

UK Small Cetacean Bycatch Response Strategy

Comments on the proposal.

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Bycatch is indeed a major threat to the conservation of small cetaceans not only in European Waters but also throughout the world's oceans.

ECBC welcomes the UK government's strategy, as it acknowledges the severity of the cetacean bycatch problem in fisheries in UK waters and beyond, and is making a commitment to take action.

However, ECBC has serious concerns relating to some of the proposals, and requests that these concerns be given due consideration.

Paragraph 10

It is important to note that the harbour porpoise (*Phocoena phocoena*) "has a substantial and important population in UK waters and uses both INSHORE and offshore waters".

Therefore harbour porpoises are vulnerable to inshore fishing.

Paragraph 12

It is important to note, "Brown et al 1997, estimated the bottlenose dolphin (*Tursiops truncatus*) population for UK INSHORE waters as 300 to 500 individuals".

Therefore bottlenose dolphins are vulnerable to inshore fishing.

Paragraph 22

It is important to note Article 6 of the Code of Conduct for Responsible Fisheries states, "The right to fish carries with it the obligation to do so in a responsible manner... should not only ensure the conservation of target species but also of species belonging to the same ecosystem...".

Article 6 clearly states that fishermen have an obligation to manage the marine ecosystem in a responsible manner and to conserve cetacean populations.

Paragraph 23

Article 7 of the Code says "States should take appropriate measures to minimise... catch of non-target species, both fish and non-fish species, and negative impacts on associated or dependent species and in particular endangered species".

Therefore the UK government should take note that Article 7 states "technical measures" may be used, where appropriate, in order to minimise the bycatch of cetaceans in fisheries.

Paragraph 24

It should be noted that the Habitats Directive Article 12 (4) stipulates that Member States must introduce a system to monitor the incidental capture and killing of all species listed in Annex IVa, which includes ALL cetaceans.

Therefore ALL fisheries should be monitored, as SGFEN and ICES reports clearly demonstrate that cetacean bycatch occurs in ALL fisheries to a greater or lesser extent. In the ICES ACE 2001 Report, it states,

"independent observer programmes are essential for reliable estimates of bycatch rates and should be implemented in fisheries that do not have them".

STECF Report May 2003 states that fleets which have observer coverage should continue to do so and "pilot schemes" should be initiated for those not already observed.

Article 12 (1) states that Member States have a duty "to maintain or restore at a favourable conservation status.... species of wild fauna" which includes all cetaceans. Therefore, a bycatch target of 1.7% of a cetacean population is hardly ambitious.

ICES 2001 ACE report states "1.7% of a small cetacean population is the maximum that could be sustained... bycatch substantially below 1.7% per year could deter the re-building of a depleted population of cetaceans".

Paragraph 25

Article 2 of Council Regulation (EC) 2371/2002 specifies, "The Community shall apply the precautionary approach in taking measures designed to protect and conserve living aquatic resources... and to minimise the impact of fishing activities on marine ecosystems...".

Clearly the precautionary approach is not being applied in UK fisheries or indeed in EU fisheries.

Court of Justice ruling 11 September 2002 - Pfizer and Alpharma.

The Court rulings set a precedent in that the Court reaffirmed that the precautionary principle can be invoked under EU law, and that precautionary action can be justified in appropriate circumstances. Authorities can take precautionary action without backing from a competent scientific committee.

Paragraph 26

"One effect of this is that neither the UK nor any other Member State can apply their own more stringent national rules to restrict the activities...".

A Court of Justice ruling has shown this NOT to be the case.

Court of Justice Case C-3/00 Curia CPO320EN
Kingdom of Denmark versus EU Commission

The Court of Justice annulled the Commission's decision refusing authorisation for Danish Provisions that were stricter than Community Provisions. The ruling set a precedent that permits Member States to maintain national provisions and derogate from a harmonisation measure.

Paragraph 27

The following rulings from the Court of Justice would apply in this instance.

Court of Justice ruling 11 September 2002 - Pfizer and Alpharma.

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Paragraph 30

The Environment Act 1995 extends the powers available to fisheries managers to restrict fishing for sea fish for marine environmental purposes... conserving or enhancing the natural beauty or amenity of marine or coastal areas... conserving flora or fauna which are dependent on, or associated with, a marine or coastal environment.

ECBC welcomes the establishment of the St. Agnes, Looe, and Lundy Island "No Take Zones".

Given the income from ecotourism, in particular cetacean watching as mentioned in Paragraph 28 Annex A Partial Regulatory Impact Assessment, it would seem prudent for the UK government to establish further "No Take Zones" in order to benefit areas around the UK coast which are reliant upon ecotourism and which would directly benefit from conservation efforts to maintain cetacean populations.

It should be noted that two-thirds of the bottlenose dolphin population around the Cornish coast has disappeared in the last 10 years. There are now only 350 resident animals.

Paragraph 32

"Evidence from around the world has shown that all fisheries have the potential to have a cetacean bycatch...".

