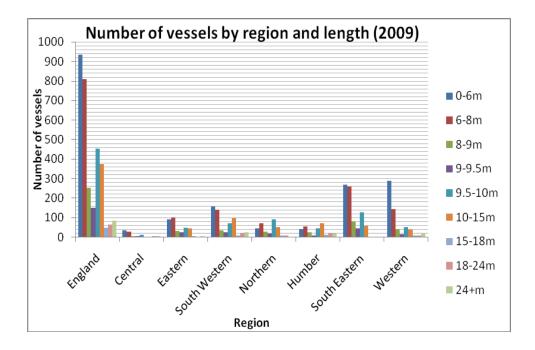
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Pie Chart: Number of registered vessels in each of the different regions of England in the year 2009

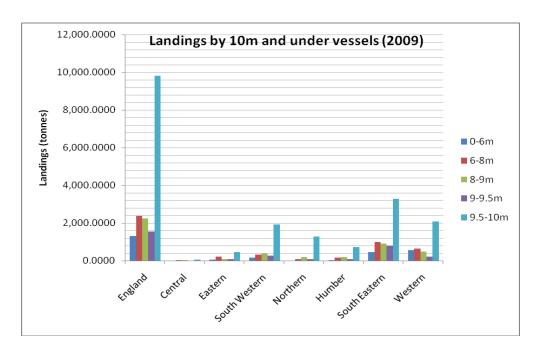


Graph: Number of vessels in each region by length in 2009

Annex 2



Graph: Landings of under-10m vessels by region and length of vessel for 2009



Annex 3

Detailed discussion of evidence/methodology behind selected policy options

1. Option 1: Modifying the current system

Step 1: Create a 'Higher Catching Vessels (HCV)' category and remove these vessels from the pool, allocating them with individual fisheries access rights

- 1.1. In order to move HCVs out of the pool and into the sector, we first need to define them. Then decide what proportion of their track record, if any, they should be allocated in order to provide them with the resources to be able to join the Sector. Moving these vessels out of the under-10m pool would be mandatory to ensure that enough vessels are removed from the pool system to enable the remaining vessels to have access to sufficient fishing opportunities for economic viability, and reduce the burdens in relation to management of the under-10m pool. Vessels would either need to join a PO or would join the non-sector pool.
- 1.2. There are two main ways of differentiating HCVs; either by physical vessel characteristics (e.g. vessel length criteria, or by scale of operation (either by landings volume or value). Detailed consideration of these alternatives has led to the conclusion that vessel characteristics are an unreliable indicator of the suitability of vessels to operate in the large scale fleet rather than the inshore fleet. One major issue is the considerable potential for individual vessels to meet length and other criteria while still operating at a relatively small scale. Another is the potential for another arbitrary size/characteristic threshold to provide the types of perverse incentives that the current under/over 10metre criterion does.
- 1.3. The alternative is to look at scale of operation. Whilst there is no clear dividing line between those catching large volumes of fish and those that have more modest catches, there is a distinct trend to show that the bulk of the landings of the under-10m fleet are attributable to a minority of the fleet. Therefore, this provides a better indicator of suitability for transfer.
- 1.4. Research by Vivid Economics¹ assessed a range of different options for defining the HCVs, looking at different percentages of the top catchers of quota species (looking at both the top 10 and all quota species), by both volume and value. This work assessed how many vessels would be moved in each option, what track record² these vessels had associated with them, and what quota would remain in the pool if these vessels were allocated FQAs based on track record when leaving the pool.
- 1.5. This work provided the scenario that was used to estimate the costs and benefits for this option. Out of the three analysed options, defining HCVs as those catching 60% or more by volume of all quota species landed by the under-10m fleet (excluding leasing), moves those vessels out of the pool with sufficient allocations to maintain economic viability, whilst leaving enough quota to support the track records of remaining vessels.
- 1.6. To establish which vessels fell into the HCVs category, an average track record of landings over a number of years (with 2007-2010 giving the most accurate data) would be used and would exclude Environmentally Responsible Fishing³ scheme landings. Under these criteria 144⁴ vessels would fall above the threshold (around 5% of the under-10 fleet and 7% of the active under-10m fleet) with the landings threshold falling just below the 11 tonnes per year per vessel mark.
- 1.7. Vivid's analysis concluded that removing 100% of the track record of these higher catching vessels (HCV) from the pool would leave only around 30-45% (by value) of the quota required by remaining vessels for a minimum level of economic viability. However, this would leave the same level of quota as is currently fished by the remaining vessels, and would not therefore leave them worse off in terms of catching opportunities.

¹ 'An economic approach to long term reform of access to fisheries for the inshore fleet: extension' – Vivid Economics, January 2010

² Based on average landings as a proportion of catches from pool quota, over a reference period of 2007 – 2010.

³ The Environmentally Responsible Fishing Pilot Scheme ran during 2008-2009, and limited vessel activity of 30 under-10m vessels in 3 areas through a days-at-sea limit rather than using quota. 'Environmentally Responsible Fisheries Project – Final Summary Report' Cefas & Seafish, 2010. http://www.defra.gov.uk/foodfarm/fisheries/policy/saif/research.htm

⁴ MMO Statistic Team analysis, 2011

- Moreover, throughout the analysis a number of assumptions were made that are likely to result in 1.8. the viability of remaining vessels being underestimated. The first was that all active fishermen identified in the analysis primarily rely on quota species. In reality, as acknowledged in the report, "part-time vessels and those with income from non-quota stocks might achieve economic viability with a lower quantity of quota."5 As set out earlier, the under-10m fleet derive a majority of their landings, both in volume and value terms, from non-quota stocks.
- Another assumption is that all fishermen in the under-10m fleet are full time fishermen, with no other means (other than fishing) of remaining economically viable. In fact, on average 86% of fishermen are deemed to be full-time, whilst the remaining 14% operate part time⁶.
- The analysis also assumes that to maintain an economically viable return from fishing, the return on capital invested by fishermen would need to be as high as 7% return. This is based on the assumption that all fishermen have existing requirements for return on capital (due to vessel purchase). or would want to invest profits in new or improved vessels. The vessel age of the current fleet would indicate that fishermen do not invest in new vessels that frequently.

