

**Agenda Item 6.3:      Review of new information on bycatch**

**Fulfilling the pinger provisions of Regulation (EC) 812/2004  
Problems encountered and progress required to reduce  
harbour porpoise bycatch**

**Submitted by:            WDCS/The Marine Connection**



***NOTE:***  
**IN THE INTERESTS OF ECONOMY, DELEGATES ARE KINDLY REMINDED TO BRING  
THEIR OWN COPIES OF THESE DOCUMENTS TO THE MEETING**



# **Fulfilling the pinger provisions of Regulation (EC) 812/2004 problems encountered and progress required to reduce harbour porpoise bycatch**

**Presented by WDCS, the Whale and Dolphin Conservation Society**

## **Background**

The problem of incidental capture of cetaceans in fishing gear is well documented, though poorly quantified in many parts of the world, and is generally considered to pose one of the most pressing conservation problems facing many of these species<sup>1</sup>. Within EU waters, the bycatch of harbour porpoises in bottom-set net fisheries in particular has been identified as a serious and, in areas such as the North, Celtic and Baltic Seas, probably unsustainable problem. The high bycatch levels revealed by monitoring programmes in various fisheries provided the basis for the adoption in 2004 of EC Regulation 812/2004 that lays down measures concerning incidental catches of cetaceans in fisheries.

However, three years on from the adoption of this Regulation, one of the key provisions aimed at reducing these bycatch levels, namely the requirement for pingers to be used on specified static nets, is largely not being implemented. Representations from the industries and research institutes from a number of Member States identify a catalogue of problems relating to the practicality of attaching and using the devices and to health and safety concerns. Therefore, at present there is little if any enforcement of this part of the Regulation in certain fleets. Moreover, as the requirements are costly and unpopular with the fishing industry, there appears to be little incentive for Member States to find solutions.

## **Pinger requirements under EC 812/2004**

Under the terms of Council Regulation (EC) No 812/2004<sup>2</sup> it has been illegal for vessels of 12 m or over in overall length to use the fishing gear defined in Annex I in the areas, for the periods and from the dates indicated without the use of acoustic deterrent devices, otherwise known as pingers (Article 2(1)).

The fisheries for which the use of pingers is mandatory under the Regulation are:

- a) In the Baltic Sea (specified areas), any bottom-set gillnet or entangling net and any driftnet at any time of year (from June 2005) and in subdivision 24 from January 2007;
- b) In ICES sub area IV and division IIIa (i.e. the North Sea, Skagerak and Kattegat), any bottom-set gillnet or entangling net whose total length is 400 m or less for the months of August to October (since August 2005) and any bottom-set gillnet or

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<sup>1</sup> Read, A.J., P. Drinker & S. Northridge 2006 Bycatch of marine mammals in U.S. and global fisheries. Conservation Biology Volume 20, No. 1, 163–169

<sup>2</sup> OJ L150. 30.4.2004, p.12. Council Regulation (EC) No 812/2004 of 26.4.2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98

- entangling net with mesh sizes of 220 mm or greater at any time of year (from June 2005);
- c) In ICES divisions VII e,f,g,h and j (i.e. the Western Channel, Bristol Channel and Celtic Sea), any bottom-set gillnet or entangling net at any time of year (from January 2006); and
  - d) In ICES division VII d (i.e. the Eastern Channel), any bottom-set gillnet or entangling net at any time of year (from January 2007).

The technical specifications of the pingers to be used are defined in Annex II of the Regulation.

However, two derogations apply to these provisions. First, the requirement to use pingers does not apply to fishing operations authorised for purely scientific investigation aimed at developing new technical measures to reduce incidental capture or killing of cetaceans (Article 2(3)). Second, the temporary use of pingers with specifications different to those set out in Annex II can be authorised if their efficacy at reducing bycatch of cetaceans has been sufficiently documented (Article 3(2)).

