



POSITION PAPER

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2007 TACs & Quotas Proposal for selected fish stocks & fisheries

Every year, ICES advice calls for a further reduction in fishing quotas of pressured stocks and each year WWF has observed a blatant disregard of this scientific advice by the Council of Ministers. The result of such mismanagement is the continuous deterioration of European Fish stocks, and a continued delay of the implementation of ecosystem based fisheries management – a cornerstone of the reformed Common Fisheries Policy (CFP).

The Fisheries & Maritime Commissioner has on several occasions outlined the need for a gradual approach to TACs (Total Allowable Catches) and quotas and effort reduction - limiting reductions to 15% (except for stocks under recovery plan to 25%). The gradual approach however does have the downside of delaying the profitability of the sector in the longer terms, as necessary adjustment of TACs to stock depletion is missing and therefore the productivity of the stock is significantly reduced in long term as shown in the flatfish non-paper produced by the European Commission. It also puts the biological integrity of targeted and by caught fish stocks and ecosystem robustness of marine ecosystem at great risk of permanent collapse. This should be borne in mind when considering decisions at this year's December Council meeting.

The reformed CFP will maintain its failure in delivering sustainable fisheries management as long as sound scientific advice based on the precautionary principle continues to be ignored. WWF urges the European Commission and the European Council of Fisheries Ministers to set quotas according to ICES advice and implement measures that will eradicate wasteful fishing practices (through technical measures and bycatch quotas) and illegal fishing practices as well as improve data collection through the increased use of observer programmes. Only by taking such measures will we finally implement ecosystem based management of fisheries and save the resource all fishing business is depending on – the fish stocks

WWF is focusing in this briefing on cod and associated stocks, plaice and sole, elasmobranchs and the proposal on the introduction of electric fishing and the deepwater gillnet fishery. A priority for both Members States and European Commission should be the identification of the cause of the significant "so called "unaccounted for removals", which according to ICES figures make up 40% of the cod catches. ICES also go on to say that plausible contributions to these unaccounted removals are discards of catches in excess of the quota, and mis- and underreporting of catches. (ICES, 2006¹).

Discarding

In certain fisheries (i.e. whiting, haddock, plaice and Nephrops) discards of fish remain very high; in some fisheries discards rate of up to 90% have been recorded (ICES, 2006²). Improvements in gear selectivity to reduce the catches of fishes below Minimum Landing Sizes (MLS) are becoming imperative to protect fish stocks.

¹ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/cod-347d.pdf>

² <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/ple-nsea.pdf>

In the North Sea flatfish fishery, mesh size increase would reduce the bycatch of undersized plaice (ICES, 2006) and help significantly to rebuild the plaice stock. An increase in the MLS of sole could provide an incentive to fish with larger mesh sizes and therefore mean a reduction in the discarding of plaice.

Currently, discarding is a legitimate, yet highly unsustainable, method of managing quotas and capture of fish below MLS. WWF urges the Commission and Ministers to formally review the merits of introducing a discard ban in certain fisheries where levels are acknowledged as high. Such a measure would have to be designed appropriately to allow for effective monitoring and evaluation. Onboard observers would have to be a key element to such a measure. The use of technical measures to improve selectivity must be a key priority for the Commission and Member States to be introduced as standard practice throughout EU fisheries.

Onboard Observers

Deployment of observers on all fisheries under recovery and long term management plans is urgently needed. On fleet segments targeting or bycatching cod it is crucial to monitor and evaluate catch and the implementation of bycatch quotas should this measure be implemented, which we strongly advocate it is. WWF's recommends observers be deployed onboard vessels catching cod (including bycatch of cod) to improve the scientific assessment and enforcement of the cod Recovery Plan as outlined in the WWF report on *Observer Programmes: Best Practice Funding Options and North Sea Case Study*³.

Ecosystem Based Management

Integrated management of areas such as the North Sea is urgently needed under the framework of ecosystem based management. Species that are an integral part of ecosystem, for example sandeel and Norway pout in the North Sea are currently considered to be in very unstable conditions being classed as having reduced reproductive capacity by ICES⁴. Sandeel is an important prey species for many marine predators, but there is very little information on the effects of fishing this stock and further analysis of the ecological impacts of these fisheries is still required. However, the Community continues to allow the commercial fishing of such species (on the basis of seasonal surveys) without an environmental impact assessment – negating the spirit of the precautionary principle.

