

UK Fisheries Project - Consultation Paper

About You

Name: Euan Dunn

Organisation (if any): RSPB

Your Main Role/Interest in the Fisheries Sector (you may tick more than one box. If you do, please number them in order of importance)

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|--|-------------------------------------|
| <i>Aquaculture</i> | <input type="checkbox"/> |
| <i>Auctions/Markets</i> | <input type="checkbox"/> |
| <i>Catching Sector</i> | <input type="checkbox"/> |
| <i>Community Group/Interests</i> | <input type="checkbox"/> |
| <i>Consumer Representatives</i> | <input type="checkbox"/> |
| <i>Environmental Issues</i> | <input checked="" type="checkbox"/> |
| <i>Finance/Banking</i> | <input type="checkbox"/> |
| <i>Fisheries Management</i> | <input type="checkbox"/> |
| <i>Fisheries Science/Economics</i> | <input type="checkbox"/> |
| <i>Fisheries Services/Support Industry</i> | <input type="checkbox"/> |
| <i>Local Authority/Development Agency</i> | <input type="checkbox"/> |
| <i>Marketing/Brokerage</i> | <input type="checkbox"/> |
| <i>Processing</i> | <input type="checkbox"/> |
| <i>Producer Organisation</i> | <input type="checkbox"/> |
| <i>Retail/Catering</i> | <input type="checkbox"/> |
| <i>Recreational</i> | <input type="checkbox"/> |
| <i>Other please specify</i> | <input type="checkbox"/> |

Overall Challenge

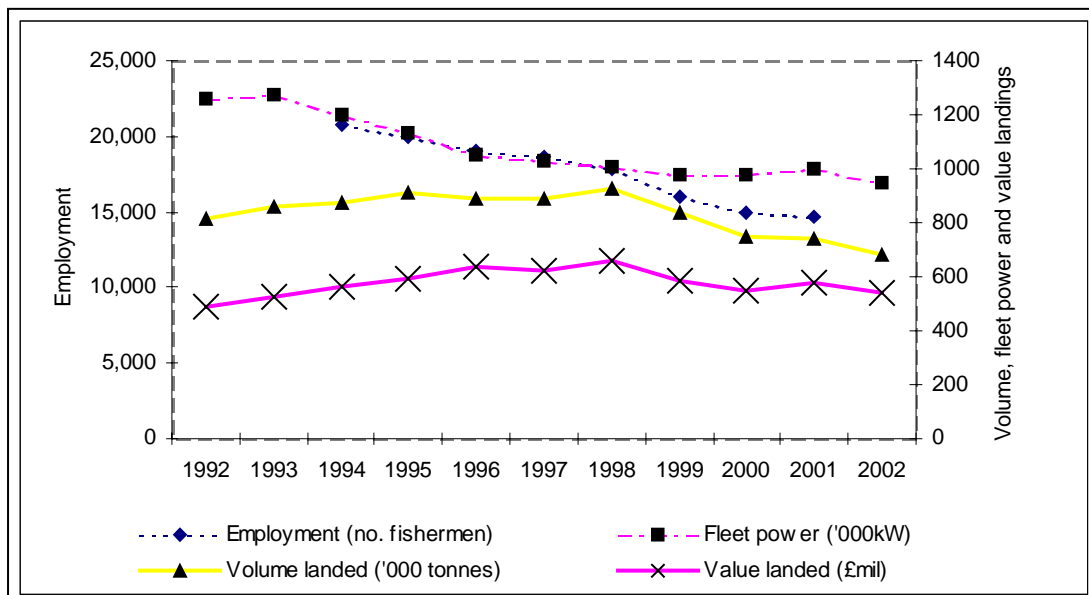
1. What do you regard as the biggest challenge facing the fishing industry?

To accept the fact of overfishing and recognise that its effect has been to systematically degrade the marine ecosystem, of which fish stocks are a critical part. Then to transcend the 'tragedy of the commons' and fish according to scientific advice, even if the science sometimes has limitations.

The Current State of the Fishing Industry

The value of fish landed in the UK was £542 million in 2002. The quantity of landings was broadly stable between 1992 and 1999, but has fallen by 20% between 1999 and 2002. The changes have been much greater for some species, particularly demersal fish. The industry has changed in structure over the past decade, with a 25% fall in catching capacity between 1992 and 2002 and an even greater fall in the number of fishermen.

Economic size and landings of the UK fishing fleet 1992 - 2002



Value and volume of landings refer to landings by UK fishermen in UK and overseas waters

Source: Defra, UK Sea Fisheries Statistics 2001

2. What is the current economic situation for businesses in your sector of the seafood industry?

Though much of the whitefish catching sector has seen severe cuts in quotas and a decline in profitability, other parts of the catching sector – notably the pelagics and nephrops - seem to be in good economic health. Processing and aquaculture seem to have mixed economic prospects.

please insert response

3. Have any fishing-related businesses failed in your area recently? What are the main reasons for people exiting the industry? What activity / new business have former fishermen entered into? How many new people have entered into fish catching / processing in your area?

Small businesses in all parts of the economy suffer high rates of failure (14% per annum). Do capture fishing-related businesses have a relatively high rate of business failure, or where catchers are concerned do decommissioning schemes mask this effect? The number of people employed in the catching industry is falling. Is this primarily because of quota reductions, fleet consolidation, business failure, retirement or better employment opportunities elsewhere? What is behind business failures in the processing and fishing support services sector? What have businesses done to successfully manage changing situations?

please insert response

4. Who is investing in your part of the seafood industry? What type of finance is available?

How much new investment is, or has recently occurred, in your sector? Are current levels of profit, where they exist, adequate to finance investment in new boats and equipment? Who provides finance to the fishing fleet and processors, and under what terms (collateral, loan length)? Have you noticed a change in the availability and type of finance available over the past decade?

please insert response

5. Who are your competitors? What is your principal source of competitive advantage? How can UK catch compete with foreign imports? What is your view on the current EU tariff system?

The UK exists in a global market for frozen and exotic fish, and a European market for fresh fish. The UK is a successful exporter of quality fish around the world. The UK fleet lands over £100m of fish in foreign ports and has a presence in many different non-European waters. In all these markets we compete with other countries for sales and catches. Competition is growing for processing with low income countries inside and outside the EU. Fish itself is competing with other foods for a share in the consumer's "food wallet". What factors make you competitive: price, quality, cost, technology, skills, access to stocks? Which subsidies in other countries affect the competitiveness of the UK industry?

please insert response

6. Who is your principal customer? How do you market your product to your customers to maximise revenues and added-value? What improvements or innovations have you adopted in recent years?

At each stage in the seafood supply chain value is added. One aspect of this is the maintenance of the quality and freshness of the catch, while another is the processing. Value can also be added through better marketing, better handling, quality assurance and branding, etc. The UK exports over £700m of processed fish products. What are the marketing strategies in your part of the industry, and is there a need for more investment in marketing skills and systems? Who should provide this?

