

# SEA FISHING: QUOTAS FOR 2009

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This briefing provides background information in advance of the autumn 2008 fisheries negotiations at which decisions by the EU on fishing quotas and days at sea will be made for 2009.

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## KEY POINTS OF THIS BRIEFING

- Under the Common Fisheries Policy, the EU sets annual limits on the total amount of fish that can be landed from various fish stocks in the following year (the Total Allowable Catch or TAC). The TAC for each stock is shared out through quotas allocated to Member States. The EU also sets limits on days that fishing vessels can spend at sea.
- TACs for a number of North Sea stocks (e.g. cod, haddock, whiting and herring) are decided on in negotiations between the EU and Norway. TACs for various other stocks (mackerel, blue whiting, atlanto-scandian herring) are decided on in negotiations between the EU and other Coastal States (Norway, Iceland, Faeroes, Russia). TACs for the remaining stocks are decided on at the December meeting of the EU Council of Fisheries Ministers. The Council's decision is based on a proposal from the European Commission.
- The Commission takes into account scientific advice on the state of fish stocks. On 27 June 2008, the International Council for the Exploration of the Sea (ICES) published scientific advice on whitefish stocks. It recommended a zero catch for North Sea cod and for West of Scotland cod and haddock. It also recommended substantial TAC reductions for North Sea whiting (40% cut) and West of Scotland herring (52% cut). ICES advice for North Sea Nephrops would also result in a 24% TAC cut. On 13 October 2008, ICES released further advice, which recommended a 27% increase in the TAC for mackerel.
- The European Commission's 2008 policy statement proposes a more flexible approach to the setting of TACs that "will allow genuine conservation measures to be taken where they are most needed, while helping the industry to benefit from recovery once it has taken root". The Commission also states that limits on fishing effort in the form of days at sea has not been effective and it proposes to introduce a new system that would be based on the engine power of fishing vessels. This new system is being trialled in Scotland this year under the Conservation Credits Scheme.
- The health of North Sea cod stock is an issue that has dominated fisheries management in Scotland and the EU in recent years. In 2004, the EU adopted a cod recovery plan. On the basis of scientific advice showing that the plan has not been successful, the European Commission recently published a proposal for a revised plan which is due to be agreed at the November meeting of the Council of Fisheries Ministers.
- The Scottish Government recently hosted a summit to look at ways of radically reducing discards of fish. It has also stated that it is "making the issue of discards a key part of this year's autumn negotiations on fish stocks and quotas". The European Commission issued a proposal on eliminating discards in 2007. It has recently published a consultation paper on implementing the policy in relation to two fisheries.

## COMMON FISHERIES POLICY

Conservation policy is the most important plank of the [Common Fisheries Policy](#) (CFP). Since 1983, the main instrument of conservation policy has been to set Total Allowable Catches (TACs) which fix the total amount of fish that can be landed from stocks each year. TACs are usually set by species and sea area (eg North Sea cod). The TAC for each stock is shared out through quotas allocated to Member States. This is done according to the principle of 'relative stability' which guarantees each Member State a percentage of a stock in a certain area, based on historical catch levels. The process for setting TACs is outlined in the next section.

The EU has also imposed restrictions on fishing effort. In 2003, it introduced limits on the number of days at sea which could be spent fishing for vessels over 10 metres in length that were using fishing gear likely to catch cod. This scheme has also been extended into other sea areas to cover other fish stocks. The days at sea restrictions aim to remove the opportunity for illegal fishing and to reduce discarding (i.e. throwing dead fish back into the sea) (European Commission 2008a). Without such restrictions, fishing vessels could continually go out and catch target fish within their quota allocation but discard other species that they also catch (BBC News 2008). CFP conservation policy also involves the use of technical measures, including regulating the types of fishing gear that vessels can use.

Since reforms introduced in 2002, the EU has been taking a longer-term approach to fisheries management (European Commission 2008b). To maintain the well-being of some fisheries two types of multi-annual plans are being implemented based on the state of the stocks in question. *Recovery plans* are designed to help rebuild stocks that are in danger of collapse while *management plans* aim to maintain stocks at safe biological levels. The plans contain a formula for calculating annual TACs on the basis of scientific advice on the state of the stock. So far only four recovery plans (for certain cod, hake and Nephrops stocks) and four management plans (for certain plaice, sole and cod stocks) have been adopted; a further management plan for West of Scotland herring is in preparation and is likely to be agreed at this year's December Fisheries Council (House of Lords European Union Committee 2008).

A recent [report](#) by the House of Lords European Union Committee (2008) provides further information on the CFP, including on progress since 2002 and ongoing challenges.