Other species such as elasmobranchs have been shown to have life history traits which mean they can only sustain very low fishing mortality, and some species of skates and rays are widely thought to be caught in relatively high numbers in a range of fishing gears (ICES⁵, 2006). Deepwater sharks, the common ray, spurdog and several other species are currently being neglected in terms of a comprehensive ecosystem based management approach. The EU is lagging behind countries like Malaysia, Australia, Japan and USA which have produced an International Plan of Action and Management (IPOA) for sharks as outlined by the UN's Food and Agriculture Organisation (FAO).

The WWF report entitled Policy Proposals and Operational Guidance for Ecosystem-Based Management of Marine Capture Fisheries has outlined the fundamental principles of Ecosystem Based management as:

1. Maintaining the natural structure and function of ecosystems, including the biodiversity and productivity of natural systems and identified important species, is the focus for management.
2. Human use and values of ecosystems are central to establishing objectives for use and management of natural resources.
3. Ecosystems are dynamic; their attributes and boundaries are constantly changing and consequently, interactions with human uses also are dynamic.
4. Natural resources are best managed within a management system that is based on a shared vision and a set of objectives for longer term management developed amongst stakeholders.
5. Successful management is adaptive and based on scientific knowledge, strategic planning, continual learning and embedded monitoring processes.

³ <http://assets.panda.org/downloads/observerreportlores.pdf>

⁴ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/North%20Sea.pdf>

⁵ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/North%20Sea.pdf>

Upon review of these principles, it is clear that the current TACs and quotas system Europe adheres to is not moving the EU towards an implementation of ecosystem based management in fisheries, as Member States are currently committed under the CFP. It is crucial that management decisions are based on best available scientific advice and not bartered for political gains. WWF urges the European Commission and Fisheries Ministers to make decisions in Decembers which will ensure Europe moves towards a successful implementation of the Common Fisheries Policy and not yet another case study for the *Tragedy of the Commons*.

Below are WWF's Recommendations for critical European stocks and fisheries.

Table 1.0: Comparative table of ICES Advice and TACs & quotas set , Commission Proposal & WWF recommendations

Stocks	TACs agreed for 2005	ICES advice for 2006	TACs agreed for 2006	ICES advice for 2007	WWF Recommendation	Commission Proposal
Cod & Associated fisheries						
Cod-Kattegat	1,000	Zero catch	1,000	Zero Catch	Zero Catch	-24.94%
Cod- Irish Sea	2,150	Zero catch	1,828	Zero Catch	Zero targetted catch, minimum level bycatch quota	-25%
Cod – North Sea, Eastern Channel & Skagerrak	27,300/22,659	Zero catch	23,205/	Zero Catch	Zero targetted catch minimum level bycatch quota	pm
Cod- West of Scotland	721	Zero catch	613	Zero Catch	Zero targetted catch, minimum level bycatch quota	-24.96%
Haddock - North Sea	66,00/51,321	39,400	51,850	55,400	Follow ICES advice in conjunction with improved selectivity measures	pm
Whiting – North Sea	28,500	<17,300	23,800	<15,100	<15,000	pm
Nephrops – North Sea TBC	21,350	No increase in effort	28,417	Not more than 19227 FU 6-10 only	Support ICES advice in conjunction with bycatch reduction measures & onboard observers	23,925 tonnes (for IIa and VI)
Flatfish						
Plaice North Sea	59,000/57,370	48,000	57,441/ 55,820	32,000	32,000	pm
Sole North Sea	18,320	11,900	17,470	10,800	10,800	-15%
Elasmobranchs						
Basking shark	0	Zero catch	0	Zero Catch	Zero Catch	-
Porbeagle	No management	Zero catch	No decisions	No directed fishery	Zero Catch	240 tonnes
Spurdog	1,100	Zero catch	1,051	Zero TAC	Zero TAC	-19.98% (841 tonnes)
Skates/rays	3,220	Zero catch	2,737	Zero Catch	Zero Catch	-

1. COD

Cod in Sub area IV (North Sea), Division VIId (Eastern Channel), and Division IIIa Skagerrak)

Based on the most recent estimate of Spawning Stock Biomass (SSB) and fishing mortality, ICES⁶ classifies the stock as being harvested unsustainably and suffering reduced reproductive capacity. SSB is well below the Blim (biomass limit point) of 70 000 t. According to ICES, simulations show that with low recruitment and zero catch in 2007 and 2008 rebuilding of the stock to Bpa (Biomass precautionary reference point) by 2009 ("large growth potential") can be achieved.