Strengths

- 1.11. The scale of operation, either by value or by volume, is a more accurate description of the types of vessels which can be classified as 'higher catching' because it allows for both physically smaller and larger vessels that have a higher impact in terms of catches. It takes account of evidence that vessel length is not a deciding factor when identifying high impact vessels.
- 1.12. With HCVs moving out of the under-10m pool, the Sector would benefit from new members bringing additional quota, and thus additional flexibility in any PO pool arrangements. These are more tailored to the needs of members than the generic 'one size fits all' approach used for the under-10m pool. It should be possible to adapt fishing more effectively to quota availability, and so there could be a reduction in discards. Any vessels joining the Non-Sector would also be adding quota available to the non-sector pool. The HCVs allocated FQAs will be empowered to make more tailored business and fishing decisions in the same way as other sector vessels.
- 1.13. Vessels remaining in the pool would benefit from better tailored catch limits. At the moment, catch limits need to account for a huge range in levels of activity, accommodating high catchers. Removing these HCVs and no longer needing to accommodate them could allow more consistent limits over the course of the year. This should reduce the 'shocks' in the current system that can sometimes lead to fisheries closures at short notice. Removing these vessels will make management of the pool easier and therefore cheaper for the MMO, and more effective for the remaining vessels.
- 1.14. Using scale of operation, rather than vessel characteristics as the criterion for identifying vessels to move out of the under-10 fleet, will avoid any perverse 'snowdrift' effect, as will the fact that this would be a one off exercise. Further detailed analysis would be required to determine the exact vessels that would move out of the under-10m fleet.

Weaknesses

- 1.15. Analysis shows that whilst there are vessels turning over higher volumes of fish, the volume varies across quota and non-quota species. When ranked in order of catch, the volume of catch smoothes to a point where there is little distinction across the fleet. This makes it difficult to identify a clear threshold, with vessels instead falling just above and below the line (illustrative chart at Annex 4). Although the analysis shows us that moving the HCVs catching 60% of the quota species by volume out of the pool is a strong option, there would need to be rigorous assessment of which vessels fell under and over the dividing line. A transparent process to identify these vessels with industry will be required.
- If they were to move into the Non-Sector, this would place pressure on the small quota pool that these vessels access, and would likely reduce the HCV's overall catch limits. This is because the Non-Sector members cannot hold individual FQAs. There would therefore be strong incentives to join a PO. Alternatively, increased flexibility would need to be considered by Government to allow these vessels to

⁵ 'An economic approach to long term reform of access to fisheries for the inshore fleet: extension' – Vivid Economics, January 2010

⁶ Supplied from MMO Statistics Team- extrapolated from results of the 2009 Fishermen survey English administration ports

⁷ 75% of English administered vessels were built before 1991 – 'UK Sea Fisheries Statistics 2009', MMO, 2010

operate independently, or to change the arrangements for the Non-Sector pool. Both would have significant implications for administrators and affected vessels, requiring further consideration.

Summary of Step 1

1.17. Based on the above analysis, identifying higher catcher based on volume of catch, and allocating them with individual fisheries access rights in the form of FQAs linked to track record, would be the strongest option. Therefore, this is the model we have used for step 1 in testing costs and benefits.

Step 2: Securing additional quota for the under-10m fleet:

- 1.18. Realigning FQAs associated with un-fished quota to fleet segments actively targeting these stocks would increase uptake. For purposes of our analysis, consistently un-fished quota is considered to be stocks where uptake against group (under-10m, sector and non-sector) allocations has been less than 90% *and* there has been more than 100 tonnes of quota remaining un-fished during the period 2007-2009. The annual quota uptake spreadsheets prepared by the MMO were used to identify those stocks to which this criterion is applicable. The consultation will explore whether this is appropriate criteria to use, or whether alternatives should be explored. Re-alignment would be confined to stocks where another part of the fleet has used a high proportion of its allocation, increasing the likelihood that this re-aligned quota will be caught.
- 1.19. The FQAs associated with a significant proportion of this un-fished quota would be taken from current holders and re-distributed to the segment actively fishing the stock. This would leave a proportion of un-fished quota for the donating sector. Detailed analysis can be found in Annex 5. In practice, the criteria apply only to FQAs currently held by the Sector, and actively fished in the under-10m fleet.
- 1.20. In respect of re-distributing FQAs associated with fished quotas, to minimise impacts on the Sector, the percentage of total quota holdings would be very small. The measure would only be applied to those stocks where the under-10m fleet has taken an average of 90% or more of its initial allocation since 2007.

Strengths

- 1.21. Un-fished quota is a waste of UK fishing opportunities. Most would agree that the UK should maximise the potential wealth from the resources available within the limits of sustainable catches. Unfished quota potentially represents an underutilisation of resources.
- 1.22. Targeting those stocks consistently fished by one fleet sector and consistently under-fished by another, should increase the level of take of these stocks and associated revenue. The stocks identified using this methodology are likely to be of great importance to the receiving sector. Area 7d Sole, for example, is a key inshore stock of the South East coast and the under-10m allocation is consistently exhausted, requiring supplementation through swaps and gifts.
- 1.23. Additional quota may also reduce pressure on other stocks, allowing more even distribution of effort across species. However, whilst this would be possible, the under-10m fleet tend to target fish according to geographical area, prevalent stocks, and historic catch patterns with certain stocks having traditional dominance (e.g. Sole and Cod in the South East). As such, other measures may be needed to encourage increased diversification. Similarly, as fishermen invest in the vessels to maximise catches, any reduction in pressure would likely reverse.
- 1.24. By taking only a proportion of un-fished quota and redistributing it to the under-10m pool, it will leave a buffer of FQAs to account for declining TACs, and some level of flexibility for the Sector to increase fishing effort in this area.
- 1.25. The proposed low-level of re-distribution would have minimal impact on the Sector, but by focussing on those stocks where uptake by the under-10m fleet is high, this would maximise the benefits to the remaining under-10m fleet.

Weaknesses

1.26. For the re-distribution of fished FQAs, the finite nature of TACs means that increasing the share of FQAs held by one segment will inevitably reduce the number available to another. Whilst this proposal

does aim to minimise the impacts of the Sector by targeting a very small proportion of FQAs and targeting only certain stocks rather than a blanket re-distribution, it will still remove some fishing opportunity from these vessels.

- Reducing TACs may mean the benefit to the under-10m fleet declines over time, and that the associated dis-benefit to the Sector increases. However, the methodology used targets stocks with significant under-fishes, thus reducing these risks.
- The critical weakness of Option 1 is that transferring additional quota into the under-10m fleet, without addressing the fundamental problems with the current management system, will at best provide a short term relief to the problems faced by the fleet. The incentives faced by individuals will be unchanged. The benefits of additional quota will likely be lost relatively quickly, as without certainty of access to a share of the quota; businesses invest in further capacity to ensure that they do not lose out to others. The cost of this investment will, overall, be likely to offset the benefits of the additional quota. As explained in the main evidence base, this has been accounted for in estimating the quantitative benefits of this option.

Summary of Step 2

Based on the above analysis, re-aligning a high proportion of FQAs associated with consistently under-fished quota, and redistributing a small percentage of actively fished FQAs, would provide a source of quota to temporarily boost the economic viability of the under-10m fleet.