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7. Is the number of fishing ports around the UK sustainable? What are the advantages and disadvantages in having few large ports and many small ports? Can the industry afford to meet the cost of running the current level of port infrastructure?

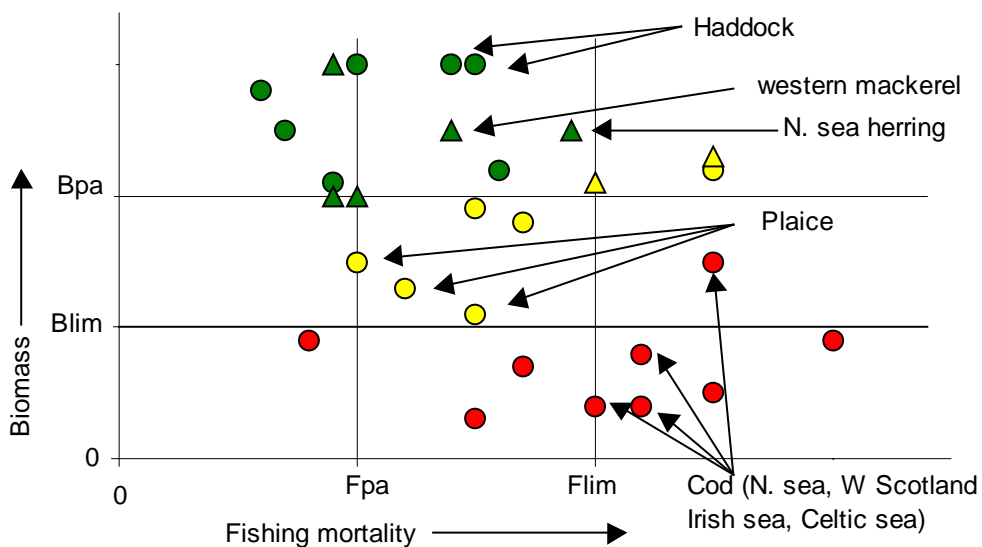
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Fish Stocks and Fisheries Management

Scientists regard cod stocks in the North Sea as being at an all time low, and fear that any further stock reductions could lead to a total collapse in recruitment. The figure below shows that cod stocks are liable to collapse. There are also scientific concerns about the state of other stocks, including plaice and whiting which are important revenue earners for UK fishermen. In December 2002, this resulted in European Fisheries ministers agreeing to cut the Total Allowable Catches for North Sea cod by 45%, haddock by 49% and whiting by 55%. Cuts on the West Coast were 61%, 41% and 40% respectively. Quotas for other species such as plaice and Dover sole have also been reduced.

Status of a selection of fish stocks in the North Sea, West of Scotland, Irish Sea, Celtic Sea, English Channel



Key: Green = Good status, Yellow = Intermediate status, Red = Poor status

Circles are demersal stocks, triangles are pelagic stocks.

ICES reference points Bpa, Blim and Fpa, Flim are given. Data are interpolated from the 2002 ACFM report which does not give reference points for all stocks.

Blim – biomass below which recruitment is impaired,

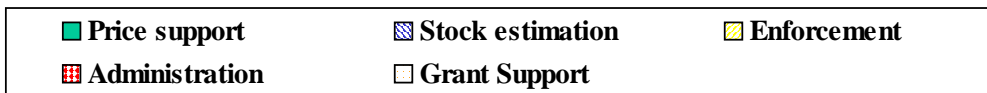
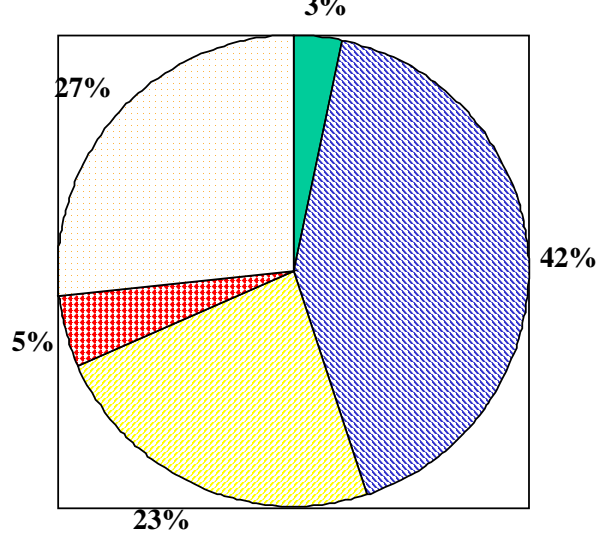
Bpa – target biomass to reduce probability of Blim being hit

Flim – fishing effort that will lead to stock dropping to Blim,

Fpa – fishing effort which will lead to Bpa

Significant public resources are spent on fisheries science and management. At present, expenditure is about £120 million, which is equivalent to around 20% of the value of UK landings.

Share of Annual UK Government Spend (£120m)



8. What do you think have been the main problems with the Common Fisheries Policy (CFP) in the past? Have the recent reforms adequately addressed these issues? If not, what further measures are needed?

Over the past 20 years key commercial stocks have not been maintained at high or even stable levels. Many explanations have been given for this, some of which are contradictory. They include: that scientists have given an overly pessimistic view of fish stocks; that scientists have not proposed tight enough quota limits in the past; that the Fisheries Council has not followed scientific advice; that fisheries managers have not enforced quota management rules; that there has been large-scale non-compliance by the catching sector; that bad investment decisions by banks has led to overcapitalisation in the industry; that government subsidies in some EU countries have encouraged excess capital investment; that centralised decision-making fails to address local problems; and that the length of time it takes for decisions to be taken results in regulation lagging behind reality. What do you see as the most important of these or other factors? Do individual problems interact to cause more serious outcomes than would be expected? Do you think the wide-ranging reforms agreed in December 2002 have begun to tackle the main issues?

Please Rank in Order of Importance (1 = most important)

Inaccuracy in measuring fish stocks	8
Ministerial decisions ignoring science	1
Lack of enforcement in UK	7
Lack of enforcement rest of Europe	6
Fishermen non-compliance	2
Poor private investment decisions	9
Subsidies for new vessels	3
Decision-making too centralised	4
Decision-making structure too slow	5
Other (please explain)	10 (see Box)
All about the same	

Other factors:

1. Subsidies not just for new vessels (see 3, above) but also for vessel modernisation; i.e. failure to measure and address the problem of 'technical creep'. Collectively with failure to prevent over-capacity, this has created the over-arching problem of excessive deployed capacity (which results in excessive fishing effort). Greater efforts needed to be made at Government level to measure and control the increasing technical efficiency of vessels or at least to take the phenomenon into account in regulating deployed fishing capacity.

2. A problem of mind-set in which the marine environment has for too long been regarded as a production unit for fish, and fish stocks thus divorced culturally and politically from the wider marine ecosystem. This in turn has delayed a strategic and more holistic approach to sustainability of the ecosystem, i.e. lack of an ecosystem-based approach.