The extent of knowledge regarding the cetacean bycatch in UK fisheries, and indeed EU fisheries, is woefully inadequate. Therefore ALL fisheries should be monitored as SGFEN and ICES reports clearly demonstrate that cetacean bycatch occurs in all fisheries to a greater or lesser extent.

In the ICES ACE 2001 report, it states, "independent observer programmes are essential for reliable estimates of bycatch rates and should be implemented in fisheries that do not have them".

STECF report May 2003 states that fleets which have observer coverage, should continue to do so and "pilot schemes" should be initiated for those not already observed.

Paragraph 33

"The Atlantic albacore drift net fishery was known to have had a relatively high bycatch of small cetaceans".

This fishery exemplifies the necessity of observer programmes. Prior to observation the French tuna fleet estimated a cetacean bycatch rate of 70 animals per annum. After an observer programme, the estimate was 415 common dolphins and 1170 striped dolphins per annum.

Prior to an observer programme, a representative of the UK tuna drift net fishery, when called to give evidence to a House of Lords Select Committee, estimated the number of bycaught dolphins in the UK tuna drift net fishery to be 10 animals per annum. An observer programme estimated that the actual dolphin bycatch was TWICE that of the French fleet (numbers given above).

Paragraph 36

"To date no cetacean bycatch has been seen in any of these fisheries with the exception of the bass fishery".

This is not surprising. In order for a pelagic trawl fishery to be adequately monitored, it is essential that a significant number of hauls be observed due to the sporadic nature of cetacean bycatch in trawl fisheries.

The SMRU study 2000-2001, observed 3 hauls in the anchovy fishery, 4 in the blue whiting, 42 in the herring, 27 in the mackerel, 8 in the pilchard, 10 in the sprat, but 116 in the bass fishery. Therefore, it is not surprising that cetacean bycatch was not observed in fisheries other than the bass fishery.

Morizur et al 1999 states, "No bycatch was reported in the UK mackerel and pilchard fisheries, but under-recording is strongly suspected due to the nature of fishing practice". The report continues to explain that the use of fish pumps at night and the practise of emptying the cod-end outboard, allows for bycaught cetaceans to go un-noticed. The report continues and states, "Where bycatch was not recorded in a fishery, it does not mean it did not occur... it is thought that some marine bycatch exists in all the fisheries observed".

When the Dutch horse mackerel fleet was observed, 98% of the hauls were emptied inboard, and cetacean bycatch was observed.

Couperus 1997, "Bycatch of common dolphins started to occur only when mackerel was in the catches..." and the report continues to state that "horse mackerel, mackerel, hake and blue whiting were found in the stomachs of bycaught common dolphins", which clearly demonstrated that they had been feeding on these species prior to capture.

Berrow and Rogan 1997, established a clear link between mass strandings of harbour porpoises and pelagic herring trawl fisheries.

Therefore, it would seem unlikely that herring, mackerel, and blue whiting fisheries have no cetacean bycatch.

In the SGFEN Report April 2002, it states, "All seasonal pelagic and pair trawl fisheries require a more detailed examination and bycatch mitigation trials should start".

Paragraph 37

"We do not yet know what proportion of the total fishing effort was observed, and have not yet estimated the total annual bycatch for 2001".

This study was completed almost 2 years ago. The fact that no annual bycatch has as yet been estimated is unacceptable, as a lack of estimate of total fishing effort in these fisheries makes it impossible to extrapolate the observed catches to the total fleet and therefore potentially significant levels of cetacean bycatch remain undetermined.

The UK does play a very small part in the bass fishery, but plays a very large part in the other fisheries observed by SMRU. Therefore it would seem prudent to observe 116 hauls in these other fisheries and perhaps request that the cod-ends are emptied inboard.

Paragraph 38

"Further evidence of bycatch in pelagic trawls is obtained from necropsies of stranded animals... the NHM, IoZ, & the SAC... Data obtained from 01 January 2000 to 30 September 2002 demonstrated that bycatch, most probably from pelagic fishing operations, was identified as the cause of death in 65% of the common dolphins that were subject to post mortem examination and where the cause of death was established."

It is interesting to note that the report for Contract CR0177, conducted for the Department of the Environment, Transport and the Regions, by the Institute of Zoology (Zoological Society of London), clearly showed that for the period 1990-1999, the bycatch percentage of common dolphins in Cornwall and Devon, where a cause of death was established, was 86%.

Paragraph 39

"Demersal trawling... not thought to have a significant impact on the conservation of cetaceans".

ICES, SGEFN, STECF reports and numerous other reports clearly demonstrate that a number of cetacean species are caught in demersal trawling activities. Unless these fisheries are monitored, it is not known whether these fisheries have a significant impact upon the conservation of cetaceans. In almost all cases estimates of cetacean bycatch are considerably lower than is shown to be the case when fisheries are monitored by observers.

Paragraph 40

"...only infrequent bycatch of cetaceans has been noted during potting operations..."

Evidence from fisheries around the world, indicates that interactions between small cetaceans, in particular orca and long-finned pilot whales and potting operations are quite frequent.