Step 3 – Restricting Capacity: Removing latent or active capacity

- There a number of options for addressing this. One would be to revoke the access rights to quota fisheries from fishing licences that have had no quota-species landings attributed to them in the last 5 years. However, this could be a disproportionate response to this ongoing risk. Alternatively, it would be possible to build on the licence capping scheme introduced across the under-10m fleet in February 2009, reducing the current 300kg cap to zero on dormant licences for quota stocks.
- In addition, a decommissioning scheme could remove both active and inactive capacity from the fleet. Decommissioning schemes have been used a number of times in the past with the aim of reducing capacity in the fleet. In 2009, a scheme was run for the under-10m fleet, seeking to target areas most vulnerable to quota stock pressure. This saw 65 vessels scrapped, releasing more than 500 tonnes of key quota stocks previously caught by these vessels back into the pool for fishing by others.
- 1.32. A traditional decommissioning scheme would be wholly publicly funded, and brings risks of reinvestment of public money in new, more efficient boats. Combining with further control of latent capacity would reduce the risks of increased effort as a result, but early analysis of the 2009 decommissioning scheme for under-10m vessels would suggest that this would not wholly address the risk.⁸ To further mitigate the risk, the option of introducing an element of industry match funding might incentivise self-policing by industry to help prevent re-entry.

Strenaths

- Both of the options to address latent capacity would be one-off exercises and therefore the costs 1.33. would also be one-off. There is also now several years of data relating to activity collected under the Registered Buyers and Sellers Regulation, and the lessons learned from the previous licence capping exercise would provide a valuable insight into the design of a further scheme to limit licences.
- Revoking the licence, or placing a zero cap on quota species, removes the risk that these licences become active again in the future, placing additional pressure on the available quota fishing opportunities in the pool and other businesses operating within this system. The latter would provide a more proportionate response to the risks present.
- 1.35. Capping dormant licences at zero for quota stocks would allow shellfish entitlements to still be utilised. It would allow vessels to continue to catch non-quota stocks subject to any relevant national or

⁸ There is anecdotal evidence that some fishermen taking decommissioning grants under the 2009 scheme have returned to the industry with new boats, and purchased licences from the available pool. Formal analysis is due during 2011.

European controls.

- 1.36. The main strength of decommissioning is that it delivers a tangible removal of capacity for a tangible cost, albeit it with diminishing benefits over time (e.g. reinvestment of grants in new boats). The level of applications for the 2009 scheme would also suggest there would be industry appetite for such a scheme.
- 1.37. Part funding by industry would reduce burdens on Government, in terms of public funding requirements, and reasonably asks those that will benefit from the additional quota to meet some of the costs in securing that benefit. Industry will have a vested interest in making sure that the scheme works.

Weaknesses

- 1.38. If licences were revoked entirely, the holder would no longer be able to fish the absence of records of landings against quota species indicates these vessels have instead been targeting non-quota (including shellfish) stocks. Since the main concern is to cap effort for quota species it may be unnecessary and disproportionate to revoke the licence entirely.
- 1.39. An appeals process would be required, which experience has shown can be resource intensive and create uncertainty for licence holders whilst the appeal is being considered.
- 1.40. In terms of decommissioning, establishing and implementing such schemes can have significant resource implications. It is likely that additional resources would need to be secured to deliver and manage the scheme. The value for money offered by decommissioning is also highly questionable; with research suggesting that it is difficult to deliver an effective scheme without it being part of a more fundamental re-think of fisheries management⁹.
- 1.41. Continued use of decommissioning schemes leads to an expectation from industry that it is part of business as usual fisheries management. This may lead to a possible distortion of current and future investment incentives and plans.
- 1.42. Without proper management and appropriate constraints put in place and enforced, successful applicants to a decommissioning scheme may use the funds to invest in a new vessel and re-enter the pool there is some evidence of this happening with previous schemes. Value for money is unlikely to be achieved unless issues of latent capacity are addressed alongside a decommissioning scheme (i.e. where funds are simply used to purchase latent licences and start fishing at similar or greater levels).
- 1.43. There may be a backlash from the general public that public money is being used to compensate those who have decided to leave the fishing industry when, in the current economic climate, many people are losing their jobs without similar compensation.
- 1.44. The costs associated with decommissioning can be extremely high. For example, the last decommissioning scheme cost an average £75k per vessel, with each tonne of quota released costing around £10k¹⁰. As a comparison, one tonne of sole could fetch around £8000 if sold at an average market price¹¹.

Summary of Step 3

1.45. Based on the above analysis, latent capacity would be best addressed by capping dormant licences at zero, and decommissioning would be considered with industry.

Option 2: Fisheries Management Reform

Step 1a – Allocating individual fisheries access-rights to all vessels:

1.46. In order to introduce this system to under-10m vessels, an allocation method is required. Rights-based management and the allocation of access-rights are being considered as part of the reform of the CFP, but this will not be finalised and implemented until 2013 at the earliest. Given that there is an

 $^{^{9}}$ 'Reducing Fishing Capacity: Best Practices for Decommissioning Schemes', OECD, 2009

¹⁰ Source: MMO Fish Statistics Unit, 2009

¹¹ MMO Statistics Unit, average market prices 2010

argument for earlier intervention, a mechanism is required that can be implemented in advance of CFP reform, to bring short term benefits and act as an key step towards any revised rights based management system, bringing greater certainty of fishing rights across the fleet.

- 1.47. There are several options available to allow the allocation of access-rights to all fishermen. One would be to develop and implement a brand new rights-based management system, along the lines of those anticipated as being endorsed or promoted by CFP reform. Whilst it is still too early to be able to know what these might be, assumptions could be made about likely features. An alternative would be to extend the current system of FQAs in the UK (applied to HCVs in option 1) to all vessels. All under-10m vessels would be notionally allocated FQAs based on a proportion of their track record an average of their landings over a reference period of 2007-2010.
- 1.48. By allocating FQAs to all vessels, the issue of dormant licences and latent capacity becoming active is addressed as these vessels would be allocated zero rights. These vessels would still hold a commercial licence and any associated entitlement, enabling them to land and sell non-quota stocks (subject to any national or local restrictions) and so in the future, if they decided that they wished to start fishing quota stocks again, they would be able to purchase FQAs from other fishermen.