Table 1.1: ICES advice and Actual Quota set Fisheries Council for North Sea Cod.

Year	North Sea (Sub area IV)	TAC and quota (tonnes)
2002	Lowest possible catch	49,300
2003	Closure	27,300
2004	Zero catch	27,300
2005	Zero catch	27,300
2006	Zero catch	23,2050
2007	Zero catch	???

According to ICES total removals in 2003 and 2005 have been estimated to consist of 50% official landings, 10% discards, and 40% unaccounted removals. Plausible contributions to these unaccounted removals are discards of catches in excess of the quota, and mis- and underreporting of catches (ICES⁷, 2006). This would indicate that the management system is insufficient to control the catches effectively.

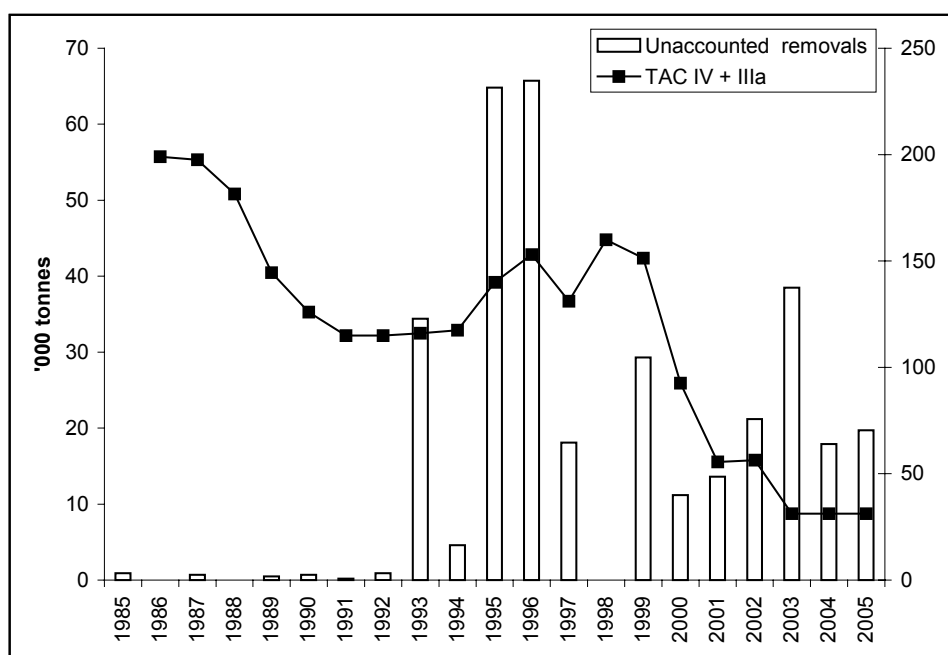


Figure 1.0 Cod- Unaccounted Removals (ICES, 2006).

Cod - Kattegat

According to ICES⁸, this stock is classed as having reduced reproductive capacity. All available data indicate the SSB to be in the range of the historically lowest stock estimates and below the value currently set for Blim, though the exact estimate for SSB is uncertain due to unreliable catch data.

Recruitment has been low in recent years. The SSB of cod in Kattegat has declined steadily from around 35 000 tonnes in the 1970s, to around 5000-6000 tonnes in the 1990s. This decline seems associated with the disappearance of separate spawning aggregations/subpopulations in Kattegat.

⁶ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/cod-347d.pdf>

⁷ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/cod-347d.pdf>

⁸ <http://www.ices.dk/committe/acfm/comwork/report/2006/may/cod-kat.pdf>

The disappearance of spawning components or subpopulations is of concern for the reproductive capacity of this stock and the ability of the stock to rebuild.

Cod - Irish Sea (Division VIIa)

ICES⁹ classifies the stock as having reduced reproductive capacity and as being harvested unsustainably and overexploited in terms of fishing mortality. Fishing mortality had been around F_{pa} until the mid-1980s. It has increased close to or above F_{lim} since the late 1980s. SSB has been below B_{lim} since the mid-1990s. Recruitment has been below average for the past sixteen years, and the four most recent year classes are amongst the smallest on record. At the average rate of exploitation estimated for recent years, SSB will remain at sizes where the risk of continued poor recruitment is high.