9. Do you believe that fisheries scientists are accurately measuring economically important stocks? How could the system be improved within existing government resources? Can you cite any examples

of how scientists and fisherman can pool their knowledge and improve stock estimates?

There is criticism from the catching sector that stock estimates are too pessimistic, and fail to account for local variation within a fishery. However, simply trying to improve accuracy by increasing the emphasis placed on data collection would be very expensive, requiring more research vessels and more research trips. In what areas would more accurate data or more science improve the prospects of the industry? Would this be a significant gain? Given the limits on public funding for fisheries science, how might the system be improved without large increases in government funding?

The non-compliance of fishermen (Q8) is, of course, linked directly to the over-centralisation of decision-making, in which the fishing industry has felt disenfranchised from taking responsibility. A classic result is the situation in which the greater the reductions in TACs the higher the under-reporting of true landings (see slide 49 in SAG presentation 19 June); this introduces a serious bias in the ICES assessments in which fishing mortality is under-estimated and stock size over-estimated by ICES (slide 51 in same SAG presentation). As a result, commercial CPUE data for North Sea cod were excluded from ICES assessments in 2000-2001.

At the same time, the fishermen regard and wish to present themselves as reliable monitors of what is really happening in the marine environment. Regional Advisory Councils seem to offer one step out of this impasse by giving fishermen at least partial ownership of the problem. This in turn may lead to better compliance, at which stage pooling of knowledge may lead to greater certainty in measuring fish stocks rather than less.

If you wish your answer to the following question to remain confidential please tick this box:

10. What is the extent of illegal landings in your area/stock? Do you believe this activity is significantly affecting stocks?

Illegal landings are often blamed for the decline in stocks, but their extent and significance is hard to measure, and also seems to change over time.

please insert response

If you wish your answer to the following question to remain confidential please tick this box:

11. Are local, other UK, UK-flagged, foreign-owned or non-UK fishermen most responsible? What evidence do you have for this assessment?

UK flagged, but foreign owned, vessels are often accused of high levels of illegality, but given that they represent a declining proportion of the UK fleet how significant is their contribution?

Foreign-owned vessels on the UK register licensed to fish							
	1996	1997	1998	2000	2001	2002	2003
Belgian	3	2	1	1	1	1	1
Danish	2	0	0	0	0	0	0
Dutch	40	35	35	33	37	37	38
Icelandic	4	4	4	3	2	1	2
Irish	4	4	3	3	3	4	6
Spanish	107	107	97	83	71	75	69
Swedish	1	0	0	0	0	0	0
Total	161	152	140	123	114	118	116

please insert response

If you wish your answer to the following question to remain confidential please tick this box:

12. How effective are current UK enforcement measures, and what could be done to improve compliance? At what stage of the process is enforcement best targeted: at sea, on the market, during processing?

In recent years the National Audit Office has positively assessed the performance of enforcement systems in Scotland, England and Wales, but also highlighted the relatively low chance of any individual boat being inspected during any particular trip. There are contrasting complaints from the catching sector that the UK has far tighter enforcement than other EU countries. Experience in other sectors of law enforcement often shows decreasing returns as more stringent legal enforcement measures are introduced. They also highlight the importance of acceptance of the enforcement objectives by the target community as a key factor in improving compliance rates. What is your experience of enforcement systems, and how could they be changed to improve compliance?

please insert response

If you wish your answer to the following question to remain confidential please tick this box:

13. In your experience how effective are the enforcement regimes in other EU countries and non-EU countries? What techniques do they use which work particularly well? What evidence do you have of the extent on non-compliance in other EU countries?

The CFP will only work if all countries enforce measures adequately, and accusations are often made that other EU countries are more lax in their systems than the UK. Do you have any evidence that this is the case? Can you give examples of non-compliance by non-UK vessels?

please insert response

14. How much fish is discarded in your area/stock? Do you believe this activity is significantly affecting stocks? How much sellable by-catch do you discard?

Fish are discarded because they are too small to be legally landed, have no retail value or because they have accidentally been caught as by-catch but no quota is held to land the fish. Discarded fish are usually dead when they are returned to the sea.

please insert response

Community Issues

15. How important is the seafood industry to your community? How important is it to individuals in your community?

The number of jobs and income associated with the seafood industry varies between communities, as do opportunities for alternative employment. What role does the seafood industry play in your community and among different sections of the community, especially for young people and those with limited opportunities? What impact does the seafood industry have on local culture and identity, social cohesion and other economic activity such as tourism in your area? Can you give examples?

Please rank the following contributions of the Seafood industry to your community in order of importance (1= most important)

Direct employment

Encourages tourism

Other dependent industries e.g. marketing, processing

Contribution to community cohesion

Continuation of fishing heritage

please insert response

16. Is the catching industry a special case? If so why?

The fisheries industry is supported by significant levels of public funding for regulation, science, etc. compared to other sectors, amounting to approximately £8000 per active fishermen last year [some of this is spent downstream on processing and marketing]. Some is spent directly on supporting the market price of fish. What is the justification for such high levels of spending?

Could this money be more productively used in supporting fishing communities directly (e.g. improving education and vocational training in other employment)?

please insert response

17. What existing government (EU/ national/ local) support programmes are you aware of in your community? Which have been most successful in your view and why?

please insert response

18. Do young people in your area regard the catching sector or the wider fishing industry as an attractive career? How have these views changed over the past twenty years? Why have views changed?

The average age of a crew member on a fishing boat is fifty. For skippers the average age is approaching sixty. Many boat owners and processors have difficulty in recruiting local employees, and are forced to rely on seasonal and immigrant labour. Why is it often difficult to hire local employees?

please insert response

Environmental Quality

19. What do you consider to be the most important issue facing marine environmental management?

The marine environment faces pressures from commercial fishing fleets, pollution, coastal and marine development and climatic change. These all have different impacts on species, habitats and ecosystems. Which do you believe is the most important threat to the health of the marine environment and why?

The greatest threats to the health of the marine environment can be ranked as follows (1 = highest rank):

1. Excessive deployed fishing capacity (combination of fleet size and effort). Reduction of this will, at a stroke, relieve pressure on a wide variety of species and habitats.
2. Lack of EIA of new (or adapted) fishing methods or of existing methods on new fishing grounds. The impact of pair-trawling on cetaceans could have been foreseen and pre-empted by EIA (which also invokes the need for on-board observers). Inability even to take rapid measures once a problem is recognised (the absurdity, as we have seen with the Darwin Mounds, of a Member State being able to invoke ‘emergency powers’ under the CFP only if the problem was ‘unforeseen’.)
3. Failure to take a precautionary approach to industrial fisheries.
4. Failure to take a precautionary approach to deepwater fisheries. This simply represents a failure to learn from the past (experience with shallow sea fisheries) and thus to repeat the same mistakes but with the likelihood of inflicting even faster and longer-lasting damage to fragile marine biodiversity. Deepwater fisheries in general would benefit from SEA.