Strengths

- 1.49. Introducing a brand new system would allow any shortcomings in the current FQA system to be addressed, these are detailed below in the 'weaknesses' section.
- 1.50. The risk of CFP reform delivering a new rights-based-management regime could be mitigated through taking an interim step. The UK already has some elements of a rights-based management system through the holding of FQAs. By extending a system which is already embedded with the UK fishing industry, the first step towards an integrated rights-based management system can be made without the need to introduce a new system across the whole fleet.
- 1.51. FQAs provide greater flexibility to individual businesses, enabling them to have greater confidence in their fisheries access rights and so plan more effectively. The current pool system applies generic catch limits across the fleet that have to account for every level of fishing activity. Individual access-rights would allow Government to step back from micro-management of quota, instead empowering industry to fully adopt this role.
- 1.52. Allowing FQAs to be traded brings further economic benefits, particularly in a fluid market where FQAs can move freely to those who wish to purchase and fish against them. The under-10m vessels receiving FQAs would have much greater control over their fishing activity, with flexibility to fish at times that best suited them either seasonally, or to take advantage of strong market prices.
- 1.53. As discussed above, having a more certain stake in fisheries incentivises responsible fishing behaviour, as fishermen will more likely benefit from increasing fish stocks. Whilst the FQA system is not a perfect rights-based management system, it would be a huge step forward from the pool system currently operated for under-10m boats.
- 1.54. Removing the divide of under-10/over-10m would unify the fleet, removing some administrative complexity. It would also recognise that vessel length is no longer an indicator of vessel activity, and encourage fishermen to source and run vessels appropriate to their businesses rather than trying to meet arbitrary fleet segment criteria.

Weaknesses

- 1.55. CFP reform will not be implemented until 2013. It is impossible at this stage to know exactly what form this reform will take, particularly in relation to rights-based management. If we pre-empt reform of the CFP and introduce a new system of user-rights, there is a risk that this new system will be incompatible with that proposed under CFP reform and a second new system of user-rights would have to be introduced. This would have serious resource implications as well as potentially significantly reduced stakeholder buy-in as the industry is disenfranchised. However, it is important to balance the need to reform the status quo in the short term, with the risk that a reformed CFP may be incompatible in the long term. Based on the current direction of negotiations, it is considered that the risk of incompatibility is low.
- 1.56. The current FQA system does not fully adhere to the principles of rights based management for a

number of reasons, which do impact on its effectiveness. In particular, rights are not certain, the system is not transparent which makes transferability difficult; it operates based on imperfect fisheries management units, rather than the ideal of biological fisheries management units; and it is complex due to the extra layers of regulation brought by the effort regime and other regulations.

- 1.57. Currently, the under-10m fleet is exempt from the CFP effort regime and therefore benefits from a simpler overall regulatory regime. With the introduction of these vessels into the over-10m fleet, there would be additional pressure from the rest of the industry to subject them to this additional regulation as well.
- 1.58. The expansion of the FQA system to under-10m vessels could increase barriers to entry for new fishermen. Currently, the main investments required would be a vessel and a fishing licence. Under the new regime, without special arrangements for new entrants, they would also need to purchase FQAs to fish quota stocks. This however is an inevitable consequence of moving to a more efficient, non-pool based management system.
- 1.59. An FQA system without safeguards could allow the concentration of FQAs in just a few hands. There is a debate about whether this would be a positive or negative outcome, but the social research conducted as part of the SAIF project established that small-scale fleets (which are generally constituted of a number of small businesses) are socially and culturally important in some coastal communities.

Summary of Step 1a

1.60. On the basis of the above analysis, the best 'step 1' would see FQAs allocated to all under-10m vessels.

Step 1b: Establish the level of FQAs for under-10m vessels:

- 1.61. There are a number of ways in which the level of FQAs for individual fishermen who do not currently hold them could be defined. A simple option would be to allocate FQAs based on 100% of fishing track record against pool quota, as recorded by the Registered Buyers and Sellers system.
- 1.62. There are concerns in industry that any move to allocate 100% of track record fished against pool quotas would see some businesses that were grant funded to leave the Sector, and joined the under-10m fleet, benefit disproportionately from Government intervention. To address this, a ceiling could be imposed limiting the volume or value of access-rights allocated to each individual, above which additional user-rights would need to be bought or leased from elsewhere. Alternatively, only a proportion of track record could be converted to access-rights (e.g. they could be based on 85% of track record).
- 1.63. In both of these scenarios, the 'surplus' access-rights could be distributed using a variety of mechanisms, e.g. using them to resource new entrant or environmentally responsible fishing schemes, leasing or auctioning them to the rest of the fleet, or using them to reinforce the community quota arrangements discussed later in this assessment.
- 1.64. Non-sector vessels were allocated FQAs in 1999 along with the other over-10m vessels which form the Sector. Any deviation away from allocating user-rights to the non-sector vessels based on their FQA holdings would potentially lead to all FQA holdings being reviewed and reallocated. This wholesale reallocation of quota is not something which is being considered as part of this impact assessment and so the proposal is that the FQAs held in the non-sector pool by the MMO on behalf of the non-sector are returned to those vessels and the pool dissolved, thus delivering the flexibility of individual user rights to non-sector vessels.

Strengths

- 1.65. The current system of FQAs was established based on track record using detailed records of landings over the reference period. Allocations for the under-10m pool used the best available summary data at the time. However, since the introduction of RBS in 2005, all sales notes have been collated for commercial sales. Allocation of FQAs based on track record in the reference period of 2007-2010, would give a fair reflection of landings of the under-10m fleet to ensure that current fishing opportunities are not compromised. If track record were not taken into account, some fishermen could find themselves with FQAs mismatched to their activity, increasing the risk that they will become economically unviable.
- 1.66. Applying a ceiling to the level of FQAs allocated would allow for some re-distribution of FQAs

within the pool between the higher catching vessels and those that are fully active but operating on a smaller-scale. This would be considered a strength by those fishermen whose catches may have been constrained through lower catch limits when seasonal fishing grounds came on, due to higher catches by higher catchers earlier in the year.

Weaknesses

- 1.67. Some fishermen may argue that their vessels' RBS track record is not an accurate indicator of their fishing capabilities. This is mainly due to the ineffective nature of the pool system the significant capabilities of some under-10m vessels together with a 'race to fish' and the failure of the pool system to effectively take account of regional and seasonal difference may have contributed to a lower track record than the vessel capabilities.
- 1.68. There are also under-10m fishermen that do not record their catches through the RBS system, as they sell small quantities direct to the public from the beach. There are also some gaps in the RBS system where buyers have not submitted sales notes. These are closed on an on-going basis by MMO fisheries officers in their enforcement activity, but anecdotal evidence would suggest some buyers remain unregistered.
- 1.69. There may also be an argument that some under-10m vessels were forced to move away from targeting quota species and diversify into catching non-quota species, but if more quota fishing opportunities were available then they may wish to return.
- 1.70. Applying a ceiling to FQA allocations would be challenging for fishermen as for many it would make it difficult to carry on fishing at their current levels without purchasing additional quota. This would increase the burden on this sector, when some are already struggling to be economically viable. Allocating all fishermen FQAs based on only a proportion of their track record could also be perceived as unfairly impacting on smaller scale fishermen who had not 'down-sized' into the fleet.