Although this strategy relates to small cetaceans, the Habitats Directive relates to ALL cetaceans. It should be noted that of the stranded cetaceans post-mortemed by veterinary surgeons at SAC Veterinary Science Division, Inverness, 1995 - 1999, 40.0% of minke whales died as a result of entanglement in fixed ropes, such as creel or mooring ropes

"There is very little long-lining by UK vessels and bycatch is therefore thought to be negligible".

Scientific reports clearly demonstrate that small cetaceans, particularly bottlenose dolphins, orca, and long-finned pilot whales interact with long-line fisheries.

When the French tuna long-line fishery was observed {OSPAR, 2000 (Goujon et al., 1996)}, 5 small cetacean species were found to have been bycaught in this fishery.

When a US long-line fishery was observed in the North-west Atlantic 1994 to 1997, 3 species of small cetaceans were found to have been bycaught in the fishery.

In assuming that the bycatch in UK long-line fisheries is negligible, the UK government is not adhering to the Precautionary Principle, given that long-line fisheries work in the same sea areas as other fisheries, and even if bycatch levels were found to be low, could be contributing to bycatch levels that would have significant impact on cetacean populations.

Paragraph 43

Please see comments stated for paragraph 36.

Paragraph 44

BIM 2000 states, "145 cetaceans were taken in 313 hauls, of which only 31 hauls had a cetacean bycatch. 98 of the 145 cetaceans were taken in just 10 hauls".

In the sea bass fishery observed by SMRU, 116 hauls were observed and 53 cetaceans were bycaught.

Tregenza and Collet 1998, estimated that the total bycatch rates for the Dutch horse mackerel fishery would be 196 white-sided dolphins and 101 common dolphins, and 323 common dolphins for the French hake, tuna, and bass pelagic fisheries.

Therefore, it would seem ludicrous to suggest that cetacean bycatch did not occur in the anchovy, blue whiting, herring, mackerel, pilchard, and sprat fisheries.

Paragraph 47

Read 2000... “Observed reductions in bycatch rates in certain fisheries were 12-fold for common dolphins and 10-fold for harbour porpoises”

It should be noted that Dr. Read continues by stating “that in the Gulf of Maine, the bycatch of porpoises in strings of gill nets equipped with pingers INCREASED from 0.0 porpoises per haul in 1997 to 0.3 porpoises per haul in 1999”.

He stated that it was not clear whether this increase was due to habituation or to poor maintenance.

He further stated that partial pinger coverage or function on a string of nets could produce “black holes”, thereby increasing porpoise bycatch.

Paragraph 48

“Only currently viable management option.”

There have been a considerable number of studies involving cetacean bycatch mitigation measures in gill net fisheries.

Studies in the US have clearly demonstrated that the length of string, diameter of twine, the mesh size, the use of tie downs, soak times, and the height of the head line (rope), all have a significant impact on porpoise bycatch.

In one instance, lowering the head line, reduced porpoise bycatch considerably, and lowering it even further, prevented porpoise bycatch entirely.

In addition, in his report Dr. Read states that trials of the acoustically reflective gill net showed great promise.

CNR in Italy has developed a cetacean deterrent, EMMA, which produces a whistle that has been shown to deter dolphins from nets over a 3-month period.

“...occasional malfunctioning devices do not compromise the effectiveness of pinger deployment.”

Read 2000 states “that partial pinger coverage or function on a string of nets could produce ‘black holes’, thereby increasing porpoise bycatch”.

Paragraph 49

“... the use of pingers in nets could interfere with setting and hauling procedures”.

This could be overcome by using acoustically reflective gill nets.

Paragraph 50

“Cox et al 2001 also states that porpoises initially stayed 208m from the pinger, but that this displacement diminished by 50% in 4 days”.

The report continued to state that the results of habituation needed to be considered when pingers are used to reduce the bycatch of small cetaceans.

In a study by Carlstrom et al 2002, it states that, “the displacement effect by pingers is more prominent in coastal waters”.

Paragraph 51

It should be noted that a number of studies have demonstrated that dolphins and larger cetaceans become entangled in gill nets. It should also be noted that the Aquamark pinger that the UK government appears to favour, is available in 3 variant models, the 100, 200 and 300. The 100, designed to reduce porpoise bycatch, the 200 designed to reduce dolphin bycatch, and the 300 to reduce porpoise bycatch in US waters.

It would be interesting to know which type of Aquamark pinger is proposed for use on UK fishing nets.

Paragraph 54

It would be interesting to know which make of pinger was deployed in the BIM study.

Paragraph 55

“... there may be significant differences in bycatch rate associated with twine thickness used”.

It has been suggested that the positive results when using the acoustically reflective gill net was due in part to the added thickness of the twine.

Paragraph 58

See comments re. paragraph 55.

Paragraph 59

Studies in the US have clearly demonstrated that the length of string, diameter of twine, the mesh size, the use of tie downs, soak times, and the height of the head line (rope), all have a significant impact on porpoise bycatch.

In one instance, lowering the head line, reduced porpoise bycatch considerably, and lowering it even further, prevented porpoise bycatch entirely.