## ANNUAL DECISIONS ON FISHING OPPORTUNITIES

Annual decisions on fishing opportunities (TACs and limits on days at sea) are made as follows:

- ***EU-Norway negotiations:*** A number of stocks in the North Sea (including cod, haddock, whiting and herring) are managed jointly by the EU and Norway. At the end of each year, the TACs for these stocks for the following year are fixed in bilateral negotiations between the European Commission and Norway. These negotiations decide about 60% of the fishing opportunities for Scotland's fleet.
- ***Coastal States negotiations:*** A number of other stocks (e.g. mackerel, blue whiting, and atlanto-scandian herring) are jointly managed by the EU and other Coastal States (including Norway, Iceland, Russia and Faeroes). TACs for these stocks are set in negotiations between the EU and relevant other Coastal States. Agreements on TACs for these stocks need to be ratified by the North East Atlantic Fisheries Commission.
- ***EU Council of Fisheries Ministers:*** TACs for the remaining stocks (including North Sea monkfish and Nephrops and stocks on the West Coast of Scotland) are decided at the *providing research and information services to the Scottish Parliament*

December meeting of the EU Council of Fisheries Ministers. The Council also decides limits on days at sea. The Council's decisions are made on the basis of a proposal from the European Commission, usually published in late November/early December.

The European Commission takes into account scientific advice on the state of stocks. In June and October each year, the [International Council for the Exploration of the Sea \(ICES\)](#) publishes scientific advice on the state of relevant stocks, and opinions on TACs for the next year. The Commission then consults its own [Scientific, Technical and Economic Committee for Fisheries](#) (STECF), which is made up of national experts. The Commission also consults with the fishing industry and other stakeholders (European Commission 2008b).

## KEY DATES IN 2008 NEGOTIATIONS

The following key events have taken place in 2008:

30 May	The European Commission published its <a href="#">annual policy statement</a> outlining the general approach to the proposal for fishing opportunities in 2009
27 June	ICES (2008a) issued its <a href="#">scientific advice</a> for most North Sea and West of Scotland fish stocks of interest to the Scottish fleet
30 June -4 July	An STECF sub-group met to review the ICES scientific advice. The STECF <a href="#">report</a> was finalised at the STECF plenary meeting on 7-11 July
13 October	ICES issued its scientific advice on pelagic stocks, including mackerel, blue whiting and atlanto-scandian herring.

Important dates in the autumn 2008 negotiations are shown in the Table below:

<b>October</b>	
20-21	Coastal States negotiations on blue whiting (EU, Norway, Faeroes, Iceland)
20-24	STECF sub-group meeting to review ICES scientific advice
22-23	Coastal States negotiations on atlanto-scandian herring (EU, Norway, Russia, Iceland and Faeroes)
27-28	EU Fisheries Council meeting in Luxembourg
30-31	Coastal States negotiations on mackerel (EU, Norway, Faeroes)
<b>November</b>	
Early	European Commission proposal on fishing opportunities for 2009.
3-7	1 <sup>st</sup> round of EU/Norway negotiations in Bergen on North Sea shared stocks, including most whitefish stocks, such as cod, haddock & whiting.
3-7	STECF plenary meeting
10-14	North East Atlantic Fisheries Commission meeting – negotiations on fisheries in NE Atlantic in international waters beyond the 200 mile limit.
17-18	EU Fisheries Council meeting in Brussels
24-28	2 <sup>nd</sup> round of EU/Norway negotiations in Brussels
<b>December</b>	
17-19	EU Fisheries Council meeting to decide on fishing opportunities for 2009.

Source: Adapted from draft timetable prepared by Scottish Government and provided to SPICe.

## UK QUOTAS IN RECENT YEARS

The table below shows the UK quotas for the seven most important quota species for the Scottish fleet for the last ten years. It can be seen that 2008 quotas are significantly lower than they were ten years ago for all species, except for Nephrops (commonly known as langoustines), which have increased. In terms of changes in quota from 2007 to 2008:

- North Sea stocks: the only quota that increased was for cod (up by 11%). There were large decreases in quota for herring (down 40%) and whiting (down 17%) and a significant decrease in quota for haddock (down 13%). The quotas for monkfish and Nephrops remained the same.
- West of Scotland stocks: There were large decreases in quotas for herring (down 20%), and haddock (down 20%). There was also a significant decrease in the quota for mackerel (9%) and a slight decrease in the quotas for cod and whiting. The quotas for monkfish and Nephrops remained the same.

There would have been even larger decreases in quotas for North Sea whiting (30%) and haddock (20%) in 2008 but for the UK's use of what are known as "Hague Preferences". Only the UK and Ireland can make use of these preferences, which allow for the top up of quota where the socio-economic impact of a quota cut would be extremely large (Scottish Government, 2008a). When used, the preferences take quota away from other Member States. This was the first time in several years that the preferences were used.