Cod – West of Scotland (Division VIa)

ICES¹⁰ classifies the stock as having reduced reproductive capacity and as being harvested unsustainably and overexploited in terms of fishing mortality. The spawning stock biomass is at an all time low, but the rate of exploitation is uncertain and probably high. The survey SSB estimates indicate that the stock has been declining and is presently at an historical low. Recruitment estimates indicate a decline in recruitment in the last decade, correlated with a decline in the spawning stock to the lowest levels observed. Recruitment since 2003 has been the weakest in the time-series.

WWF Recommendations for Cod Fisheries

In adopting the TACs for cod in the recovery zone, the Council is obliged by law to apply the scientific evaluation of STECF, (which STECF must carry out in the light of the ICES report) as to:

- (a) the level of catches that will result in an increase in stock levels of 30% at the end of the year; and
- (b) the level of capture which will generate a fishing mortality rate greater than 0.65 in the North Sea, 0.60 in the Kattegat and West of Scotland and 0.72 in the Irish Sea.

The Council must not adopt TACs which exceed those levels. (Article 6 Reg 423/2004) and if the Commission proposal is for TACs that exceeds those levels, the Council is not entitled to adopt that proposal. Where STECF estimates (in the light of ICES advice) that the levels of stock are less than 70,000 tonnes in the North Sea, and adoption of a TAC by reference to the figures referred to in (a) and (b) above would not bring the quantities of stock back up to above 70,000 tonnes by the following year, then the Council, acting on a Commission proposal, must adopt a lower TAC than that set out in (a) and (b) above (Article 7 Regulation 423/2004).

WWF recommends a cessation of commercial targeting of cod in the North Sea, Kattegat, Irish Sea and West of Scotland. In order to comply with provision 8 of the cod recovery plan fishing effort in all related fisheries taking cod as a bycatch should be reduced, and cod removal should be managed as a bycatch quota, which include fisheries for haddock, whiting, Nephrops, plaice and sole (beam trawling).

It should be the priority of both Members States and European Commission to identify the cause of the current levels of significant misreporting bearing in mind that unallocated removals make up 40% of the cod catches. Improved selectivity measures need to be deployed in the range of fisheries where cod is caught as a secondary species. This will include the mixed whitefish fishery, flat fish fishery and the Nephrops fishery.

To support the implementation of bycatch quotas the effective deployment of onboard observers would be required. This would help quantify exactly what is being removed from the fishery as well as improve data input for assessment purposes. WWF strongly recommend that an observers programme be deployed in this fishery as a matter of urgency. WWF's report on Observer Programmes: Best Practice Funding Options and North Sea Case Study¹¹ presents the benefits of observer programmes and how cost effective they can be, particularly when deployed at a large scale.

⁹ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/cod-iris.pdf>

¹⁰ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/cod-scow.pdf>

¹¹ <http://assets.panda.org/downloads/observerreportlores.pdf>

2. COD ASSOCIATED FISHERIES

HADDOCK in Subarea IV (North Sea) and Division IIIa (Skagerrak Kattegat)

ICES¹² classifies this stock as having full reproductive capacity and being harvested sustainably. SSB in 2005 is estimated at 256 000 t and is estimated to have decreased to around 230 000 t in 2006. SSB is well above the Bpa but the 2001-2004 year classes are all estimated to be well below average, while the 2005 year class is above the long-term geometric mean. Indications are that the 2006 year class is low. Fishing mortality in 2005 is estimated at 0.32, which is well below Fpa. However discarding is a problem for this fishery. ICES has noted that reducing discards would improve landing opportunities in the longer term.

WHITING in Subarea IV (North Sea)

According to ICES¹³ the available information is inadequate to evaluate the spawning stock in relation to precautionary approach reference points. The assessment is indicative of trends only. The stock is estimated at or near the lowest observed level. Landings and fishing mortality remain at a low level.

NEPHROPS (North Sea)

The by-catch and discard of non-target species is a major issue in certain Nephrops fisheries. Considerable numbers of fish are caught as bycatch, up to 70% of which are discarded as the fish are below the minimum landing size. Off the coast of Norway 61% of the total cod catch by Nephrops trawls was discarded between 1995 and 2000. Indeed STECF have estimated that the entire North Sea Nephrops fishery could account for almost half of cod removed from the water.

These fisheries need to introduce measures which can greatly reduce catch rates of cod if they are to be prosecuted sustainably. Member States need desperately to improve selectivity in these fisheries and support fishermen affected by such measures.