Summary of Step 1b

1.71. Based on the above analysis, RBS track record would provide a strong basis upon which to allocate FQAs.

Step 2 – Re-alignment and re-distribution of quota:

- 1.72. The first option is simply to allocate this to all vessels, based on a proportion of track record. Alternatively, the FQAs could be auctioned or leased, which could generate valuable revenue.
- 1.73. Given the objective of maximising the social, environmental and economic benefits of small-scale fishing, a final option would use these FQAs to incentivise the most responsible and beneficial fishing activities. Analysis of existing community-based co-management quota schemes suggests that this can secure significant social benefits and effective fisheries management. This supports a community quota scheme model, which is therefore the option analysed further. A model to help achieve this, integrating fleets with local communities and empowering them to deliver maximum benefits, would be to allocate additional user-rights to community quota groups. More detail on how these community groups would work is provided at step 4.

Strengths

- 1.74. The strengths for allocation of redistributed quota, based on track record, are the same as those detailed in option 1. Coupled with tradability, this approach would allow the market to drive the matching of quota and capacity, removing the need for Government intervention.
- 1.75. The availability of additional quota over and above pool track record would provide a significant incentive for under-10m boats to collect together their FQAs and join community schemes. As discussed below, the intention would be to promote social and environmental benefits through these schemes and so these incentives could lead to increased benefits. 'Foundation' quota would also help provide a solid, secure base for community quota schemes to give them stability in their start up phases.
- 1.76. As community quota schemes have been found to contribute to sustainable fisheries and

increased economic returns¹², incentivising their start up could contribute to such outcomes in English fisheries. Foundation quota would provide the incentive likely to be required for fishermen to change practices in order to deliver the potential benefits.

Weaknesses

- 1.77. Allocating additional FQAs secured through re-alignment/re-distribution, based on track record, would amount to a missed opportunity in terms using quota as a means of incentivising positive outcomes in fisheries management (i.e. promoting social and environmental benefits).
- Auctioning additional FQAs would give those with higher capital an advantage, and so there would likely be a migration into large scale commercial operations, risking some of the social benefits associated with smaller scale businesses.

Summary of Step 2

1.79. Based on the analysis above, directing realigned and redistributed quota to community quota schemes could generate benefits. This is explored in more detail below.

Step 3: Roll-out the new system - timing of change:

- 1.80. Under a 'big bang' scenario, all vessels would move to an individual access-rights system on 1 January 2012, and start fishing against individual FQAs from then. Any community quota schemes, discussed later, would need to be established during 2012. This could allow greater flexibility to be delivered to the fleet as quickly as possible, avoiding another year of pooled quota and ongoing uncertainty. There are, though, 'transitional' options which would allow a phased approach.
- For example, FQAs could be notionally allocated to the whole English fleet, but only formally allocated to those vessels identified as HCVs, and the Non-Sector on 1st January 2012. Remaining vessels would fish against the pool for a further year, with available quota boosted through the redistribution and re-alignment of FQAs from the Sector during the transition year. Individual access-rights (FQAs) would be formally allocated to the remaining vessels on 1st January 2013, allowing a period of time for new management arrangements, including community quota schemes, to be established.
- In addition, there could be the potential for vessels which do not fall into the HCV category to optin to the transition prior to the final deadline of 1st January 2013, if they made a business decision that it was in their interests.

Strengths

- 1.83. Transitioning all vessels to an individual access-rights system on 1st January 2012 would ensure that the associated benefits and flexibility could be realised as soon as possible. This would also avoid another protracted year of difficult quota management for both the MMO and under-10m vessels. However, there is little time, realistically, for fishermen to adjust to this fundamental change. As such, there would be high risk of the new system failing.
- Removing the HCVs from the under-10m fleet first, boosting the remaining pool with quota and maintaining the pool system for a further year (until 1 January 2013), would ensure that the remaining vessel businesses should be left in a broadly economically viable state. Remaining businesses would then have time to reflect on what FQA's they would receive under the new management arrangements, and plan, before formal dissolution of the pool.
- A transition period would also provide the time needed to develop and build the community quota schemes identified as having potential to deliver social and environmental benefits, collectively contributing to more sustainable fisheries management.

Weaknesses

1.86. In the absence of sufficient time for small-scale vessels to organise themselves to form community groups, they may be forced to fish independently against their FQAs without the flexibility that a pool can bring (although this would be mitigated to some extent by tradability of quota associated with FQAs). This would bring with it additional costs to Government associated with monitoring the catch

^{12 &#}x27;Leadership, social capital and incentives promote successful fisheries', Nicola's L. Gutie'rrez, Ray Hilborn & Omar Defeo, published in Nature, 2011

limits of individual vessels as the option is likely to increase the proportion of vessels fishing independently.

1.87. Taking the transitional approach, the potential benefits of an access-rights based management system for the year 2012 would be lost for those vessels still operating in the under-10m pool. The MMO would also still face similar quota management issues in the transition year as, although they would be managing a smaller under-10m pool, they would potentially be managing a bigger non-sector pool.

Summary of Step 3

1.88. Based on this analysis, a phased roll-out would allow time to establish a community quota network and also give fishermen time to adapt to the new system.

Step 4 – Establish community quota groups/schemes:

- 1.89. There is a range of different ways that FQAs could be pooled effectively, including establishing; a 'small-scale' arm in existing POs, a small-scale vessel PO or some form of community quota group (e.g. a Community Interest Company or co-operative).
- 1.90. As discussed previously, the latter in particular offers an opportunity to incentivise and promote social, economic and environmental benefits. There is a desire for a less prescriptive, centralised regime which is being promoted as part of CFP reform, and a move to greater localism. Government would not wish to dictate the types of community group which are formed, but would look to support the set-up of these groups where possible, potentially through the utilisation of the European Fisheries Fund (EFF) grants. Once established, these groups would need to be self-sustaining as POs are currently, and would also be expected to adhere to minimum standards of governance and transparency. Models might include arms of Producer Organisations, Co-operatives, or Community Interest Companies. The latter has been explored and found to have potential to deliver benefits, subject to certain conditions.¹³
- 1.91. In order to promote the benefits set out above, incentives and support would be targeted towards those with the greatest potential to deliver them. This is not a matter of vessel length, but of fishing and business characteristics. Whilst a community would define the most important and valuable defining characteristics of their community fleets, a set of guiding principles might help secure maximum benefits.
- 1.92. These could include:
 - Size of catch preference for smaller catches and mixed fisheries
 - Scale of operation preference for small turnover businesses
 - Type of vessel preference for mono-hull vessels that are day boats, staying at sea for less than 24 hours
 - Type of operation preference for vessels using non-mobile, passive or other environmentally sustainable gears/fishing methods, small engines
 - Social benefits demonstrable links with the local community, either economic or cultural
- 1.93. Ultimately, the decision to recognise a community group could rest with a Government or non-Government body, or a joint enterprise. Similarly, whether an individual fisherman's bid to join such a group is accepted could lie in the hands of a centralised group established by Government or a community group, consisting of key stakeholders in a local area, or with other members.