**Table 1 – UK quotas for selected species, 1999-2008 (tonnes)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>North Sea</b>										
Cod	55,660	34,149	20,555	20,377	10,696	9,507	8,674	9,037	7,773	8,628
Haddock	57,088	53,056	41,184	59,805	33,257	49,537	44,123	34,574	36,466	31,672
Whiting	24,415	19,470	14,363	19,608	7,257	6,784	10,544	9,162	11,297	9,336
Monkfish	17,960	14,370	11,495	9,205	6,245	6,157	8,950	8,392	9,233	9,233
Nephrops	14,865	14,862	12,961	13,885	14,005	16,047	18,101	24,380	22,644	22,644
Herring <sup>1</sup>	40,503	40,570	40,570	38,101	56,818	65,220	94,941	63,333	50,279	30,025
<b>West of Scotland</b>										
Cod	5,960	3,530	2,322	2,974	1,084	508	485	368	294	241
Haddock <sup>2</sup>	14,705	15,002	10,720	10,996	6,455	5,304	7,081	6,294	5,932	4,743
Whiting	4,060	2,875	2,580	2,157	1,285	1,032	917	780	585	438
Monkfish	2,695	2,505	2,033	1,572	1,086	1,220	1,865	1,442	1,586	1,586
Nephrops	12,305	12,305	11,070	11,102	11,065	11,043	12,399	17,257	19,415	19,415
Herring	39,240	24,990	21,570	21,571	17,728	17,776	17,788	20,145	20,145	16,036
Mackerel <sup>3</sup>	164,580	192,770	197,099	202,139	187,596	175,164	128,690	131,713	149,519	136,522

Notes: 1. North Sea Herring quota is for Northern North Sea.

2. West of Scotland Haddock quota does not include Rockall Haddock - in 2008 UK quota for Rockall Haddock was 5,574 tonnes.

3. Mackerel quota is for whole of Western waters.

The Scottish fishing fleet also has an interest in stocks of plaice, sole, saithe, megrims, and ling among the demersal species (i.e. bottom dwellers) and blue whiting among the pelagic species (i.e. fish that live between the bottom of the sea and the surface). Lobsters, crabs and scallops

which are particularly important for inshore shellfish fisheries, are not regulated by quotas. The Scottish fleet has only very small quotas for industrial species (i.e. fish that are used to make animal food, mainly fishmeal) such as sandeel, Norway pout and sprat.

## DAYS AT SEA LIMITS IN RECENT YEARS

The table below shows the days at sea limits that have been in place since 2003 for the two main sectors of the Scottish fleet which are affected: boats targeting whitefish, and boats targeting Nephrops. Note that these limits were initially set according to days per month. This was changed in 2006 to days per year. To allow comparisons to be made, figures from 2006 to 2008 have been divided by 12 to show days per month.

**Table 2 – Limits on days at sea: 2003-2008**

Year	Whitefish trawlers (monthly days)		Nephrops trawlers (monthly days)	
	North Sea	West of Scotland	North Sea	West of Scotland
2003	15	15	25	25
2004	15	15	22	22
2005	14	13	21	21
2006	13.6	12.6	18.9	18.9
2007	13.6	12.6	17 (mesh 70-99mm) 17.4 (mesh 90-100mm)	18.9
2008	13.6	12.6	15.3 (mesh 70-99mm) 15.7 (mesh 90-100mm)	17 (mesh 70-99mm) 18.9 (mesh 90-100mm)

Sources: Council Regulations (EC) Nos 2341/2002, 2287/2003, 27/2005, 51/2006, 41/2007, 40/2008.

Note: The monthly days at sea for Nephrops trawlers are higher than shown above for vessels with a track record of less than 5% landings of cod (known as additional days for “derogation”).

## CONSERVATION CREDITS SCHEME

Following approval from the EU, in February 2008 the Scottish Government announced the start of the Conservation Credits Scheme, which allows the Scottish Government to decide on the allocation of days at sea for its own fleet for a trial period. Under the scheme, vessels can receive additional days at sea in return for complying with strict conservation measures (Scottish Government 2008b). These measures include controls on net sizes and voluntary closure of areas when juvenile or spawning cod are encountered.