WWF strongly recommends that fisheries with high bycatch should be required to use technical measures - such as sorting grids and escape panels - to increase the selectivity of their fishing gear. Sorting grids allow smaller creatures, like Nephrops, to pass through a grid to reach the net proper while bigger species, like cod, are directed towards an escape hole. Escape panels work by exploiting the behavioural differences between scampi and fish. As fish enter a net they try to escape by heading towards the top and sides of the net. Escape panels enable these fish to escape through the open square-shaped meshes.

The advice from ICES¹⁴ scientists on Nephrops this year includes recommendations for significant cuts in TACs. This advice is made on the basis of stock considerations and must be taken seriously. The Nephrops fisheries would benefit from improved levels of observer coverage to provide better information on the fisheries and their associated catches which in turn will improve stock assessments.

WWF Recommendations for Cod Associated Fisheries

For haddock, given that it is caught in a mixed fishery alongside cod, it is crucial that any proposals to increase the TAC for haddock is accompanied by stringent measures to ensure that bycatch of cod is minimised. Please refer to WWF's cod recommendations for full details.

Deployment of observers on all fleet segments targeting or bycatching cod is crucial in addressing the problem of discarding and highgrading. WWF's report on *Observer Programmes: Best Practice Funding Options and North Sea Case Study* (published in November 2006) presents the benefits of observer programmes and how cost effective they can be, particularly when deployed at a large scale. It should be the priority of both Member States and European Commission to identify the cause of the highly significant misreporting, which may make up to 40% of the cod catches. Improved selectivity measures need to be deployed in the range of fisheries where cod is caught as a

¹² www.ices.dk/committe/acfm/comwork/report/2006/oct/had-34.pdf

¹³ www.ices.dk/committe/acfm/comwork/report/2006/oct/whg-47d.pdf

¹⁴ www.ices.dk/committe/acfm/comwork/report/asp/advice.asp?Region=-1&Advice=-1&Species=61&Period=165&titlesearch=&submit1=Submit+Query&mode=2

secondary species. This will include the mixed whitefish fishery, flat fish fishery and certain Nephrops fisheries.

3. PLAICE AND SOLE (North Sea)

The recent ICES report¹⁵ shows that the state of stocks for both Plaice and Sole has further deteriorated and are classed as overexploited. ACFM has recommended an even further reduction in the TACs for both species. A review of previous quotas set for these fisheries shows that the TACs that are consistently above the scientifically advised TACs, have led to overexploitation and reduced income for fishermen. Had the ICES advised TACs in the previous year been allocated the stock status for both fisheries would be presently better. The table below shows the significantly high TAC allocation compared to the TAC advised by ICES.

Table 3.0: Summary of TAC and ICES advice for Plaice & Sole

Year	ICES Advice Plaice (IIa,IV) t	TAC Plaice(IIa,IV) t	ICES Advice Sole(II,IV) t	TAC Sole(II,IV) t
2003	60,000	73,250	14,600	15,850
2004	Recovery Plan	61,000	-	17,000
2005	35,000	59,000t	-	18,600
2006	48,000	57,441	11,900	17,670
2007	32,000	?	10,800	?

The Council Regulation (EC) no 850/98 of 30 March 1998 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms (review 4th quarter of 2006) should tackle the bycatch and discard of juvenile plaice and other associated species. The bycatch of other species should also be considered in this as it is estimated fishing mortality of invertebrate populations was calculated to be on average more than 25 % (max 48 %), larger beams causing higher mortality rates. In particular changes in the abundance and distribution patterns of large long living bivalves like *Arctica islandica* (on OSPAR list of threatened and/or declining species and habitats) can be related to the effect of intensive beam trawling.