Paragraph 60

The EU Commission and a number of Member States spent in excess of one million euros designing, making and trialling the Eurogrid, which is basically the same grid that was used in the SMRU trials, in an attempt to reduce white fish bycatch. Many trawlers will be required to use grids to help white fish stocks recover.

It is, perhaps, convenient and cost effective that the same grids, albeit slightly modified, are also being used as a dolphin bycatch mitigation measure.

Paragraph 61

“... grids have been successfully deployed on an experimental basis in two hoki trawl fisheries and a squid fishery to minimise catches of Hooker’s sea lions, New Zealand fur seals, and Australian fur seals. The use of this sea lion exclusion device has been shown to reduce sea lion bycatch... ”.

The post mortem results show that blunt trauma sustained by Hooker’s sea lions were so severe that even animals that escaped the net would not have survived.

Some scientists in New Zealand are of the opinion that injuries sustained by dolphins in nets using these grids would be even more severe.

These are some of the comments we received from the scientists mentioned above.

“The issue is how seriously the animals are damaged in the process (this is currently under study by the vets at Massey)”.

“If it ejects sea lions but seriously injures them, it is hindrance rather than a help (because you no longer know how many sea lions were caught). I very much doubt whether it would be any good for dolphins”.

“Dolphins are much more fragile than seals and sea lions. The rostrum and especially the lower jaw are fragile, and would easily be broken if caught in the grill. Were the grill spacing reduced to prevent this happening, most of the catch would be ejected too”.

“Some of the sea lions known to have been ejected by the SLEDs were found to have trauma to extensive areas of the body including the head, thorax and abdomen. This trauma is manifested as contusion (haemorrhage and oedema) to muscle and sometimes viscera such as the kidneys and there is often free blood in body cavities such as the abdomen and thorax. Bone fractures also occur but this is rare and usually involves bones of the head, face or digits. **I regard the severe extensive injuries as being incompatible with survival after ejection. Other animals from this trial had regurgitated stomach contents and that would also pose a risk of inhalation pneumonia to those individuals**”.

An unacceptable number of sea lion kills forced the early closure of the Auckland Islands squid fishery on 13 April 2002. SLEDs were used in this fishery.

Paragraph 62

During the SMRU study of 2001, “No cetaceans were encountered during the trials” as the trials began at the very end of the sea bass fishery. It would seem from the SMRU report that the object of these trials was to establish whether there would be an unacceptable loss of fish catch and if the grids were easy for fishermen to handle.

There appears to be a problem regarding the fitting of the grids. If the grids are fitted incorrectly, either one of two things will happen. If the angle is incorrect in one direction, there will be considerable reduction in fish catch. If fitted incorrectly in the opposite direction, the pressure effect of the water will cause any body to be forced on to the grid. An FRS report details the effect.

In the SMRU report, MFO 733, it states that a compromise was made in respect of the “rake angle” in terms of fish passage and “guiding large animals out of the net”. A further compromise was made in respect of grid spacing, whereby the spacing was required to be large enough to accommodate the passage of fish, yet small enough to prevent the beaks of animals becoming trapped in the grid. The outlet cover was weighted to reduce fish loss and it would, as a consequence, become more difficult for dolphins to escape.

TEDs, smaller versions of these grids, are removed from nets when the sea is rough, as the grids become blocked with rubbish. An FRS report states that the grids become “clogged with weed... and require frequent clearing”. The proposed grids are supposed to be used in winter & spring fisheries, when the seas are rough.

TEDs are mainly used in shrimp fisheries in the US (the Nordmore Grid was originally designed for reducing white fish bycatch in shrimp fisheries). There is little cetacean bycatch in shrimp fisheries, but when it does occur the injuries sustained by cetaceans are severe, broken jaws, broken beaks, and internal injuries. Recently a white-sided dolphin was found with a broken jaw.

The escape hatch has a flap, through which the dolphins have to pass. Dolphins often die in nets because their beaks become entangled in the netting. Even though the netting of the escape hatch is a smaller mesh size, it will not prevent dolphins becoming entangled in the body of the net. The SMRU report MFO733 states “... many had their beaks poked through the 4.5cm meshes of the sleeve...”. As stated above, some New Zealand scientists have already expressed their concerns, stating, “The rostrum and especially the

lower jaw are fragile, and would easily be broken if caught in the grill. Were the grill spacing reduced to prevent this happening, most of the catch would be ejected too”.

There is also the matter of stress capture. Numerous studies have shown that even when dolphins have been released from various types of nets, within a short time of capture / entanglement, many die as a result of stress.

Morizur et al 1997, suggests that up to 50 cetaceans may be taken in one haul.

The BIM report clearly stated that 30 cetaceans had been taken in one haul.

The stress caused, as 30 cetaceans are force directed through a single hatch before they become hypoxic would undoubtedly result in cetacean fatalities.

It has been suggested that substantial numbers of dolphins would experience injuries, which whilst not fatal at the time, would result in fatalities at a later stage, notably after the fishery responsible had ended, thus making it extremely difficult to establish the actual cause of death was as a result of by-catch.