## SCIENTIFIC ADVICE FOR 2009

### THE ICES APPROACH

As noted above, when preparing proposals for TACs, the European Commission takes into account scientific advice from the International Council for the Exploration of the Sea (ICES). ICES advice is based on a precautionary approach to fisheries management (ICES 2007a). The objective is to avoid overfishing a stock to an extent that it collapses. 'Collapse' does not mean that a stock is at risk of biological extinction, but does mean recovery is likely to be slow, or that a species' position in the ecosystem is altered to the extent that it may never return to former

levels of abundance. For example, the once abundant cod stocks on the Grand Banks off the Canadian coast collapsed in the 1990s and show no sign of recovering to former levels. For a number of fish stocks ICES has set reference points for two parameters:

- (1) **Spawning stock biomass (SSB)** - the total weight of mature fish (capable of spawning) in the population; and
- (2) **Fishing mortality (F)** - the proportion of a fish stock taken each year by fishing.

For both parameters, two reference points are set (a) a limit reference point; and (b) a precautionary reference point. The purpose of precautionary reference points is to account for the uncertainty in stock assessments and to provide a high probability of avoiding limit reference points. For example, when a stock's biomass is assessed to be above the limit point but below the precautionary point, there is a chance the true biomass may be below the limit point. If so, there is a risk that the stock could collapse. ICES has regard to these limit and precautionary reference points when advising on TACs.

### SCIENTIFIC ADVICE FOR 2009

In recent years the EU has been making efforts to avoid last minute decisions being taken by the December Fisheries Council on which there has not been an opportunity to consult with the fishing industry and other stakeholders. As part of this process, in June 2008 ICES published [advice](#) on several fish stocks which would not normally be published until October.

The following Table shows, in summary form, the ICES advice on TACs for 2009 for the most important quota species for the Scottish fleet. For comparison purposes, it also shows the ICES advice on TACs for 2008 and the TAC outcomes for 2008. A more detailed summary of the ICES advice for 2009 is outlined in Annex 1.

**Table 3 – ICES advice for 2009 and comparisons with 2008 (figures in tonnes)**

Stock	Advice for 2008	Outcome for 2008	Advice for 2009
North Sea Cod	22,000*	22,152	Zero catch.
North Sea Haddock	46,444	46,444	42,264 (9% cut)
North Sea Whiting	5,000	17,850	10,700 (40% cut)
North Sea Nephrops	No increase in effort	26,144	No increase in effort and TAC set in line with recent average landings (which would lead to a 13% cut)
North Sea Herring	175,000	201,227	171,000-180,000 depending on which new management plan is adopted (10-15% cut)
Monkfish (North Sea & West of Scotland)	No increase in effort	16,500	No increase in effort
West of Scotland Nephrops	No increase in effort	19,885	No increase in effort and TAC set in line with recent average landings (which would lead to a 24% cut).
West of Scotland Cod	Zero catch	241	Zero catch.



Stock	Advice for 2008	Outcome for 2008	Advice for 2009
West of Scotland Haddock	4,200*	6,120	Zero catch.
Rockall Haddock	6,916	6,916	4,330 (37% cut)
West of Scotland Whiting	Reduce catches to lowest possible level	765	Reduce catches to lowest possible level
West of Scotland Herring	15,000	27,200	13,000 (52% cut)
North East Atlantic Mackerel	349,000-456,000	385,366	443,000-578,000 (27% rise)

Sources: (ICES, 2007b), Council Regulation (EC) 40/2008, (ICES 2008a)

\*TACs refer to the landed component of a catch. This figure in the Table is not the recommended TAC but the recommended figure for total catches (including discards and unaccounted catches).

As noted above, the Scientific, Technical and Economic Committee for Fisheries (STECF) (2008) reported on the ICES advice at the conclusion of its meeting on 7-11 July 2008. In summary, the SCTEF agreed with the ICES advice on the stocks mentioned above. STECF's comments are outlined alongside the ICES advice in Annex 1.

#### **Note about zero catch advice for cod**

From 2003 to May 2007, ICES advised that no cod should be caught in the North Sea. In October 2007, ICES updated its advice based on new survey information that changed its perceptions of the size of the 2005 year class of cod. Despite the low stock size and poor recent recruitment, ICES (2007c) estimated the stock could be rebuilt to the precautionary biomass limit at the beginning of 2009 with a low fishing mortality. This corresponded to total removals (landings, discards and unaccounted removals) of 22,000 tonnes for 2008. As can be seen from the above Table, the advice for 2009 is a zero catch. ICES (2008b) explains:

“This year’s advice is consistent with that of May 2007 in noting that Bpa [the biomass precautionary point] cannot be achieved in two years even with a zero catch. The October 2007 advice showed a more optimistic view... The difference between the two evaluations results from the interpretation of achieving Bpa at the end of the forecast year. In each case SSB is forecast to increase to close to Bpa following two years of low mortality rates. The forecast of October 2007 estimated SSB just above Bpa even with a small catch, and the most recent forecast indicates that SSB will be just below Bpa...”