20. Are there any coastal or marine sites near you that deserve to be protected for nature conservation or cultural reasons? How does fishing affect them, and do they need greater protection?

At present marine areas can be designated as Special Areas of Conservation and Special Protection Areas under the EU Habitats and Birds Directives respectively. In addition the UK has 40 individual Biodiversity Action Plans for marine species and habitats, though some people feel these measures are poorly integrated with fisheries management.

1. Although the Birds Directive entered into force in 1979, the UK still has (unlike some other EU Member States) no offshore SPAs. Progress has been made with the designation of offshore SACs under the Habitats Directive. However, the management of offshore SACs is, essentially, voluntary and under-resourced. The UK needs to move swiftly to (a) address the hiatus in offshore SPAs and (b) strengthen and resource the management of both these and SACs.

2. Government should press the Commission to fast-track the designation and management of the Darwin Mounds.
3. Government should lobby for the continuation of the sandeel closure off the East coast of Scotland, especially given (a) the continuing below average productivity and adult survival of the kittiwake population in adjacent colonies, (b) the failure of the Danish fleet to take more than a third of its allotted sandeel TAC this year; the Danes may readily search for new or rested grounds to make up the shortfall, rendering the E Scotland closed area vulnerable to over-exploitation were it to be opened to fishing again.

21. Does present fisheries policy take sufficient account of biodiversity/environmental considerations? What new measures would you favour to redress any perceived imbalance?

In very broad terms, European and UK legislation protecting the marine environment from pollution is more precautionary and environmentally stringent than fisheries policy, and bans or severely limits discharges of most pollutants. Should a similarly “risk averse” approach (which would aim to completely avoid the potential for irreversible shifts in ecosystem structure) inform policy on fishing? Does the current method of implementing the precautionary approach in fisheries management achieve this objective?

In essence, the question posed is: Does the current method of implementing the precautionary approach in fisheries management achieve the objective of completely avoiding the potential for irreversible shifts in ecosystem structure? The answer is surely ‘No’ for the following reasons:

1. In the first place, as answered to Q19 (above), there is no EIA or SEA for fisheries, so the threat of such shifts is not even anticipated operationally. EIA & SEA for fisheries should be introduced as one of the tools for implementing the precautionary approach into fisheries management.
2. There is little commitment to multi-species (and ecosystem) research and analysis, even though it was one of the areas identified by the Commission’s Green Paper on CFP reform. Little attention has been paid to the phenomenon of ‘fishing

down the food web', even though it is likely to be responsible for ecosystem shifts such as the 'competitive release' of sandeels and Nephrops in UK waters and to account for the growth of those fisheries at the expense of overfished gadoids and other sandeel predators. No-one knows if those changes might be irreversible but there is growing evidence of 'regime shifts' in systems where cod stocks have collapsed (e.g. Baltic where sprat and herring have replaced cod (http://www.ifm.uni-kiel.de/allgemein/research/topics/pdf_files/fb3_s3.pdf) and the Grand Banks where the collapsed cod stock has been replaced by crustaceans). In both these fisheries, scientists have speculated about the possibility of negative feedback loops on cod recovery caused by predation on cod eggs and larvae by the new dominant species.

3. Systematic implementation of an ecosystem-based approach means that the precautionary approach has to start setting by-catch reference points for non-target species (such as seabirds and cetaceans), not just for commercially important fish stocks.

Finally, while measures to avert the potential for irreversible shifts in ecosystem structure should clearly be a key goal, just as important is the aim to halt and, where necessary, reverse biodiversity loss – as mandated by the EU Sustainable Development Strategy and the WSSD. In other words, our responsibility does not end when the precautionary approach fails.

Future Trends

22. Do you believe that current EU stock recovery plans will work, and what are the main risks to their success? Are there better ways to promote stock recovery? Do you expect stocks in the following species to rise, fall or remain the same in your area? Do you think the cod recovery plan will work?

Cod	Mackerel
Haddock	Herring
Plaice	Nephrops
Sole	Other Stocks?

We see the following potential obstacles to the success of recovery plans:

- 1) It is vital that recovery plans prioritise fleet capacity and effort; the fishermen often favour technical measures but all the evidence shows that excessive dependence on technical measures amounts only to tinkering at the edges of the problem unless underpinned by a major reduction in deployed effort and thus fishing mortality.
- 2) The issue of mis-reporting (see answer to Q9) is a serious potential obstacle to recovery plans. As long as stocks remain low, fishermen are likely to land black fish which can only perpetuate overfishing.
- 3) As described in the answer to 21, it is possible that a regime shift has already taken place in the North Sea which could suppress the recovery of cod in the long term.
- 4) It is possible that the industrial fishery for sandeels will create a bottleneck for the recovery of cod and other gadoids. This is because the formerly abundant gadoid (and mackerel) stocks in the North Sea were heavily dependent on sandeels and the industrial fishery has only been made possible by the depletion of these sandeel predators. If the gross depletion of gadoid and mackerel stocks has lifted massive pressure off the sandeel stock, it follows that full recovery of gadoids and mackerel would return a huge amount of predatory pressure to the system, threatening both the

industrial fishery as well as marine wildlife (such as seabirds) dependent on sandeels. Prof Bob Furness has argued for this competitive bottleneck in ICES J of Mar Sci 59, 261-69. In this equation, the RSPB would argue for prioritising the sustainability of the human consumption fishery and sandeel-dependent marine wildlife, and therefore urges precautionary downscaling of industrial fishing effort, particularly by Denmark.

23. What are the main drivers in the global marketplace for fish products? How will aquaculture affect wild fish markets and prices?

UN estimates show that up to 70% of global commercial stocks of wild fish are fully or over exploited. Global demand for fish is rising sharply, mainly driven by income growth in China and SE Asia. Aquaculture is expanding dramatically to meet much of this demand, but there are serious concerns about its sustainability in the longer term. Will a collapse of wild stocks globally lead to higher prices in the future for stocks that remain sustainable, or could aquaculture production of a wider range of species depress prices for wild fish supply?

A collapse of wild stocks globally may well lead to higher prices in future for stocks that remain sustainable. This arises partly because (although misconceived, because wild caught fish are not entirely free of contaminants themselves) wild caught fish are perceived by the public as being 'organic' compared to fish derived from aquaculture (dependent as the latter are on processed feed, therapeutants, etc). Certainly farmed salmon has not depressed the market value of wild caught salmon. In addition, eco-labelling can give added value to wild capture fish derived from certifiably sustainable stocks.

24. What is the impact of UK fish consumption and aquaculture on fish stocks and the environment outside the EU? Is this sustainable?