Strengths

1.94. Co-management of fisheries has been identified as a potential way of improving sustainability, and evaluation of such schemes around the world has identified a number of key elements needed for success. Along with strong leadership, individual or community quotas, social cohesion and protected areas are identified as extremely important factors¹⁴. Giving communities a stake in their fisheries would help them to value these, and secure maximum benefit from them.

1.95. Local communities will have greater knowledge of the characteristics they value in their local

¹³ 'North East England Fisheries Community Interest Company – Final Report', Ribble Consultants and Associates, 2010

^{14 &#}x27;An economic approach to long term reform of access to fisheries for the inshore fleet: extension' – Vivid Economics, January 2010

fleet, and could set criteria, based on the guiding principles, to target such characteristics. These could then be marketed to secure a premium for catches, and potentially marketed to attract greater tourism to areas.

- 1.96. Using a centralised body to oversee and approve the creation of community quota schemes would ensure that the guiding principles were applied consistently to all those trying to 'opt in' to this part of fleet. There would also be no 'vested interest' in choosing certain vessels over others. However, buyin from local communities may be lower unless they were integrated into the process in some way.
- 1.97. By being organised and managed by a local community, these groups are more likely to endure and be maintained into the future on the same principle that POs have continued to exist. This approach feeds into Government plans for 'Big Society', with local communities empowered to run their local fisheries in a manner which would best suit them, rather than being regulated centrally by Government.
- 1.98. By enabling those that wish to set up and run community quota schemes the opportunity to determine the make-up of their membership, following certain guidelines, there would be a much greater opportunity for local communities to have a say and share a stake in their fishing industry, as well as reaping the potential benefits that a community fleet could bring to an area.

Weaknesses

- 1.99. In England, community quota schemes have been relatively untested and so appetite and potential benefits are hard to quantify. Social research shows that fishermen tend to be fiercely independent, and so without incentives, such groups may struggle to become established. This would likely require intervention, which is something that Government is keen to move away from, to allow fishermen greater responsibility for management.
- 1.100. Some community groups may have a vested interest in choosing certain vessels over others to be members, with benefits being concentrated with favoured groups. However, it could be argued that as long as there is free choice and decisions are locally driven, then there is no need for Government intervention.
- 1.101. In terms of selecting community groups, a centralised panel moves away from the idea of local communities having a greater say and a greater stake in their local fishing industry. Although the panel could be made up of a wide variety of industry and fisheries and marine experts providing a cross-section across the industry and a range of stakeholder groups, a single panel would be unable to fully assess the local requirements and regional differences that occur across the country.
- 1.102. There would also be resource implications associated with establishing groups, both within communities and Government. These would include assessing applications to join community groups, developing capacity to run them at local level etc.
- 1.103. Without Government steer, there may not be the momentum within the local communities to set up these groups and to establish the right criteria to define the membership.

Summary of Step 4

1.104. Based on the analysis above, it is considered that community quota schemes offer potentially significant benefits as part of a reformed management system, and the process of establishing them should integrate community views.

Step 5: Provide incentives for creation of Community groups delivering social, environmental and economic benefits.

- 1.105. There are two potential sources for this quota; 1) when allocating user-rights, a proportion (e.g. 15%) of pool track record is retained 2) the quota made available through the re-alignment of un-fished quota and some redistribution of FQAs from the Sector. Allocating less than 100% of track record would disproportionately disadvantage vessels who have been constrained in their catches by competition with HCVs.
- 1.106. If incentives were to be provided, an amount of quota proportionate to the number and scale of active members, and related to local fisheries, would be provided to support the establishment of these groups. Quota would not be 'owned' by the group, and so could not be traded, but would be fished by

members through a pool system. If the group was disbanded, the quota would be returned to Government. Under a transitional approach, Government would support creation of such models in late 2011 and 2012, and invite expressions of interest.

1.107. Of course, a user-rights system does not require vessels to pool their resources or for community groups to be formed and one option would be to allow industry to decide whether there would be benefits in forming a group and to provide no incentive other than potential EFF funding. In this option, the FQAs sourced from re-alignment of un-fished quota and the Sector re-distribution would be allocated to those under-10m vessels not defined as HCVs.

Strengths

- 1.108. Many of the strengths of targeting these FQAs at community quota schemes are discussed above. In particular, labelling re-distributed and re-aligned FQAs as 'community' quota would incentivise the formation of these groups to facilitate more effective management of resources. Using the re-aligned and re-distributed FQAs to incentivise such groups to deliver social and environmental benefits would, moreover, help provide additional rationale for the re-distribution and allow the Sector to make an important contribution to society over and above that made through the operation of a successful fishing business.
- 1.109. There is a risk, as argued in the introduction to this section, that without a framework that, at least for a time, limits the extent to which quota can be traded across the entire fleet, and provides a significant level of incentive to small scale fishermen to work together to increase their profitability, these potential benefits will not be realised. While these benefits cannot easily be quantified, providing this opportunity, at least for a limited time, will give small scale operators a chance to deliver these benefits for themselves and their communities.

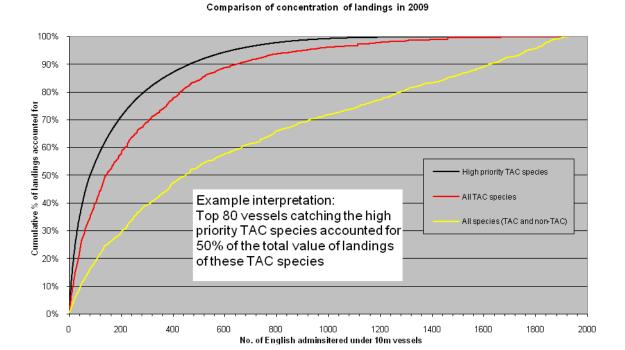
Weaknesses

- 1.110. Without an incentive to establish community groups, industry may decide that they should just fish independently against their own user-rights, or join a PO, trading and leasing where necessary. Without community groups, safeguards (discussed below) would be more difficult to implement leading to a higher risk of the concentration of FQAs and further decline of smaller scale businesses.
- 1.111. There would also be increased burdens on the MMO's monitoring and enforcement functions as the quota uptake for each vessel would have to be monitored individually, with increased risk of overfishing.
- 1.112. Given that targeting these FQAs to community quota schemes seems to offer the greatest potential benefit, there is a risk that few or no such groups are established by January 2013. Government could then be holding quota for a certain period of time whilst these groups are established, or permanently. It's useful to note that this may, in fact, provide an unintended benefit for recovery of fish stocks.