In order to monitor the effects of the grids on the escaping dolphins, necropsies will have to be performed. Therefore, it will be necessary to drown escaping dolphins, by placing a cover net over the escape hatch. The same procedure will be carried out in order to measure the amount of escaping fish. SMRU report MFO 733 alludes to the procedure.

Paragraph 65

“For closures to work, suitable times or areas need first to be identified... ”.

The SMRU report MFO 733, states that most of the dolphin casualties in the UK sea bass fishery occurred in the month of March. Given that the observers were aware of the sea area and of the month in which most fatalities occurred, it would seem that a time / area restriction could be enforced in the UK sea bass fishery.

Paragraph 67

“Clearly the most effective method of bycatch reduction is closure of the offending fishery with no displacement of fishing effort elsewhere”.

It could be suggested that most effective method of bycatch reduction is by providing incentives for fishermen to change to less destructive fishing methods.

“... seasonal or annual cetacean mortality limits could be set for a fishery... ”.

This is done in the US. However, in order to do so in UK, and indeed in European waters, it would be necessary to have accurate information regarding the status of each and every cetacean population. In the light of the fact that SCANS II will not begin until 2004/5, the suggestion of mortality limits is unrealistic.

Paragraph 68

It would not seem prudent to use the AIDCP as an example of “good practice” in that many environmental, animal welfare, and consumer organisations consider that the IADCP will weaken the criteria used by the EII to certify “Dolphin-Safe” tuna products.

Paragraph 69

“... to work towards... where practical...”.

These phrases are particularly vague and give the impression of a lack of commitment.

Paragraphs 70 & 71

ICES 2001 ACE report states “1.7% of a small cetacean population is the **maximum** that could be sustained... bycatch substantially below 1.7% per year could deter the re-building of a depleted population of cetaceans”.

The figures in paragraph 70 are fundamentally flawed, in that, it suggests that a 1.7% bycatch limit for an estimated population of 170,000 porpoises would be 2,890 porpoises, and if the UK fishing effort in the fishery was 40% then the UK bycatch limit would 1,156 animals.

The confidence limits / intervals used for population estimates are such that it would be imprudent to use calculations of this nature. Given that the UK bycatch limit would be 1,156 animals, it must be assumed that the proposal is that each vessel in the fishing area concerned would be given a “cetacean bycatch quota”. Quotas have not been successful in terms of fish stocks and one can only infer that they would be equally unsuccessful in reducing cetacean bycatch levels.

ICES report ACE 2001 states “assessing the risk to populations depends very much on political and management priorities”. This would seem to be the instance in this case.

Paragraph 71

“... apart from those vessels operating within 6 miles of the coast... “.

Given that harbour porpoises and bottlenose dolphins frequent inshore waters, **not** to require UK fishing vessels, operating within 6 miles of the coast to use acoustic deterrents on their nets, would be foolhardy in the extreme. These species of cetaceans are extremely vulnerable, and to allow fishing vessels to use set nets in coastal waters without some form of acoustic deterrent is totally unacceptable. If there are reservations about using pingers “within 6 miles of the coast” then there should be a legal requirement to use acoustically reflective nets.

Paragraph 72

The Habitats Directive Article 12 (1) states that Member States have a duty "to maintain or restore at a favourable conservation status.... species of wild fauna" which includes all cetaceans.

Therefore, the large amount of set net fishing in the English Channel should be significantly reduced, as it “may act as a barrier to any recovery of the porpoise population in that area.

Paragraph 73

Again, calculations of this type are fundamentally flawed, given that abundance estimates may be highly inaccurate. It presupposes that the Norwegian government will provide accurate cetacean bycatch figures for its gill net fisheries.

Paragraph 74

“... mandatory pinger use for all fisheries using meshes greater than 220mm... it should be a legal requirement for pingers to be used on all UK set net fisheries using a mesh size greater than 220mm in ICES areas IVb & IVc”.

Vinther 1995 “fisheries effort in terms of cetacean bycatch is a combination of length of the net and soak times” and he suggests that misleading conclusions may therefore be drawn. He states “porpoise bycatch rates in the gill net fishery for turbot are very much higher than in the gill net fishery for cod. However the

turbot fishery uses much longer nets and soak times. When these are taken into consideration, the cetacean bycatch levels in both fisheries are about the same.”

Therefore, it would seem illogical that one specific mesh size should be identified as requiring pingers. Although very long soak times e.g. 8 days for the Danish turbot fishery, and large meshes are associated with higher levels of cetacean bycatch, it is clear from the Vinther report, that shorter nets and shorter soak times can have the same levels of cetacean bycatch.

Therefore, if the UK government is truly committed to reducing harbour porpoise bycatch levels in set net fisheries, it will ensure that it becomes a legal requirement for pingers to be used in ALL UK set net fisheries regardless of the mesh size.

Paragraph 75

Harbour porpoise and bottlenose dolphin populations are declining. They frequent inshore waters; it is imperative that a legal requirement be applied to UK licensed vessels to ensure that ALL UK wreck set fisheries use pingers or similar deterrent methods.