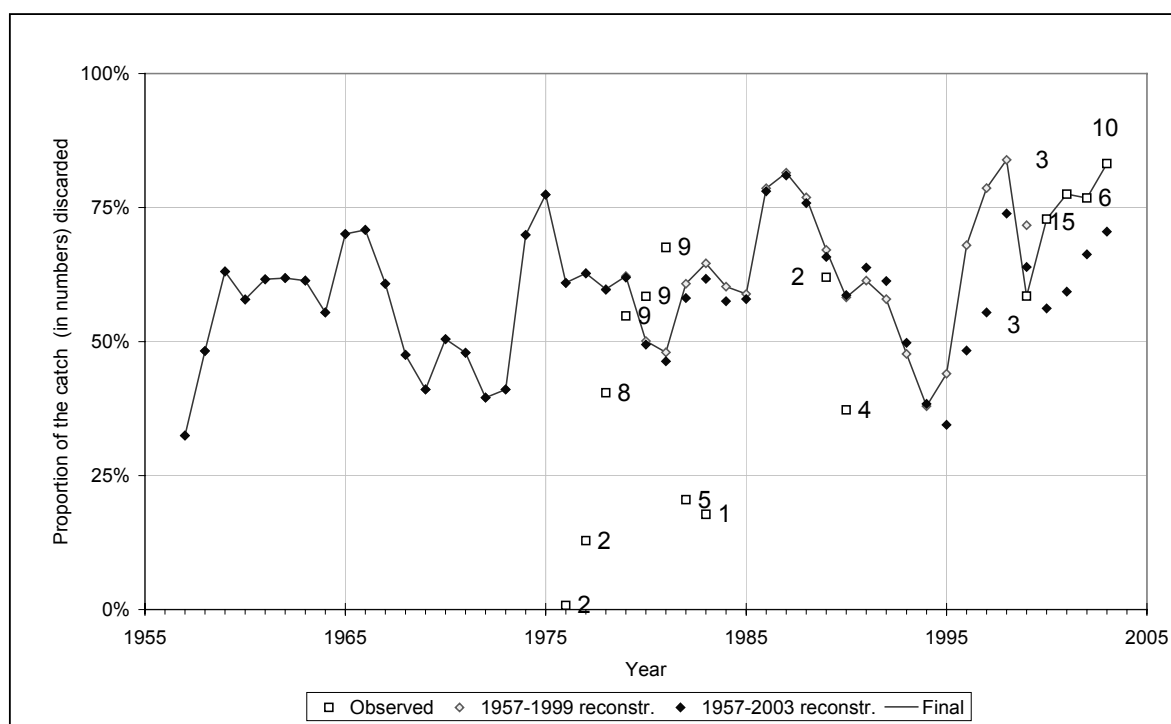


Figure 3.0: Proportion of plaice discarded per year (RIVO, 2005)

¹⁵ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/ple-nsea.pdf> and <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/North%20Sea.pdf>

Mesh Sizes, Discards and Markets

As the discarding behaviour is a result of the fisheries targeting sole (more valuable in the market compared to plaice), the mesh size for this fishery is set by the size desired for the market for the more valuable species. ICES in its recommendations have outlined that measures to reduce discarding in the mixed beam trawl fishery “would greatly benefit the plaice stock and future yields”¹⁶. Increasing the mesh size for the mixed beam trawl fishery would initially result in short term losses for the sector however in the longer-term incomes will become more profitable for this fishery. ICES also went on to say in their report that readjustment of minimum landing sizes corresponding to an improved selection pattern could be considered. Adjustment of Minimum Landing sizes of Sole in relation to plaice should also be investigated, as these two species are caught.

Ecosystem & fishing behaviour

During the juvenile stage, plaice are concentrated in the inshore waters, however the nursery areas are not entirely closed off to fishing activity, as the plaice box exempts vessels that are smaller than 300hp. Due to days-at-sea regulations, high fuel prices, and small decrease in TAC for plaice and relatively stable TAC for sole, a stronger pattern of coastal fishing has emerged in the southern North Sea, leading to high discard levels of juvenile fish being caught. According to ICES, the most effective solution to tackle the discard problem for this fishery would be an increase in the Minimum landing sizes followed by strict measures to ban discards. It is important therefore effort reduction is accompanied by technical measures such as increase MLS and mesh size in the long term management of mixed flatfish fishery.

Currently, the EU does not have regulation restricting discarding. Although discarding is widely found in this fishery, without EU regulation, this fishing behaviour is being inadvertently condoned. Hence, it is important to for European Commission to restrict discarding through initially encouraging the fishermen to land their potential discards (i.e. the bycatch of undersized fish) for data collection.