It should be noted that ICES made zero catch recommendations for cod in both the North Sea and West of Scotland because it considers that the cod recovery plan (discussed below) does not accord with the precautionary approach. ICES has “concluded that a recovery plan, in order to be precautionary, must include an adaptive element, implying that fisheries for cod remain closed until an initial recovery of the cod SSB has been proven.” ICES noted that applying the cod recovery plan would result in a TAC of 29,100 tonnes for North Sea cod in 2009.

## **PROPOSED CHANGES TO TAC SETTING**

The European Commission’s 2008 [policy statement](#) sets out its intentions with regard to its proposals for TACs and fishing effort in 2009 (European Commission 2008c). In the introduction to the statement, the Commission comments that, “the state of resources remains worrying.

Several stocks are exploited beyond sustainability”. According to the Commission, “overfishing and stock depletion is due in part to setting too high levels of TACs...The TACs decided by Council have been on average about 48% higher than the catches that, according to scientific agencies, would be sustainable in accordance with the precautionary approach.” The Commission is proposing new rules for setting TACs:

“Annual variations in TAC were previously limited to 15% in either direction, to provide a minimum level of stability to the industry. It is now apparent that, in the case of stocks which are seriously overfished, this measure is producing results which go against the longer-term interests of the industry. The Commission therefore proposes a more flexible approach... [that] will allow genuine conservation measures to be taken where they are most needed, while helping the industry benefit from recovery once it has taken root. For stocks with a low level of biomass, it is proposed that TACs be reduced by up to 20% a year, while for stocks which have recovered beyond the level which allows the highest yield to be taken, TACs could be increased by up to 25% a year. When STECF advises a zero catch, TACs should be reduced by at least 25%.” (European Commission 2008d)

## **PROPOSED CHANGES TO EFFORT LIMITS**

In 2007, the European Commission circulated a paper containing its ideas for changes to the days at sea measures for 2008 (European Commission, 2007b). It stated that the current regime had not fully succeeded in achieving the goal for which it was conceived: to substantially reduce fishing effort for the stocks which needed to recover. The Commission also noted that the scheme had become very complex, that it was inflexible, and that the cost of administering it had become disproportionate with regard to the results achieved. The Commission therefore argued that a new regime for controlling fishing effort was required. It proposed a system of kilowatt (kW) days, which would measure fishing effort in terms of the engine power of fishing boats (which determines how fast a boat can steam and the size of nets it can tow and haul).

In December 2007, the Council and the Commission agreed a joint statement that a “kW-days approach would be better adapted to the management of fishing effort in the areas covered by the multi-annual regimes for cod, flatfish and southern hake”; and that they would aim for the implementation of this approach in 2009 (European Commission 2008c).

The Commission’s 2008 policy statement notes that for various reasons, “reducing days at sea has not been very effective in reducing the effort actually deployed”. The statement continues:

“A possible effort management system based on kW-days approach has been discussed. This method would let Member States decide on a balance between fleet capacity and fishing opportunities. It would also let Member States fine-tune allocations of kW-days to encourage low discard fishing and cod avoidance.”

It then refers to the December 2007 joint statement and concludes, “the new system will be proposed in the context of the revision of the cod recovery plan for the coming years and, for its immediate implementation in 2009, in the 2009 TAC proposal”. Scotland is piloting the kilowatt-days effort scheme through the Conservation Credits scheme which was introduced in 2008.

## **PROPOSED CHANGES TO COD RECOVERY PLAN**

The issue which has dominated fisheries management in Scotland in recent years has been the health of the North Sea cod stock. The stock declined over the last 30 years to the point where scientists advised that it was at risk of collapse.

At the December 2000 Fisheries Council, Ministers agreed to develop a long-term plan to help cod stocks to recover. Quotas were cut and temporary closures were introduced in 2001. Quotas were cut further in 2002. In 2003, the number of fishing days for boats likely to catch cod was limited, and quotas were cut further. In 2004, agreement was reached on a regulation which enshrined the cod recovery plan in EU law. The cod stocks covered by this plan are those in the North Sea, West of Scotland and other regions. Cod quotas have been maintained at a low level and days at sea have been limited from 2004 to 2008.

The European Commission began a review of the cod recovery plan in 2006. A [cod recovery symposium](#) was held in Edinburgh in March 2007 under the auspices of the North Sea Regional Advisory Council (NSRAC) and the North Western Waters Regional Advisory Council (NWWRAC). In June 2007, the European Commission produced a [consultation paper](#) outlining its thinking on cod recovery. The Scottish Government published a [detailed response](#) to the consultation. In April 2008, the European Commission (2008e) adopted a [proposal](#) to amend the cod recovery plan. The basis for the revised recovery plan is that:

“Recent scientific advice from [ICES] has indicated that the reductions in cod catches arising from the collective effect of [TACs], technical measures and complementary effort management measures have been far from sufficient to reduce fishing mortalities to levels required to allow the cod stocks to rebuild and none of the four cod stocks covered by the [recovery plan] show clear signs of recovery.”