Paragraph 76

Any regulations regarding the use of pingers MUST specify the acoustic operating characteristics of the pingers, the spacing of pingers on nets, and the method of attachment.

Paragraph 77

Clearly, further work is required regarding small cetacean bycatch mitigation methods in relation to pelagic trawls. However, the level of cetacean bycatch in UK pelagic trawl fisheries must be reduced. Article 8 of the CFP Regulation allows Member States to take emergency measures to restrict or close fisheries if, “There is evidence of a serious threat to living aquatic resources... where undue delay would result in damage that would be difficult to repair”. The UK government should reduce the effort in the UK pelagic trawl fisheries immediately, and apply the Precautionary Principle.

Paragraph 79

Ultimately effort reduction should be managed at a European level. However, the UK government has the opportunity to lead by example in this regard.

Paragraph 80

As stated, the UK is obliged under the EC Habitats Directive, to identify suitable sites to be designated as SACs for the harbour porpoise and the bottlenose dolphin. In the light of the number of studies of cetaceans carried out around the UK coast, it seems somewhat remiss that no sites have, as yet, been designated in respect of the harbour porpoise.

Paragraph 82 & 83

If the problem of cetacean bycatch in UK, and indeed European waters, is to be properly addressed, it is essential that surveys of cetacean populations should take place more regularly. There is new technology available, which apparently allows for stock assessment of populations to be carried out more economically.

Paragraphs 84 & 85

It is imperative that a mandatory / compulsory observer programme is applied to all UK fisheries. It is necessary at this time. Voluntary arrangements are open to abuse.

Read 2000 states, "... where pingers are not required, not a single fisherman uses the devices... most fishermen will not use pingers on a voluntary basis. If pingers are to be used as a mitigation strategy, therefore, their use must be enforced by periodic checks, or other monitoring of compliance. Monitoring at sea has proven difficult. The US Coastguard decline to haul gill nets at sea as they are not equipped to handle the gear... concerns regarding potential liability should the gear or catch be damaged". He then explains that the Coastguard have to inspect the pingers whilst the nets are hauled.

The use of acoustically reflective nets would reduce the amount of monitoring substantially. The nets could be checked in port and to ensure that the nets were functional, the purchase date of each net could be placed on a database so that both the fisherman and the inspectorate would know when the net was due for replacement. Although acoustically reflective nets cost approximately 20% more than standard nets, they do not require additional maintenance, and equipment is not required to test them. Anecdotal reports from Canada suggest that the acoustically reflective nets last longer.

Paragraph 86

It is essential that further research be carried out in respect of the use of acoustic deterrents in all pelagic trawl fisheries.

It is essential that research be carried out into alternative, less destructive fishing methods.

Paragraph 87

"Habituation is not therefore thought to cause a problem...".

There are a number of studies that suggest that habituation IS a problem, and therefore, it is important to remember that, "No single mitigation measure has been demonstrated to be universally superior to all alternatives, and that a mixture of measures to reduce bycatch is preferred to reliance upon any single measure", ICES 2001 ACE report.

Read 2000, "It is noteworthy that none of the take reduction strategies developed in the US relied on a single mitigation measure, but on multiple strategies... each operational interaction between small cetaceans and commercial fishing gear requires a solution specific to that combination of animals and gear".

Paragraph 88

ANY intensive deployment of pingers in ANY sea areas will need to be supported by a programme of research to identify any potential problems of exclusion.

Paragraphs 89 & 90

"No single mitigation measure has been demonstrated to be universally superior to all alternatives, and that a mixture of measures to reduce bycatch is preferred to reliance upon any single measure", ICES 2001 ACE report.

Read 2000, "It is noteworthy that none of the take reduction strategies developed in the US relied on a single mitigation measure, but on multiple strategies... each operational interaction between small cetaceans and commercial fishing gear requires a solution specific to that combination of animals and gear".

Paragraph 91

Given the few applications from fishermen for EU FIFG structural funds for marine environmental purposes, it would seem that this is not a sufficient incentive.

Read 2000 states, “To persuade a fishermen to change his practices... requires the imposition of an external cost, potential or realised, through regulation. Costs are achieved by enforcement of penalties for non-compliance...”.

“However, it has not been Government policy to make compensation...”

Under the Countryside Stewardship Scheme, payments are made to farmers and land managers in England when they manage the land in such a way that enhances and conserves landscapes, habitats and wildlife. The scheme aims to make conservation part of farming and land management. Grants are awarded and when accepted, farmers and land managers then enter a legally binding agreement with DEFRA, usually for a period of 10 years. The agreeing party must comply with the targets and management actions set by DEFRA.

Perhaps it would be worth considering extending this scheme to fishermen and fishery managers.

Paragraph 92

There is indeed tremendous public support for cetacean friendly fishing methods. Recent surveys have clearly shown that consumers are concerned with environmental issues, especially when it concerns such charismatic animals as cetaceans. Many “eco-labels” have been discredited of late due to the fact that the claims made were exaggerated or inaccurate. Both the Forest Stewardship Council and the Marine Stewardship Council have lost credibility due to the fact that certification was awarded to clients whose practices were not considered to be environmentally friendly. The fishing methods used by the majority of fisheries certified by the MSC, or those in the process of certification, are considered by many not to be sustainable in terms of the bycatch of non-target species, including cetaceans.