WWF Recommendations for Plaice and Sole Fishery

WWF recommends an adherence to ICES advice for the North Sea Plaice and Sole stocks, and supports the following element of the Long Term Management Plan and recommends additionally:

- **Implementation of Harvest Control Rule (HCR)** as an additional constraint on the year to year variation of the TAC or F. TACs and/or fishing effort are derived according to a target fishing mortality (F^{MSY}), supplemented with a rule for reducing the mortality if the spawning stock biomass fell below a trigger level, to ensure avoiding a limit value for the spawning biomass;
- **Changes and coherence in the Minimum Landing Sizes for Plaice and Sole.** The EU minimum landing size for plaice is 27cm and for sole 24cm. But female plaice do not spawn until they reach 31cm at an age of 2-4 years (Council Regulation 850/98 ANNEX XII). Setting the allowable landing size below that of mature females means the North Sea stock comprises smaller and younger individuals with little chance of recovery;
- **Increase in the mesh size** (and change to square mesh size) in the mixed fisheries for flatfish in the North Sea to reflect the biologically and ecologically optimal MLS;
- **Discard restriction** in the plaice and sole fishery through EU Regulation (where all bycatch of juvenile plaice and sole are landed for data collection and not for other economic uses); and
- **Adaptation of plaice box to current distribution changes of juvenile plaice and closure of plaice box to all fishing vessels** (inclusion of 300hp beam trawlers). More than 90% of the plaice caught in the 80mm fishery in the box are discarded (Griff et al, 2004 as cited in ACFM report on Plaice and Sole 2006).

¹⁶ ICES 2005. North Sea Overview.

4. ELASMOBRANCHS

Demersal Elasmobranchs in the North Sea, Skagerrak, and Eastern English Channel

According to ICES¹⁷ landings of skates and rays in the North Sea, Skagerrak, and eastern English Channel have generally declined.

Table 4.0 Selected skates & rays status in the North Sea, Skagerrak and Eastern English Channel.

Species	ICES Report
Thornback ray (<i>Raja clavata</i>)	Distribution area and abundance have strongly decreased over the past century. The area occupied has significantly decreased since 1990. Although local abundance remains high, the North Sea stock is considered depleted.
Spotted ray (<i>Raja montagui</i>)	Area occupied and abundance has fluctuated without trend. Stock status is uncertain.
Cuckoo ray (<i>Leucoraja naevus</i>)	Since 1990 the area occupied has fluctuated without trend. Survey catch rates increased from the early 1970s to the early 1990s and declined thereafter. Stock status is uncertain.
Common skate (<i>Dipturus batis</i>)	Status is depleted. It was formerly widely distributed in the North Sea but is now only rarely found and only in the northern part of the North Sea.
Blonde ray (<i>Raja brachyura</i>)	Has a patchy occurrence in the North Sea. It is at the edge of its distributional range in this area and consequently ICES does not provide advice for this species.
Angel shark (<i>Squatina squatina</i>)	Still extinct in the North Sea

Spurdog Northeast Atlantic

Spurdog are long-lived, slow-growing, have a high age-at-maturity, and are particularly vulnerable to fishing mortality. Population productivity is low, with low fecundity and a protracted gestation period. In light of this, the risk of depletion of reproduction potential is high.

ICES¹⁸ classes the state of this stock as depleted and perhaps in danger of collapse. All experimental assessments indicate that the stock is at a record low level. The frequency of the occurrence of spurdog in trawl surveys has declined and, although large shoals are still caught, the frequency of these has also declined. Survey CPUE also indicates a declining trend. The absolute level of exploitation is unknown but the trends in fishing mortality and the continuous decline in landings indicates that exploitation has been, and continues to be well above sustainable levels.

ICES scientists have advised that the targeted fisheries should not be permitted to continue, and bycatch in mixed fisheries should be reduced to the lowest possible level. The TAC should cover all areas where spurdog are caught in the northeast Atlantic and should be set at zero for 2007.

WWF Recommendation for Elasmobranchs

Committee on Fisheries (COFI) of the United Nations Food and Agriculture Organization adopted an International Plan of Action for the Conservation and Management of Sharks (refer to all of the cartilaginous fishes: the sharks, rays and chimaeras) (IPOA-Sharks) in 1999. The Plan elaborates needed action for sharks within the context of the Code of Conduct for Responsible Fisheries and called upon countries to develop and implement National Plans of Action (NPA) by early 2001 that identify research, monitoring, and management needs for all chondrichthyan fishes that occur in their waters. The EU had not met the 2001 deadline and needs yet, nearly 6 years later to produce a NPA or EU IPOA for chondrichthyan fishes. ?melt with the paragraph at the start of the document about this issue?