The main changes in the Commission’s proposal are:

- *New objective for plan:* The long-term objective of the plan will be changed from a biomass based target to a fishing mortality based target. The Commission states:

The current evidence on global warming makes it necessary to revise long term objectives of recovery plans. Rather than targeting specific biomass levels that may no longer be achievable under changing oceanic conditions, the plan must concentrate on achieving the optimum exploitation rate that will guarantee the highest sustainable yield that the new conditions can provide. (EM, 2008)

- *New effort management system:* There will be a new effort management system. Effort ceilings will be expressed in kilowatt-days. Reductions in effort will be proportionate to the targeted reductions in fishing mortality for effort groups that contribute most to cod mortality. Effort ceilings will be managed at national level by Member States. Scotland is already piloting this scheme through the Conservation Credits Scheme.
- *Flexible approach to catch and effort limitations:* A flexible approach will make it possible to graduate catch and effort limitations in line with improvements in the biological condition of the stocks concerned. Fishing mortality would thus be reduced year-on-year by 25%, 15% or 10% depending on the gravity of the condition of the stock, until the target mortality rate of 0.4 has been met.
- *Measures to reduce cod discards:* New measures are proposed to encourage the reduction of discards and to encourage the application of cod avoidance programmes. Participation by fishing vessels in cod-avoidance programmes will be one of the criteria that Member States will have to take into account when deciding on a method of allocating the maximum allowable fishing effort to individual vessels. The issue of reducing discards is discussed further below.

The North Sea Regional Advisory Council (2008) welcomed this proposal but stated that:

“...for the North Sea, the cod recovery plan must place stronger emphasis on managing the increasing numbers and biomass of a recovering stock, through discard reduction and cod avoidance, rather than the more extreme and blunt measures required to initiate cod recovery, which is the current emphasis of the plan.”

The Council debated the proposal at its fisheries meeting on 29-30 September 2008 (Council of the European Union 2008). It said that the Permanent Representatives Committee (COREPER) should continue work on this, with a view to an agreement in November.

## **SOLVING THE PROBLEM OF DISCARDS**

### **THE PROBLEM**

Discards are fish that are caught and thrown back into the sea; in most cases the fish are thrown back dead or do not survive. Discarding occurs because of quota restrictions on species which are part of mixed fisheries. Fish of the species for which quota is exhausted continue to be caught while fishing for other species for which quota is available. Discarding also takes place because fish are caught which are too small to be landed. Fishing vessels may also engage in discarding to maximise the value of their landing: e.g. when different sizes or qualities of fish command different market prices. (European Commission 2007c)

How big is the problem? According to a report by the Food and Agriculture Organisation of the United Nations (2005), which was based on data from 1992 to 2001, total annual discards in the North Sea were between 500,000 and 880,000 tonnes. A study on the economic costs of discarding estimated that UK North Sea whitefish trawlers discarded cod, haddock and whiting worth €75 million in 1999, equivalent to 42% of their landings (Nautilus consultants 2001). A recent article (Scotsman 2008a) reports that “fishermen in Scotland are throwing away £40 million worth of fish every year”. According to the article, “it is now estimated that about 100,000 tonnes of fish are dumped by Scottish fishermen alone”.

### **RECENT DISCUSSION IN SCOTLAND**

The Scottish Government (2008c) has stated that it is “making the issue of discards a key part of this year’s autumn negotiations on fish stocks and quotas”. On 25 September 2008, the Government held a Discards Summit to look at ways of radically reducing discards. According to the Scottish Government (2008c), potential solutions to the problem include:

- Making nets more selective so that only fish above minimum landing sizes are caught;
- Closing areas of the sea on a temporary basis where high abundances of certain species are found as has been happening under Scotland’s voluntary real time closures scheme;
- Restricting the number of days which a boat is allowed to spend at sea.

The Scottish White Fish Producers Association (SWFPA) has expressed concerns about the levels of cod discards and is arguing for an increase in quota for cod in return for a reduction of days that can be spent at sea (Scotsman 2008a; and SWFPA 2008). It is not clear yet whether this proposal is supported across the industry. According to a recent article (Scotsman 2008b), the EU Fisheries Commissioner, Dr Joe Borg, stated that the solution is more complex because this could lead to fishermen targeting cod and putting more pressure on cod stocks.