Summary of Step 5

1.113. Based on the above analysis, FQAs re-aligned and redistributed could deliver maximum benefits if directed to community quota schemes.

Annex 4
Chart showing comparison of concentration of landings across the under-10m fleet.



Annex 5

Analysis of which stocks a re-alignment of un-fished quota applies to (based on the criteria stated in Annex 3), the amount of FQA's re-aligned and the relative impact on individuals.

Stock	Number of <u>FQA's</u> to be re-aligned	Equivalent tonnes of fish based on 2010 allocations	Approximate value based on average market prices
North Sea Lemon Sole and Witches	5034	493	£1.5m
North Sea Dabs and Flounders	3492	285	£137k
West of Scotland Haddock (Via, Vb)	564	11	£12k
West of Scotland Nephrops	1700	234	£622k
West of Scotland Pollock	216	11	£22k
West of Scotland Horse Mackerel	24218	898	£250k
7d Sole	1645	176	£1.3m
7a Plaice	1772	94	£113k
7b-k Whiting	3672	246	£232k
7 Saithe	1266	27	£15k
7 Megrim	1653	151	£429k
7 Pollock	1920	194	£382k

Annex 6: Specific Impact Tests

1. Economic Impacts

a. Competition Assessment

The proposals aim to achieve a more level playing field for all fishermen. The costs and benefits to those in the different sectors of the industry have been calculated and highlighted in this Impact Assessment.

The proposals in option 1 would be likely to broadly maintain the number of suppliers across the fleet, but would leave pool members without the flexibility provided by an FQA system. The proposed redistribution of FQAs from the Sector to remaining vessels in the under-10m fleet would affect vessels in the sector. However, the very low level of impact would mean that this would be unlikely to affect the number of suppliers.

The proposals in option 2, which involve allocating FQAs to the whole fleet from 2013, would be likely to reduce the number of suppliers. Those businesses that are small and/or relatively inefficient may choose to collect their rights together in a 'pool' so that several owners become a single supplier, or sell their rights and use the proceeds to exit the industry. However, by removing the pool management system and the incentive of a "race to fish", remaining businesses will have greater flexibility to target stocks at times when market prices are higher and be able to focus much more maximising the returns from the available fishing opportunities. Fluidity of the market in quota trading should also improve. This should significantly improve the overall competitiveness and long-term health of the industry.

The allocation of FQAs in option 2 could affect entry to the industry in that currently, to join the under-10m fleet, vessels need to hold only a license, whereas under option 2 new entrants would need to purchase both a license and FQAs for any quota species for which they wish to fish. This effect would be mitigated to an extent by the fact that currently, the value of licences reflects the otherwise free access to pool quota that it allows. Once licences no longer provide this privilege, their value is likely to fall. However, given the expected improvement in profitability under FQA allocation, their value is likely to increase by more than the fall in licence value. The magnitude of this effect will be explored further for purposes of the full Impact Assessment.

b. Small Firms Impact Test

The impact of the proposals on small businesses (fewer than 20 employees) has been considered. Given that all under-10m businesses and the vast majority of non-sector and sector businesses fall within this definition, it is considered that the proposals will not disproportionately disadvantage small businesses. Rather, the proposals will aim establish a more level playing field for all businesses.

c. Justice Impact Test

It is not considered that the proposals will have any impact on the justice system. In the long term, there may be a positive impact on the costs associated with the enforcement activities of the Marine Management Organisation, as the proposals will encourage a level of self-policing in terms of ensuring fishing guotas are not exceeded.

2. Environmental Impacts

a. Greenhouse Gas (GHG) Impact Assessment

It is considered that the proposals will have a minimal impact on GHG emissions, but changes may differ slightly under each option.

Under the baseline, emissions are likely to steadily decline over time as the fleet continues to decline. On the other hand, there would be little profit to invest in vessel improvements so this could lead to missed opportunities to improve emissions.

Under option 1, the addition of quota to the pool could result in more vessel trips, and so higher

emissions. Alternatively, though, fishermen may conduct the same number of trips but reduce discards and land more per trip. Vessels transferring into the sector would no longer be constrained by the pool system, or encouraged to 'race to fish' in the same way. As a result, there may be a reduction in emissions as they improve their efficiency as part of the Sector or non-sector.

As the analysis in the IA demonstrates, over time the decline in the fleet expected under the status quo would likely continue, albeit under a longer timescale. In the medium to long term, then, the same situation would apply as under the status quo.

Under option 2 there may be an increase in GHG emissions to start with, as described under option 1, resulting from the increase in available quota. However, under option 2 there is a stronger market imperative to be efficient, both to keep overheads low and to ensure fishermen can market theirs as a sustainable product. Vessel sharing is also more likely under this option, as fishermen collect rights together and strive to reduce running costs.

As the fleet becomes more profitable, investment may be made in modernising and improving the efficiency of vessels which in turn may also reduce emissions. Over time, then, we would anticipate reducing GHG emissions.

b. Wider Environmental Impact Test

Option 2, in particular, should encourage more sustainable fishing practices, which in turn will have a positive impact on fish stocks by reducing discards, notwithstanding the ongoing and increasing impacts of climate change on the state of stocks.

Whilst the re-distribution of fishing opportunities seeks to maximise uptake of quota allocations, this is within the constraints of the levels set annually by the EU Council of Ministers which aim to establish safe levels of catch to ensure healthy, sustainable stock levels.

It is possible that under all options, and in particular under the baseline, businesses will diversify into less restricted fisheries, meaning that non-quota stocks are placed under more pressure as fishing effort increases. Options to introduce measures to safeguard non-quota stocks being caught in significant quantities, to ensure they too are exploited at sustainable levels, are being considered as part of a separate work package.

The proposals are not considered to have a significant impact on air quality; result in any material change to the appearance of landscape or townscape; lead to a change in financial, environmental or health impacts of waste management; change the degree of water pollution, levels of abstraction of water or exposure to flood risk; or have any impact on noise exposure.

3. Social Impacts

a. Statutory equality duties

A separate equality impact assessment has been completed and can be found at Annex 7.

b. Health and Well-being

The Health Impact Assessment considers the effects policies, plans, programmes and projects have on health and well-being, and in particular, how they can reduce health inequalities.