The UK forms 1.2% of global demand for fish products. Over 70% of the fish eaten in the UK is imported, and much of this comes from outside the EU. Imports are growing for human consumption and aquaculture feed stocks. There has been significant growth in demand for fish raised through aquaculture, the feedstuff for which is mainly sourced from non-EU waters. Is UK consumption sustainable, and what are the biggest global environmental impacts of future UK consumption patterns, if any?

1. The UK's dependence on fish caught in third countries places a heavy onus on us to ensure best practice in EU fisheries agreements. This means that progressive implementation of an ecosystem-based approach, as mandated by Art 2(1) of the CFP reform, needs to apply to those fisheries as much as it does to our own. For example, new and existing fisheries in third countries should be subject to EIA. This needs to be factored into the overall cost to the EU of securing access to third country fisheries. Secondly, a much higher proportion of the cost needs to be allocated to ground-truthing the existence of a genuine, long-term 'surplus' stock before it is made available to EU vessels. Even though the UK has negligible distant water fleet of its own, so is not party to fisheries agreements in (e.g.) west African waters, it is still presumably an importer of fish caught in these regions and therefore needs to press for high standards of fisheries management, not least to ensure harmonisation and coherence with development (aid) policies for those regions.

2. The UK aquaculture industry, which is set to expand dramatically as caged salmon farming diversifies into cod and other groundfish, has an important responsibility to ensure that the source of feed does not adversely affect, e.g., the availability of small pelagics in Chile and Peru for the local artisanal fisheries and for marine wildlife, respectively. As global aquaculture expands, the availability of fish meal and oil for feed will become limited. The UK Government should ensure that the production and use of alternatives is environmentally sustainable. For example, if alternative feedstuffs are (as is likely to be the case) based on GM soya, this also should be a concern for the UK Government.

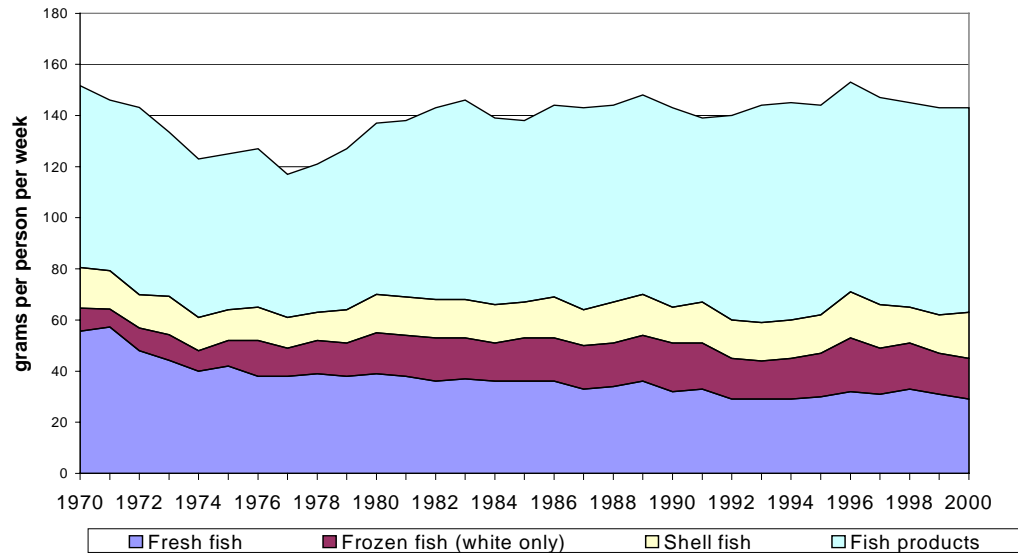
3. While the question asks for impacts 'outside the EU', we should not overlook potential impacts on fish stocks and the environment inside Community waters. The whole issue of the sustainable linkages between recovery plans for wild capture fish stocks, industrial fisheries, the burgeoning demands of aquaculture for feed derived from those industrial fisheries, and the sustainability of marine wildlife dependent on

the target species of those industrial fisheries, needs close scrutiny and a strategic approach which is singularly lacking in the Commission's Aquaculture Strategy (but could usefully be achieved in the prospective ICES study flagged up in the CFP reform Roadmap – the UK could usefully push for that comprehensive remit). So while UK aquaculture appears to be dependent mainly on South American industrial fisheries, the role of Community fisheries for sandeels should not be overlooked (see answer to Q22, above). Secondly, the growing contribution of blue whiting to the industrial fish-processing mix is of considerable concern, given that some blue whiting stocks (notably between Scotland and the Faeroes) are now outside safe biological limits. Lastly, there is considerable concern about the impact of aquaculture on the health of UK inshore waters (pollution effects, impact on local biodiversity, genetic contamination of wild salmon from farm escapes etc) and this is likely to get worse, not better, as aquaculture diversifies into farming cod and other groundfish.

25. What do you see as the main drivers of demand for fish products in the UK and EU over the next 10-15 years? Where could the UK have a competitive advantage in meeting this demand?

Overall demand for fish and fish products has not changed greatly in the period 1970 – 2000. Over the long term there has been a trend towards less fresh fish and more frozen and processed fish. There is evidence that people eat more fish as their incomes increase, and as the population ages fish consumption may also rise. Given these underlying these trends, what qualities do you believe consumers will be looking for in fish products in future (e.g. high quality, local produce)?

Household Consumption of Fish (grammes per person per week)



Please rank the following demand drivers in order of importance (1=highest importance)

High Quality/Freshness	1
Healthy Eating (oily fish, etc.)	2
Local Sourcing	4
Regional Branding (e.g. Seafood Scotland)	5
Sustainability Branding (e.g. Marine Stewardship Council)	3
Exotic Species	7
Processing into Ready-to-Eat Meals	6
Other	

As Q24 notes, fish consumed in the UK are increasingly being sourced from distant waters. Consumers will want to know that such out-sourcing is not contributing to poverty in third countries (e.g. disadvantaging artisanal fisheries) and distorting local/regional markets in those countries. The UK consumer is also increasingly concerned by environmental and sustainability issues. Hence, there is also significant potential for sustainability branding and eco-labelling.

26. How will retailers respond to different consumer demands in the future? Given the importance of regular supply and price, do you think they will be more inclined to acquire processing or catching capacity either in the UK or source more widely across the globe?

please insert response

27. What do you see as the main technological trends in the fishing sector over the coming decade? What will be their impact on the fishing industry? If you are a buyer, are you using your influence to introduce technological improvements in both catching and the supply chain?

The catching industry has actively applied new technologies over the last decade, particularly in terms of sonar and nets. Enforcement has also adopted new technologies, including satellite monitoring. It could potentially adopt electronic logbooks. Electronic marketing and auctions have been tested in different areas, and tagging and traceability systems are being developed. Aquaculture is technology intensive and advances allowing vegetable protein to be fed to carnivorous fish would have significant impacts.