## EU PROPOSALS

In March 2007, the European Commission issued a [communication](#) on reducing unwanted catches and eliminating discards (European Commission 2007c). It stated:

“A new discard policy aims to remove the practice of discarding. This will be achieved in EU waters on a fishery by fishery basis through tailored plans that could include discard bans and other supplementary measures to reduce by-catch.”

The Commission stated that “a discard ban puts a cost on taking unwanted by-catches [because vessels would not be permitted to profit from these catches] and will thus motivate development of technologies and practices which catch fewer unwanted fish”. Standards for maximum acceptable by-catch would be set. These would initially be based on a reduction relative to the present situation and would be progressively reduced over time.

During 2007, stakeholders and the Council of Ministers gave opinions on the policy and the European Parliament issued a [resolution](#) on it in January 2008. In April 2008, the Commission published a [consultation paper](#) on implementing the policy in relation to two fisheries: nephrops fisheries and the flatfish beam trawl fishery in the North Sea (European Commission 2008f). It proposes a Maximum Acceptable By-catch Limit (MABL) after five to six years, with intermediate targets in the preceding years. Vessels would not be allowed to discard by-catches in excess of the MABL. The Commission stated that “this approach will be gradually extended to all other European fisheries. This will take a period of 5-10 years presumably, and the Commission intends to propose later in the year 2008 a roadmap for implementation”.

The Scottish Fishermen’s Federation (2008) submitted that any approach to discards should be gradual and that “discarding should not be made illegal as this would not solve the problem”. It argued that “if the Commission wants to reduce the practice of discarding then technical measures and other measures designed to reduce discards should be used”. WWF (2008) submitted that “there is a role for a discard ban but only once other forms of mitigation...have been addressed”. The Commission has recently published a [summary of responses](#) to the consultation (European Commission 2008g).

## ANNEX 1 - SUMMARY OF SCIENTIFIC ADVICE FOR STOCKS OF INTEREST TO SCOTTISH FLEET

### NOTE ABOUT TERMINOLOGY IN ICES ADVICE

As noted above, ICES has regard to reference points for two parameters

(1) **Spawning stock biomass (SSB)** - the total weight of mature fish (capable of spawning) in the population; and

(2) **Fishing mortality (F)** - the proportion of a fish stock taken each year by fishing.

For both parameters, two reference points are set: a limit reference point and a precautionary reference point. The table below shows the terminology that ICES uses in relation to these parameters and reference points.

<b>In relation to spawning stock biomass</b>	
Stock has full reproductive capacity	SSB is above precautionary reference point
Stock is at risk of suffering reduced reproductive capacity	SSB is below precautionary reference point but above limit reference point
Stock is suffering reduced reproductive capacity	SSB is below the limit reference point
<b>In relation to fishing mortality</b>	
Stock is being harvested sustainably	F is below precautionary reference point
Stock is regarded as being at risk of being harvested unsustainably	F is above precautionary reference point but below limit reference point
Stock is being harvested unsustainably	F is above the limit reference point

ICES also looks at **recruitment** – the number of young fish produced each year which survive from spawning to enter the adult stock.

<b>Stock</b>	<b>ICES assessment of state of stock</b>	<b>ICES advice for 2009</b>	<b>STECF comments on ICES advice</b>
<b>North Sea Cod</b>	The stock is suffering reduced reproductive capacity but is being harvested sustainably. SSB has shown an increase since 2006 but remains below the limit. Fishing mortality has shown a decline since 2000 and is currently just below the precautionary limit. The 1997-2006 year classes are all estimated to have been well below average except for the 2005 year class, which is close to the average.	Zero catch. As the recovery plan is not considered to be in accordance with the precautionary approach, ICES continues to advise in relation to precautionary limits. Given the low stock size and recent poor recruitment, the stock cannot be built to the precautionary point at the start of 2010 even with a zero catch.	STECF agrees with the ICES advice. According to the provisions of EU cod recovery plan and the EU-Norway agreement, the TAC for 2009 should be 30,328 tonnes. STECF recommends that in addition to any agreed TAC, effort reductions should be implemented.
<b>North Sea Haddock</b>	The stock has full reproductive capacity and is being harvested sustainably. The influence of the 1999 year class on the stock is diminishing. The 2005 year class is estimated to be above average.	TAC of 42,264 tonnes (in accordance with the management plan).	STECF agrees with the ICES advice.
<b>North Sea Whiting</b>	The state of the stock cannot be evaluated. An analytical assessment estimates SSB as being at the lowest level since 1990. Recruitment has been very low since 2001.	TAC of 10,700 tonnes.	STECF agrees with the ICES advice.
<b>North Sea Nephrops</b>	Most stocks appear to be fairly stable in terms of abundance and size composition. Exceptions were Fladen Ground stock which showed marked increase in abundance and Farn Deepes where population size dropped.	Generally, not to increase effort and catches above the recent average values (2006-2007). This implies a 13% decrease in the TAC.	STECF agrees with the ICES advice.
<b>North Sea Herring</b>	The stock is at risk of having reduced reproductive capacity and is at risk of being harvested unsustainably. All year classes since 2002 are estimated to be among the weakest since the late 1970s.	There are two options: a TAC of 171,000 tonnes or – if there is no juvenile catch - a TAC of 180,000 tonnes. Both of these options depend on revisions to the current Harvest Control Rule, which will be considered during EU-Norway meetings.	STECF recommends adopting the option that implies a TAC of 171,000.