There is potential for some slight positive impact on human health, by virtue of the effects of the options proposed on the wider determinants of health, although impacts are not considered to be significant. For example, income for some fishermen may be boosted by the proposal to redistribute fishing opportunities which could lead to increased sales and profits. The regeneration of coastal areas as a result of safeguarding the long-term future of the under-10 metre fleet may lead to some reduction in crime and improvements in housing and living conditions in these areas. The impact of education and employment on health will be positively influenced by any future projects undertaken which focus on improving skills and knowledge and creating improved working conditions and safety. There may also be indirect benefits where projects lead to improvements in the quality of fish products and the continued

availability of fresh fish, and associated dietary benefits. We do not envisage any significant impacts on health and social care services; any impact on these would be minimal and positive.

c. Human Rights

The proposals are consistent with the Human Rights Act 1998.

d. Rural Proofing

The proposals in this Impact Assessment seek to reform the fisheries management system in order to secure a more economically, environmentally and socially sustainable fleet. As such, they are specifically targeted at the fishing industry which is based in coastal communities in rural areas, and are therefore designed to take account of the circumstances and needs of rural people and places.

4. Sustainable Development Impact Test

Stage 1

Environmental Standards

1a. Are there are any significant environmental impacts of your policy proposal (see Wider Environment Specific Impact Test)?

Yes

If the answer is 'yes' make a brief note of the impacts below:

Potential to increase effort on un-restricted quota stocks - measures are being explored under a separate work package to ensure these too are fished at sustainable levels.

Option 2 should encourage more sustainable fishing practices, which in turn will have a positive impact on fish stocks (by reduced discards) and the wider marine environment.

1b. If you answered 'yes' to 1a., are the significant environmental impacts relevant to any of the legal and regulatory standards identified?

No

If the answer is 'yes' make a brief note of the relevant standards below:

n/a

If you answered 'yes' to 1b, have you:

1c. Notified the Government Department which has legal responsibility for the threshold and confirmed with them how to include the impacts appropriately in the analysis of costs and benefits?

n/a

1d. Informed ministers where necessary?

n/a

1e. Agreed mitigating or compensatory actions where appropriate?

n/a

2. Intergenerational impacts

2a. Have you assessed the distribution over time of the key monetised and non-monetised costs and benefits of your proposal? This assessment can be included in your Evidence Base or put in an annex.

Yes

2b. Have you identified any significant impacts which may disproportionately fall on future generations? If so, describe them briefly.

No

If you answered 'yes' to 2b., have you:

2c. Informed ministers where necessary? If so, provide details.

n/a

2d. Agreed mitigating or compensatory actions where appropriate? Provide details.

n/a

Stage 2

3. The purpose of the second stage is to bring together the results from the impact assessment with those from the first stage of the SD test. The following questions are intended to reflect the uncertainties in the cost benefit analysis and help you consider how to proceed in the light of further evidence from the first stage of the SD test.

3a. Indicate in the appropriate box whether the balance of monetised costs and benefits is:				
Strongly positive	Moderately positive	Roughly neutral / finely balanced	Moderately negative	Strongly negative
X				

3b. Indicate in the appropriate box whether the balance of non-monetised costs and benefits is likely to be:				
Strongly positive	Moderately positive	Roughly neutral / finely balanced	Moderately negative	Strongly negative
х				

3c. Indicate in the appropriate box whether the results of the SD questions 1-3 are, on balance, likely to be:				
Strongly positive	Moderately positive	Roughly neutral / finely balanced	Moderately negative	Strongly negative
Х			_	

3d. Indicate in the appropriate box whether, overall, the balance of the monetised and non-monetised costs and benefits and the sustainability issues is considered to be:

Strongly positive	Moderately positive	Roughly neutral / finely balanced	Moderately negative	Strongly negative
х				

3e. Provide an explanation of the final result from 3d, explaining, for example, how you have compared monetised and non-monetised costs and benefits and how you have resolved any conflicts between the cost-benefit results and the SD results.

A separate work package is underway to consider whether measures are needed to safeguard non-quota stocks. Other potential costs and benefits have been identified as positive, or are not relevant to the issues covered in the sustainable development test.

Annex 7: Equality Impact Assessment

DEFRA EQUALITY IMPACT ASSESSMENT INITAL SCREENING FORM

Directorate	Environment and Rural Group
Unit	Marine Programme; Sustainable Fisheries
Date	December 2010

Name of Policy/Guidance/Operational activity

Reform of English fisheries management arrangements.

What are the aims, objectives & projected outcomes?

The proposed policy seeks to reform the current fisheries management arrangements in England, in order to secure a more sustainable future for the fishing fleet. Namely, it aims to address the problems caused by an imbalance between capacity and fishing opportunities in the 10m and under fleet which is putting the future of businesses in jeopardy and makes the management of this part of the fleet increasingly challenging. Without government intervention, the cultural, environmental and economic benefits that can be associated with small-scale/inshore fishing may be lost.

The intended beneficiaries of the policy are all those with a stake in fisheries, including catchers, buyers, processors, consumers, and members of the communities where fishing operates.

The projected outcomes involve a system that allows industry to take greater control and responsibility for their businesses, with flexibility for local fleets/individuals to manage fishing quotas in a way that suits their needs. In turn this will help maximise the economic benefits associated with available fishing opportunities; micro-management by Government will no longer be necessary; and a greater balance between capacity and fishing opportunities will be secured across the fleet, along with the benefits associated with small-scale/inshore fishing.

This is a new policy/guidance/operational activity.	
This is a change to an existing policy/guidance/operational activity (Check original policy was equality impact assessed. If so, review and update action plan).	Y
This is an existing policy/guidance/operational activity.	N

Will the policy/guidance have an impact on	
Age	N
Disability	N
Gender	N
Religion or belief	N
Race	N
Sexual Orientation	N
Transgender	N

Working Patterns	N
Are there any aspects of the policy/guidance that could contribute to equality or inequality?	N
Could the aims of the policy/guidance be in conflict with equal opportunity, elimination of discrimination, promotion of good relations?	N

If your answer to any of these questions is **YES**, go on to the full EqIA.

If you have answered **NO** to all of these questions then please provide appropriate evidence and sign off.

This policy/guidance was screened for impact on equalities. The following evidence has been considered. No full equality impact assessment is required.

The proposals centre round how fishing quotas are distributed and subsequently managed. The starting point is an established industry, the existing allocation of quotas, and track record of catching activity within the fleet.

The industry and associated coastal communities affected by the proposals are likely to include members of the equality groups listed above. However, the proposals do not suggest allocating or managing fishing opportunities specifically based on age, disability, gender (including transgender), religion or belief, race, or sexual orientation. Nor will the proposals force fishermen to change their working patterns.

Rather, the proposals will allow greater flexibility, control and choice to <u>all</u> individuals about how they wish to operate their businesses.

It is therefore considered that a full equality impact assessment is not required.

it is therefore considered that a full t	equality impact assessment is not required.	
Line/Project Manager sign-off	Bella Murfin	
I have read the preliminary screening and I am satisfied that given the available evidence, a full impact assessment is not required.		
Date	14 December 2010	
Diversity Team sign-off Please return an electronic copy to Diversityteamshr@defra.gsi.gov.uk once completed. An electronic copy should be kept within your directorate/team for audit purposes	26 January 2011	