The biggest advances are likely to be made in the farming of groundfish such as cod, haddock and halibut. This raises a number of sustainability issues, not least the insatiable appetite of the aquaculture industry for fish oil (by 2010, 90% of the world's fish oil may be consumed by aquaculture). This is likely to exacerbate the phenomenon of 'fishing down the food web' by putting severe pressure on species at the food of the food chain, e.g. krill, to be added to the traditional industrial fish sources for processing into fish feed. Nor is vegetable oil necessarily a trouble-free alternative since most soya (the most frequently invoked source) on the international market is now GM.

Other potential impacts from the growth of cod(etc) farming include additional pressure on environmentally sensitive inshore Scottish waters (questions remain about their carrying capacity to support existing sea cage fish farms sustainably, far less new developments) and the potential for adverse competition with the wild-capture sector. Given that during the 1970s the expansion of salmon farming occurred with minimum strategic guidance, regulation or precaution, Government's priority should be to ensure

that the emerging whitefish farming industry is undertaken in compliance with sustainable development from the outset.

28. What are the main drivers of change in the UK catching fleet structure? How do you see the structure of the UK catching sector changing over the next decade? What will be the effect in the processing industry?

Influences on the numbers and size of boats are driven by overall stock levels, but also by other factors including consolidation, new technology, markets for quota, and pressures for improved quality and reliability. These have all had different impacts in the various sectors with pelagics already highly concentrated and the whitefish fleet experiencing both a rise in smaller boats as well as some consolidation into larger vessels.

please insert response

29. Is there any possibility of a re-emergence of a UK long-distance catching fleet in the next decade, and if not why not?

please insert response

30. Who do you see coming into the UK catching industry in the future?

In many areas the average age of skippers is increasing and there are problems in finding crew. Assuming stocks recover over the next decade, who do you see coming into the industry as owners, skippers and crew? What will be their relationship to traditional fishing communities? Will reliance on foreign owners and workers increase? What will this mean for the definition of "a fisheries dependent community"?

please insert response

31. What do you see as the main growth sectors in your local economy over the next ten years? Are these likely to offer attractive job opportunities to people currently in the seafood industry given their pay levels, location and required skills and qualifications?

Please rank the following sources of employment by potential future importance in your area (1 = most important)

Fishing Industry

Aquaculture

Fish processing

Ancillary services for fishing

Manufacturing

Services

Agriculture

Oil and gas

Onshore Tourism

Off-shore tourism (Sea angling / dolphin or porpoise watching)

Renewable energy (e.g. off-shore wind power, tidal power)

Telework

Other (please specify)

please insert response

32. Or are people likely to need to commute more with the outside area or leave the area entirely?

please insert response

33. How do you see Government fisheries policy developing in the next ten to fifteen years?

Developments in Government fisheries policy over recent years have included: a move towards greater freedom to trade quota and licences; decommissioning to reduce excess capacity; greater emphasis on environmental objectives and the promotion of the precautionary approach to fisheries management. What is the overall direction underlying current policy, and how would you expect it to develop over the next ten years? Do you agree with this direction?

The RSPB broadly agrees with the Government's direction.

1. In placing greater emphasis on environmental objectives and the precautionary approach in fisheries policy, we wish to see Government address, as a priority, Art 2/1 of the revised CFP Framework Regulation (Council Reg 2371/2002) by developing an operational strategy for the progressive implementation of an ecosystem-based approach in UK waters. Implicit in this is a commitment to EIA of new fisheries, in keeping with the Government's response ("The Government agrees that the development of new fisheries can raise environmental issues which need to be addressed") to §12 in the Eighth Report from the Agriculture Committee, Session 1998-99, "Sea Fishing" (HC141-I).

2. The RSPB also believes that the restoration of whitefish stocks is on collision course with current levels of industrial fishing for sandeels (see our answer, para 4, to Q22) and that Government should maintain pressure at EU level to downscale the North Sea sandeel fishery.

3. The EC's review of structural funds is an opportunity to alter the future direction of aid post-2006 to take account of the reform of the CFP. In the sense that the reforms cannot progress without such a change in emphasis, subsidy reform can be seen as critical to a sustainable CFP. The abolition of public aid for building new fishing vessels after 2004, the commitment to develop an ecosystem approach and the restoration of inshore (up to 12nm) waters to exclusive national control are reforms which collectively present an opportunity to change the future deployment of structural funds. The opportunity is to shift away from the traditional capital investment projects to support 'softer' and longer term costs such as managing and monitoring the marine environment in inshore/territorial waters .

34. How do you see the Common Fisheries Policy developing over the next ten to fifteen years?

The recent reform of the CFP could signal a significant change of direction. Several potentially powerful tools have been agreed including: greater use of multi-annual management plans; the

ecosystem-based management approach; Regional Advisory Councils; the phasing out of subsidies for new build; availability of effort controls (days at sea or days in port as an instrument of fisheries management); enhanced enforcement and new technical measures e.g. different mesh sizes. How do you see the system evolving over the next ten years, and which areas should be prioritised to make the greatest positive impact?

The RSPB considers that the progressive implementation of an ecosystem-based approach is critical to the restoration of and maintenance of a healthy marine environment. The development of RACs, providing they have a properly balanced structure incorporating (inter alia) environmental interests at their core, is an important process for facilitating development of an ecosystem approach.

See also answer to Q33

Fisheries Policy Options

35. What should be the Government's strategic objectives for the management of fisheries and marine resources?

1. Promote sustainability of resources to safeguard the long term future of the marine environment, fish stocks and the fishing industry.
2. Develop an operational strategy for implementing an ecosystem-based approach, as mandated by CFP reform.
3. Adopt a precautionary approach to the development of the aquaculture industry based on a full understanding of (i) the carrying capacity of UK coastal waters to accommodate existing and future development and (ii) the sustainability of feeds used in aquaculture.

36. Does current Government policy adequately balance the different public interests in marine resources and the environment? How can biological, environmental, economic and social issues be addressed in an integrated manner?

The UK's marine resources provide profit for commercial fishing interests, employment in local communities, recreational opportunities (e.g. sea anglers, divers), tourism as well as having intrinsic value. Do current management systems appropriately balance these different elements? If not, how should a balance be achieved and measured?

This is essentially a governance problem. In the first place, the Government should promote the balanced stakeholder structure and remit of emerging RACs. There are understandably different views on, and expectations of, RACs: Fishermen see them primarily as a means for achieving more active participation in the management process as well as building bridges with scientists; anglers see an opportunity to be recognised as important resource users which should have a say in management; environmental interests hope RACs will facilitate ecosystem-based management. The extent to which these ambitions will be realised will depend on a number of factors, not least mutual trust, respect and openness. However, resolution of the different aspirations for RACs will also be a key factor influencing the structure and composition of RACs. If, for example, fishermen prioritise their own management function and reject the concept that operationalising the ecosystem approach should be a key function of RACs, then they are more likely to resist environmental interests being core members. The RSPB considers that environmental expertise (whose delivery should not be confined to NGOs) on RACs needs to have equal weight with other inputs and not be relegated to an outer consultative ring, i.e. the environmental input must not have simply token value (such as observer status) in the generation of the RAC's work and decisions. This may seem like the way things are likely to go but, since its inception, the North Sea Commission, for example, which is regarded as a prototype RAC, has excluded environmental interests and cannot be regarded as an equitable model of transparency or of stakeholder inclusiveness.