Stock	ICES assessment of state of stock	ICES advice for 2009	STECF comments on ICES advice
<b>Monkfish in North sea and West of Scotland</b>	See next column.	The new data available for this stock do not change the perception of the stock and do not give reason to change the advice from 2007. The advice is the same: effort should not be allowed to increase and the fishery should be accompanied by programmes to collect catch and effort data.	STECF agrees with the ICES advice.
<b>West of Scotland Nephrops</b>	Overall the stocks are perceived to be stable. Surveys indicate a decline in abundance in 2007 following increases up to 2006. The most marked decline was in South Minch.	Not to increase effort and catches above the recent average values (2006-2007). This implies a 24% decrease in the TAC.	STECF agrees with the ICES advice.
<b>West of Scotland Cod</b>	The stock is suffering reduced reproductive capacity. Total mortality is high but cannot be accurately divided into fishing and natural mortality. The SSB has increased from an all time low in 2006 but remains well below the limit. Recruitment has been estimated to be low over the last decade.	Zero catch. As the recovery plan is not considered to be in accordance with the precautionary approach, ICES continues to advise in relation to precautionary limits. Given the low SSB and low recruitment in recent years, it is not possible to specify any non-zero catch which would be compatible with a precautionary approach.	STECF agrees with the ICES advice. Because of the absence of essential stock parameters of required precision, STECF is unable to provide the definitive advice required for the operation of the cod recovery plan in 2009. It recommends that in addition to any agreed TAC, effort reductions should be implemented.
<b>West of Scotland Haddock</b>	The stock is at risk of reduced reproductive capacity and at risk of being harvested unsustainably. The very strong 1999 year class caused SSB to increase from a level near the historic low in 2000 to a peak in 2003, but it has declined since. The 2003 to 2006 year classes are estimated to be weak except for the 2005 year class which is of moderate strength.	Zero catch. Given the recent poor recruitment and rapidly declining SSB, the advice is for closure of the fishery in 2009 and for the development and implementation of a recovery plan as a prerequisite to reopening the fishery.	STECF agrees with the ICES advice. According to the proposed policy for setting TACs for 2009, the advice for zero catch means that the TAC should be reduced by at least 25%. This implies a TAC of no more than 4,590 tonnes. Recovery measures should also be implemented including effort reductions.



<b>Stock</b>	<b>ICES assessment of state of stock</b>	<b>ICES advice for 2009</b>	<b>STECF comments on ICES advice</b>
<b>Rockall Haddock</b>	The stock has full reproductive capacity and is being harvested sustainably. SSB has increased in recent years as a result of the 2000 and 2001 year classes.	Limit catches to 6,490 tonnes and landings to 4,330 tonnes.	STECF agrees with the ICES advice. STECF notes that previous ICES advice (2007/2008) was based on precautionary limits whilst the advice for 2009 is based on maintaining current levels of fishing mortality. This new approach results in a significant reduction in the TAC.
<b>West of Scotland Whiting</b>	See next column.	The new data available do not change the perception of the stock and do not give reason to change the advice from 2007. The advice is the same: catches should be reduced to the lowest possible level.	STECF agrees with the ICES advice. STECF notes that the mixed fisheries advice implies a zero catch.
<b>West of Scotland Herring</b>	The stock is currently fluctuating at a low level and is being exploited above the maximum sustainable yield. Recruitment has been low since 1998, and the 2001 and 2002 year classes are very weak.	TAC up to 13,000 tonnes (in accordance with the management plan).	STECF agrees with the ICES advice.
<b>North East Atlantic Mackerel</b>	The stock has full reproductive capacity but is at increased risk of being harvested unsustainably (Fishing mortality is just above the precautionary limit). Since 2002, SSB has increased by 40%.	TAC between 443,000 and 578,000 tonnes (in accordance with the management plan).	As the advice was note published until 13 October, STECF has not yet commented.

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