An eco-labelling scheme would benefit the consumer, the fishing industry, the retail trade and most importantly, cetacean populations. However, certification should only be awarded after a rigorous observer programme to ensure that levels of cetacean bycatch are extremely low or preferably zero. The consumer must have confidence in the label; they will not have confidence in a label if it is awarded to fisheries “providing assistance in researching cetacean friendly methods”. The consumer will only have confidence in a label that is awarded to fisheries with negligible cetacean bycatch. The Marine Stewardship Council has lost credibility because it has certified fisheries that have known, and unacceptable levels, of bycatch.

Paragraph 95

ICES 2001 ACE report, “Experience has shown that compliance with proper usage guidelines is often poor in the absence of effective enforcement”.

There were 8,139 serious breaches of CFP Regulations in 2001, a 12% increase on 2000’s figures.

DG Fisheries, “Member States’ deterrence systems seem inadequate to stop over fishing, misreporting, or use of illegal fishing gear”.

The National Audit Office April 2003, “English fishers can still get away with illegal fishing despite new measures... weak enforcement... too small fines... a low chance of prosecution and potentially high gains encourages illegal practices, undermining conservation policies... there is less than 1% chance of any vessel being inspected at sea”.

Paragraphs 96 to 98

ECBC trusts that the reform of the Common Fisheries Policy will result in measures that will significantly reduce cetacean bycatch in European waters, and that the UK government will consider comments made regarding this strategy, and will ultimately pursue a course of action that will result in a significant reduction of cetacean bycatch that will be an example to other Member States.

RACs should NOT consider which fishing sectors within their region have an unacceptable level of cetacean bycatch as given the nature of the fishing industry and fishing communities, RACs would be placed in an unenviable position. Independent observers should monitor a percentage of each fishery and then cetacean bycatch reduction teams should be responsible for suggesting and implementing cetacean bycatch mitigation measures in those fisheries.

Paragraph 99

“... apart from those vessels operating within 6 miles of the coast... “.

Given that harbour porpoises and bottlenose dolphins frequent inshore waters, **not** to require UK fishing vessels, operating within 6 miles of the coast to use acoustic deterrents on their nets, would be foolhardy in the extreme. These species of cetaceans are extremely vulnerable, and to allow fishing vessels to use set nets in coastal waters without some form of acoustic deterrent is totally unacceptable. If there are reservations about using pingers “within 6 miles of the coast” then there should be a legal requirement to use acoustically reflective nets.

Paragraph 100

“... mandatory pinger use for all fisheries using meshes greater than 220mm... it should be a legal requirement for pingers to be used on all UK set net fisheries using a mesh size greater than 220mm in ICES areas IVb & IVc”.

Vinther 1995 “fisheries effort in terms of cetacean bycatch is a combination of length of the net and soak times” and he suggests that misleading conclusions may therefore be drawn. He states “porpoise bycatch rates in the gill net fishery for turbot are very much higher than in the gill net fishery for cod. However the turbot fishery uses much longer nets and soak times. When these are taken into consideration, the cetacean bycatch levels in both fisheries are about the same.”

Therefore, it would seem illogical that one specific mesh size should be identified as requiring pingers. Although very long soak times e.g. 8 days for the Danish turbot fishery, and large meshes are associated with higher levels of cetacean bycatch, it is clear from the Vinther report, that shorter nets and shorter soak times can have the same levels of cetacean bycatch.

Therefore, if the UK government is truly committed to reducing harbour porpoise bycatch levels in set net fisheries, it will ensure that it becomes a legal requirement for pingers to be used in ALL UK set net fisheries regardless of the mesh size.

Paragraph 101

Harbour porpoise and bottlenose dolphin populations are declining. They frequent inshore waters; it is imperative that a legal requirement be applied to UK licensed vessels to ensure that ALL UK wreck set fisheries use pingers or similar deterrent methods.

Paragraph 102

The US Fisheries Service placed an Aquamark 300 pinger at intervals of 300 feet and yet this strategy suggests 1 pinger is required for every 200m, approximately 600feet, which implies that the US strategy is more stringent.

Paragraph 103

Use of a mortality limit scheme in any UK fishery could only be considered post SCANS II.

Paragraph 104

“At present it is not believed that fishing activities...”.

Surely it is imperative to obtain the evidence that fishing activities do not have an adverse impact on the populations of bottlenose dolphins for which SACs have been established. It is also imperative, that SACs are designated as soon as possible for the harbour porpoise. Consideration should be given to introduce measures to restrict all fisheries that impact upon the species for which SACs have been designated regardless of the fishing practices concerned.

Paragraph 105

The UK should indeed continue to work closely with the project co-ordinators to ensure that adequate funding is secured for SCANS II. The European Commission should be willing to provide funds for the project, as should other Member States.