Beyond RACs, within their principal focus on fisheries, we recommend that the UK and devolved Governments introduce a system of marine spatial planning. Such a system needs development but would, for example, seek to take a strategic and forward planned approach to the development of the marine environment and the use of its resources. It should seek to balance competing demands on the marine environment and resolve

resource use conflicts, whilst protecting the structure and function of the marine ecosystem itself.

37. What should the role of the UK Government be in the fishing industry and marine management?

The fishing industry is one of the most intensively regulated and controlled industries in the UK, with fleet capacity, activity, floor prices and catching methods all being controlled to a substantial extent. The government provides significant support to the industry through grants and stock management/ science services. Should the government withdraw from any of these roles? Should it share these roles with others? How might this be changed?

The UK (and devolved) Governments should continue to take the lead in the management of the marine environment. Government should champion the sustainable use of marine resources and the protection of the marine ecosystem, providing necessary resourcing and delegated powers to statutory bodies and enforcement agencies as appropriate.

38. Who should be involved in fisheries management and at what level?

The establishment of Regional Advisory Councils will give stakeholders – primarily the industry – a greater role in the decision-making particularly regarding decisions affecting the region and stocks they are directly involved in. What duties should the Regional Advisory Councils be given as they develop and why? What duties should not be regionalised and why? What are the benefits and costs of involving stakeholders in decision making? How can these be managed? Should greater control be given at a more local level inside the UK? If so in which areas should this be done?

1. The RSPB views the introduction of regional management as one of the most important opportunities presented by CFP reform. We strongly support RACs as a mechanism for institutional reform:

- to allow a regional approach to governance, sensitive to the needs and different conditions of regional seas and communities, and thus likely to ensure better identification/compliance with management measures

- to deliver a more inclusive approach to fisheries management, promoting better cooperation and understanding between stakeholders
- to facilitate an ecosystem-based approach to management, and greater awareness generally of the need for sound stewardship of the marine environment.

2. The over-arching aim of a RAC should be to ensure the sustainable development of fisheries at regional level, which assumes the wider context of progressive implementation of an ecosystem-based approach to management (as required by CFP reform). The RSPB supports the proposal by the SFF/NFFO that the guiding principles should include adherence to the FAO Code of Conduct for Responsible Fisheries.

3. Governance role. While RACs must ultimately carry weight in decision-making over fisheries management and move towards increased responsibility, RACs should evolve from a starting point of a strictly advisory role rather than executive decision-making powers.

4. It will be important to address the resourcing implications of inclusive management. The UK Govt should press, in the forthcoming review of structural funds, for a shift away from traditional capital investment to more underpinning of 'soft' investment such as management schemes/strategies for sustainable development of inshore waters etc.

5. Apart from RACs, the Government also needs to embrace the need for a new regime for inshore fisheries, the more so with the opportunities afforded by the new access restrictions brokered in the CFP reform. Apart from supporting valuable fish and shellfish stocks, inshore waters contain high levels of biodiversity so their stewardship is a special case. However, the existing management framework for England & Wales is fragmented and was never designed to cater for an ecosystem approach. The Sea Fisheries Committees have been expected to take on more and more environmental responsibility but their 1960s legislation is out of date. Just tacking on an ecosystem approach responsibility to the existing framework will only frustrate a regime already creaking at the seams, scarcely able to cope with fishery objectives, far less wider ones. There is a need, therefore, not just for legislative but also financial and structural reform of SFCs, perhaps best captured in a new Inshore Waters Act, for which Parliamentary time must be found. Properly transformed, a new regime could (and should) take on

board innovative tools such as local management plans, low impact fishing areas and financial incentives for environmentally-sensitive fishing practices etc, in keeping with a genuine functional recognition of an ecosystem approach being a bona fide part of the role of SFCs.

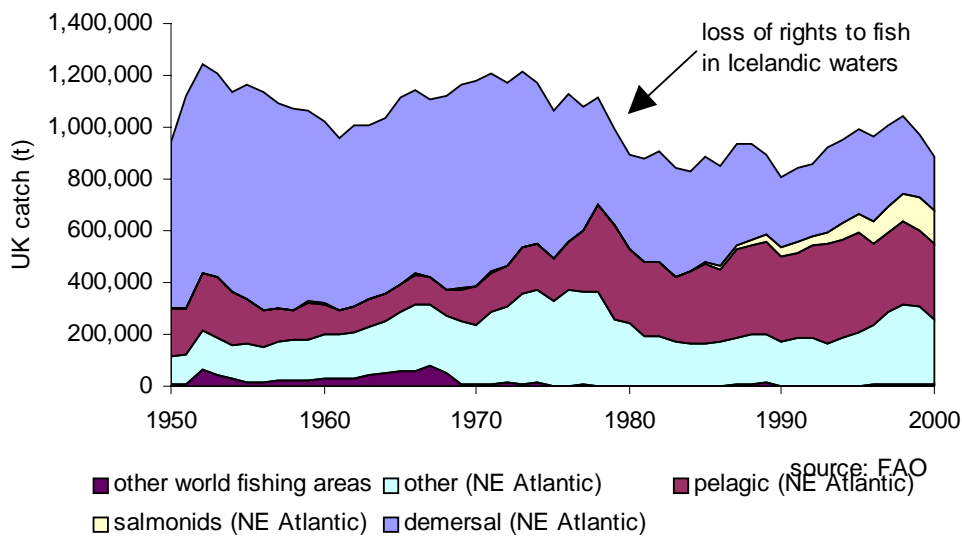
6. The inshore fisheries management regime in Scotland has similar limitations in terms of inability to allow stakeholder involvement in management, or to facilitate an ecosystem approach to be taken.

See also answer to Q36

39. How can we ensure that investment in the catching sector is better matched to biological resources, and avoid destructive “boom and bust” cycles of investment and fisheries stocks?

Over the past 50 years the volume of fish caught by UK fisherman has varied dramatically from year to year reflecting the natural variability in stocks of particular species. The UK catching sector seems to have followed boom and bust cycles where increased stocks have stimulated large capital investment in catching capacity; for example, pelagics in the 1960s and 70s, whitefish in the 1980s. The data suggests that after a period of high profits stocks decline through a combination of natural fluctuation and increased catching pressures. The fleet is left chasing fewer fish with too many boats and enters into a declining spiral of low profitability and increasing incentives to fish stocks unsustainably. Is this characterisation accurate? Is it inevitable or could better policy help minimise these effects?