WWF recommends that an IPOA for sharks (all of the cartilaginous fishes: the sharks, rays and chimaeras) be immediately drafted taking into account management, monitoring and research needs for both targeted and not-target species within Community and regional waters. Till such a plan has been adopted there should be a moratorium on all fisheries targeting elasmobranchs (e.g. spurdog) to protect these for overfishing highly sensitive stocks.

¹⁷ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/North%20Sea.pdf>

¹⁸ <http://www.ices.dk/committe/acfm/comwork/report/2006/oct/nea%20spurdog.pdf>

The management measures for elasmobranchs need to include:

- Effective bycatch reduction measures for fisheries that are incidentally catching elasmobranchs; and
- Exploitation of this species should only be allowed when indicators and reference points for stock status and future harvest have been identified and a management strategy, including appropriate monitoring requirements has been decided upon and is implemented.

5. Electric Fishing (Beam trawling)

The European Commission's proposal also includes a derogation to allow 5% of the beam trawl fleet to use the electric beam trawl. WWF does not support this proposal and is highly concerned by the current move by the European Commission to go against the recommendations of Scientific, Technical and Economic Committee for Fisheries - STECF¹⁹ and International Council for the Exploration of the Seas-ICES²⁰.

Effects of electric fishing

In its reports both ICES and STECF note that a major concern of both bodies is the impact on vertebrate species. There is much information to suggest that the stimulus being used may be capable of damaging (spinal breakage and internal haemorrhaging) fish species. A number of cod retained in the pulse gear were noted to have suffered from snapped spines; this was not observed in the standard gear.

According to STECF, the frequency of the pulse is known to be above the threshold that induces tetanus and the induction of strong muscle stimulus is likely to be the cause of the spinal injuries and therefore STECF recommends that trawl in its current form should not be promoted at a commercial level.

ICES in its report also noted that electric signals created by the pulse trawl could possibly affect electro sensitive fish such as sharks and rays, which are currently in a very alarming state in the North Sea (please refer to Elasmobranch Section in this briefing).

Inconsistent data on selectivity

The basis for the derogation is also unreliable. As the commercial trials and the research vessels trials have shown varying results. STECF noted that the catch at length data for plaice and sole the research vessel trials showed a 16% reduction in plaice catches across all length classes; whilst the commercial trials showed no significant reduction in catches of plaice below MLS but a 35% reduction in catches above the MLS. By contrast, the research vessel data collected using the electrical pulse trawl showed that for sole the probability of capture increased with length and that higher catch rates were obtained for fish larger than about 25cm in length.

According to STECF the commercial trials failed to show any significant length dependency for sole with a about about 25% reduction in catches across all length classes. It is therefore not possible to conclude that there was "a better selectivity for sole" as noted in the EU proposal. STECF concluded that there was little evidence to suggest that the use of beam trawl, using pulse trawl resulted in "an improved catch quality".

WWF Recommendations

WWF is of the position that this derogation is unjustified at this point in time and that further research on the effects of this gear on the ecosystem and other non-target species such as elasmobranchs is crucial before derogation for the use of this gear is tabled, as currently fishing using electrical gear is prohibited (*Art.31*, Council Regulation (EC) No. 850/98).

Opening the door to a gear with clear adverse side effects on fishes like cod, clearly shows that the Commission has neglected to consider the impacts on the wider ecosystem and vulnerable species. This could create a dangerous precedence for other fisheries to follow, especially in the

¹⁹ <http://stecf.jrc.ec.eu.int/event.php?id=65> 2006

²⁰ <http://www.ices.dk/committe/acfm/comwork/report/2006/Reply%20to%20request%20on%20pulse%20trawl.pdf>

Mediterranean, since the STECF has concluded that the gear in its current form was not suitable for wider commercial use and the improvement in terms of selectivity is not significant enough.

Another key argument against the derogation is the enforceability of the voltage restriction for this gear. To allow for the derogation while the control and enforcement procedure has not been clearly outlined, could create an incentive for excessive voltage use.

6. Deepwater Gillnet Fishery and Area Closures.

The current proposal is to limit certain parts of this fishery to a maximum depth of 600m and for 72 hours soak time. WWF believes that there can be no justification for any weakening of this proposal. This measure should be viewed as interim (maximum one year) pending further research on optimal soak time and gear length, to be reviewed in order to inform decisions by Dec 2007. Observers on board vessels utilising this gear is highly recommended to develop a better understanding of this fishery and to monitor the effects of this gear on deepwater sharks.