Paragraph 106

Methods to identify trends in populations of harbour porpoise, common dolphin, and bottlenose dolphin should be identified and set up as a matter of urgency. We consider it also important that trends in populations of white-beaked dolphins, Atlantic white-sided dolphins and long finned pilot whales should also be identified and set up as a matter of urgency.

Paragraph 107

The UK should fund further work on small cetacean population structure and seasonal movement.

Paragraph 108

In terms of genetics, it would most valuable to ascertain whether the hundreds of common dolphins found on the beaches of Southwest England and the coast of France originated from the same gene pool.

Paragraph 109

The UK should develop an expanded bycatch monitoring scheme to assess levels of bycatch in ALL UK fisheries at statistically valid level.

Paragraph 110

It is imperative that a mandatory / compulsory observer programme be applied to all UK fisheries. It is necessary at this time. Voluntary arrangements are open to abuse.

Read 2000 states, “... where pingers are not required, not a single fisherman uses the devices... most fishermen will not use pingers on a voluntary basis. If pingers are to be used as a mitigation strategy, therefore, their use must be enforced by periodic checks, or other monitoring of compliance. Monitoring at sea has proven difficult. The US Coastguard decline to haul gill nets at sea as they are not equipped to handle the gear... concerns regarding potential liability should the gear or catch be damaged”. He then explains that the Coastguard have to inspect the pingers whilst the nets are hauled.

The use of acoustically reflective nets would reduce the amount of monitoring substantially. The nets could be checked in port and to ensure that the nets were functional, the purchase of each net could be placed on a database so that both the fisherman and the inspectorate would know when the net was due for replacement. Although acoustically reflective nets cost approximately 20% more than standard nets, they do not require additional maintenance, and equipment is not required to test them. Anecdotal reports from Canada suggest that the acoustically reflective nets last longer.

Paragraph 111

“... much lower levels of observer coverage could still be used...”.

ICES report 2001ACE, suggests that 10% observer coverage would be sufficient. Any less would not enable statistically sound conclusions to be achieved.

Paragraph 112

Further trials should be carried out on the use of acoustic deterrents in ALL pelagic trawl fisheries. Fishermen should be legally required to carry observers to monitor cetacean bycatch, as is the case in the US. Fishermen should not be persuaded to assist with trials but should be legally required to do so and should receive penalties for lack of compliance.

Paragraph 113

ANY intensive deployment of pingers in ANY sea areas will need to be supported by a programme of research to identify any potential problems of exclusion.

Paragraph 114

Research into separator grids and the use of reflective and other net modifications should continue. Research should also be carried out into less destructive fishing methods, and the possibility of fishermen changing to more cetacean friendly gear.

“No single mitigation measure has been demonstrated to be universally superior to all alternatives, and that a mixture of measures to reduce bycatch is preferred to reliance upon any single measure”, ICES 2001 ACE report.

Read 2000, “It is noteworthy that none of the take reduction strategies developed in the US relied on a single mitigation measure, but on multiple strategies... each operational interaction between small cetaceans and commercial fishing gear requires a solution specific to that combination of animals and gear”.

Paragraph 115

There is indeed tremendous public support for cetacean friendly fishing methods. Recent surveys have clearly shown that consumers are concerned with environment issues, especially when it concerns such charismatic animals as cetaceans. Many “eco-labels” have been discredited of late due to the fact that the claims made were exaggerated or inaccurate. Both the Forest Stewardship Council and the Marine Stewardship Council have lost credibility due to the fact that certification was awarded to clients whose practices were not considered to be environmentally friendly. The fishing methods used by the majority of fisheries certified by the MSC, or in the process of certification, are considered by many not to be sustainable in terms of the bycatch of non-target species, including cetaceans.

An eco-labelling scheme would benefit the consumer, the fishing industry, the retail trade and most importantly, cetacean populations. However, certification should only be awarded after a rigorous observer programme to ensure that levels of cetacean bycatch are extremely low or preferably zero. The consumer must have confidence in the label; they will not have confidence in a label if it is awarded to fisheries “providing assistance in researching cetacean friendly methods”. The consumer will only have confidence in a label that is awarded to fisheries with negligible cetacean bycatch. The Marine Stewardship Council has lost credibility because it has certified fisheries that have known, and unacceptable levels, of bycatch.

It is not for the fisheries to decide whether some form of eco-labelling system should be adopted. Consumers are demanding an eco-label that can guarantee that fisheries have very low cetacean bycatch levels or zero cetacean bycatch levels. Consumers are also demanding a higher quality of fish, which can only be obtained by using pole and line or handlines.

Paragraph 116

RACs should NOT consider which fishing sectors within their region have an unacceptable level of cetacean bycatch, as given the nature of the fishing industry and fishing communities, RACs would be placed in an unenviable position. Independent observers should monitor a percentage of each fishery and then cetacean bycatch reduction teams should be responsible for suggesting and implementing cetacean bycatch mitigation measures in those fisheries.

Paragraph 117

A formal review of the effectiveness of the measures recommended in this strategy should be undertaken within 18 months of publication.