Volume of fish caught or grown by UK fishermen (1950 – 2000)



The loss of rights to Icelandic waters reflects a break in the series for demersal species

please insert response

40. How should fisheries managers deal with technological advances which improve catching efficiency?

Improvements in vessel design, fish sensing equipment and the selectivity of fishing gear all have the potential to make catching fish more efficient. This is often referred to as 'technical creep'. What should our attitude be to these advances? How can we encourage technological modernisation and hold fishing effort at a sustainable level?

A mechanism needs to be developed for factoring technical creep into the assessment of deployed fishing capacity, in order to better balance fishing effort with available resources in future. When the Lassen Committee was drawing up its recommendations for MAGP-III, they called on Member states to provide data on technical creep but scarcely any was forthcoming. While the SFIA have done some work on this complex issue in the past, much more needs to be done in order to inform decision-making on levels of decommissioning and effort reduction and the fleet segments at which this should be targeted.

41. Who should benefit from the value reflected in quota prices? Are these quota prices a barrier to new industry entrants?

The present system provides licensed fishermen with a valuable asset based on historical landings. The cost of acquiring quota is now included in the cost of catching fish (along with boat, licence etc.) and if the market is operating properly, the price for quota will include a profit margin for the seller. Who should benefit from these profits and are they preventing new entrants joining the industry?

please insert response

42. What are the main features we should seek in a fisheries management instrument?

Across different countries fisheries managers use a wide variety of different instruments to regulate fishing effort. Different management instruments have different characteristics. What do you think are the most important features of a policy management system?

Please rank the following characteristics in order of importance (1=highest importance)

Trust of the fishermen	1
Predictable effect on fishing effort	3
Ease of monitoring and enforcement	6
Quality of information on catch (will landings data become biased?)	7
Simplicity of regulation	5
Ability and speed of response to biological changes/condition	4
Economic flexibility and efficiency	8
Ability to maximise catch per trip	9
Environmental impact	2
Other (please specify)	

please insert response

43. What policy instrument(s) and management system(s) would you favour in your catching sector?

Fully Transferable Quotas permit greater economic flexibility than the current system, allowing the most efficient fishermen to expand. However, there are problems such as incentivising illegal landings and the consolidation in fleets; with negative impacts on fishing affecting communities. Systems such as transferable effort quotas are easier to measure, but some argue they are inefficient and give perverse incentives to invest in more powerful boats. Some of the technical measures, for instance on mesh size, can reduce the efficiency of fishing.

Please rank the following policy instruments (1=most favoured). Please comment on the reasons for your choice.

- Intra-UK fully transferable quotas
- Intra-UK fully transferable effort quotas
- International fully transferable quotas
- International fully transferable effort quotas
- Regulations on gear such as mesh size
- Closing fisheries for part of the year (during spawning)
- (Uncompensated) effort limitation measures (tying up boats)
- Decommissioning grants
- More enforcement effort
- “Real time” effort control / area closures
- Other (please specify)

please insert response

44. Are there other countries that the UK and the EU should be learning from in terms of fisheries management? What are the attractive features of these systems? How transferable do you think they are to the UK situation?

There are several competing systems of fisheries management which seem to have performed well in different countries and for different stocks, ranging from Individual Transferable Quotas (e.g. New Zealand) to “real time” effort controlled fisheries (e.g. Faroes). Different countries also operate different institutional structures such as co-management and greater involvement of fish catchers and allied industries.

Progressive implementation of an ecosystem-based approach raises important resourcing questions and the Government will need to look to its budget lines for this area of work. In recent years, the New Zealand Government has implemented a scheme to recover from the domestic commercial fishing industry the funding required to investigate and mitigate the impacts of fishing on protected species of marine wildlife, especially seabirds and marine mammals. The so-called ‘Conservation Services Levies’ are used to boost observer coverage in selected fisheries, to monitor the status of protected species taken as incidental by-catch, and to develop appropriate mitigating measures (often technological solutions). A similar funding route could be explored in the UK. Perhaps the SFIA could hypothecate a proportion of its levy from the fishing industry for this purpose.

Broader Policy Context

45. What role do you see for regional planning, economic development and community support initiatives to support the industry and communities in the future?

What role should different public and private bodies play? How could public structures and funds be better used to tackle social exclusion and improve quality of life in communities dependent of the seafood industry in all its forms?

please insert response

46. What are the practical consequences of adopting an ecosystem approach to fisheries management? What type of management tools should we use?

Though the reformed CFP contains a commitment to an ecosystem approach, it is unclear what this means in practical terms and how it would affect the type of information, indicators and management regime used in the EU. Which tools could be used to implement this approach, and what impact might they have on fishing activity? Do we understand the overall marine

ecosystem well enough to implement this approach? Should priorities for research funding be shifted to more ecosystem-focused work?

1. The ecosystem approach to fisheries management under the CFP will mean:
 - setting environmental objectives/targets (eg targets for stock restoration in Community waters),
 - setting environmental indicators (eg Limit Reference Points for commercial species; bycatch limits for non-target species; ecosystem indicators such as the productivity of seabirds dependent on specific sandeel populations etc),
 - adopting a precautionary approach (eg implementing Environmental Impact Assessments of both existing fisheries and particularly for planned fisheries for new species or in new grounds, especially where there is a presumption of impact on non-target species or sensitive habitats; introducing Strategic Environmental Assessment of fisheries programmes),
 - protecting food sources of commercial fish and other key species (eg precautionary approach to management of industrial fisheries),
 - protecting critical habitats of commercial fish and other key species (eg drawing on practice in the Icelandic cod fishery such as closures of key spawning & nursery grounds, temporary & emergency closures of areas with high numbers of juveniles),
 - building a robust scientific basis through a research programme prioritised to understanding the ecosystem and the interaction of fishing activities with it, accepting that incomplete scientific knowledge is no excuse for inaction,
 - ensuring that structural funds and other budget lines are appropriately developed and deployed to support such a research programme
 - bringing fishing activity in line with available marine resources (eg limiting effort and reducing capacity on a permanent basis),
 - introducing a long-term basis for management (ie multi-annual management),
 - introducing a much wider dimension of multi-species management,
 - conservation of biodiversity (eg implementation of the EU Fisheries Biodiversity Action Plan; implementation at sea of the EU nature conservation Directives),
 - providing incentives (including financial) to encourage environmentally sensitive fisheries and promote compliance with Technical Conservation Measures.

2. More widely, there are also changes to governance that would facilitate and support the ecosystem approach to fisheries management, including:

- wider stakeholder involvement,
- integrated management,
- management at the appropriate scale (eg regional management; coastal zone management).

3. There are certainly resource implications and the Government has a responsibility to address this. The cost of NOT applying an ecosystem approach is, and already has been, immeasurably greater in terms of loss of critical habitat for fish, attrition of fish stocks, job losses etc. So in this sense the impact on fishing activity is beneficial, not detrimental. See also answer to Q44.