Additionally, Member States are required to monitor and assess, through scientific studies or pilot projects, the effects of pinger use over time in the fisheries and areas concerned (Article 2(4)).

### **Implementation of the pinger requirements by the UK**

A series of pinger trials has been conducted in the UK since 1998, looking initially at the efficacy of these devices and later at their feasibility in the fisheries concerned in the western Channel/Celtic Sea area. While the early trials demonstrated that pingers can substantially reduce porpoise bycatch levels, they highlighted numerous technical and procedural problems that would be associated with the commercial use of these devices<sup>3</sup>. With the Commission's proposal for mandatory use of these devices on the table, a further series of deployment trials, examining the practicality of four of the models of pingers available, was started in 2003<sup>4</sup>. These trials identified further difficulties resulting in several modifications of the devices themselves by the manufacturers and of their mode of use and attachment to the nets. However, the conclusion of the final trial (that involved just two models: Fumunda and AQUAmark 100) was that *"the issues of attachment, deployment, long term reliability and costs have not yet been completely resolved. The underlying problem is that pingers in their present form need to be attached at regular intervals along the tiers of nets. In attaching the pingers directly to the nets there will always be issues concerning entanglement and health and safety of the crew"* and *"There are still serious doubts as to their compatibility in the SW offshore netting fishery because of the risk of entanglement, particularly in tangle net gear."*<sup>5</sup>

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<sup>3</sup> SMRU 2001. *Reduction of porpoise bycatch in bottom set gillnet fisheries*. Report to the European Commission, DG Fisheries. Study contract 97/095. Sea Mammal Research Unit, University College Cork/Cornish Fish Producers' Association/Irish South & West Fishermen's Organisation

<sup>4</sup> Seafish 2003. Trial of acoustic deterrents ('porpoise pingers') for prevention of porpoise (*Phocoena phocoena*) bycatch: phase 1 Deployment Trial. Financial Instrument for Fisheries Guidance (FIG) project FEP 686A. Seafish report no. CR201; Seafish 2005 phase 2 and 3 Endurance and Tangle net Trial. Seafish report no. CR207

<sup>5</sup> Caslake R & W Lart 2006 Trial of acoustic deterrents ('porpoise pingers') for prevention of porpoise (*Phocoena phocoena*) bycatch. Extension Trial. Seafish report no. CR210

The UK Government estimates that approximately 50 UK vessels involved in the bottom-set gill net fishery off south west England (ICES areas VII e-j) are affected by the pinger requirements of EC Reg 812/2004<sup>6</sup>. Some of these vessels operate as much as 120km of net per vessel<sup>7</sup>. It has not been possible to identify how many vessels are affected in the North Sea (ICES area IV) but UK officials estimate that the number that use set nets of less than 400m “*is likely to be fewer than 10 vessels*”<sup>8</sup>. The Government does not appear to have assessed the number of UK vessels affected in the eastern Channel (ICES area VII d).

The UK Government states that “*currently there is no suitable working pinger*” and it has not therefore required the UK industry to comply with these provisions. Indeed, it appears that no commercial vessels in the UK are using pingers. However, it also states that “*research is ongoing (trials in Ireland and Denmark)*” and that it “*intends to approach the Commission about funding and coordinating research for the development of an effective and safe pinger.*”<sup>9</sup>

### **Implementation of the pinger requirements by other Member States**

It is difficult to assess the level of pinger deployment by other Member States given that the national annual reports that have been submitted to the Commission on implementation of Regulation (EC) 812/2004 do not provide this level of detail<sup>10</sup>. The submissions do indicate some use of pingers. For instance, Denmark reports that the Danish Fishermen’s Union has bought a sufficient number of pingers and offers them at a minimal price to interested fishermen and that “*a number of Danish fishermen have chosen to use acoustic alarms*”.

Various submissions have been made to the Commission by the industry and research institutes within the UK<sup>11</sup>, France<sup>12</sup> and Ireland<sup>13</sup>, detailing the results of pinger deployment trials and the technical difficulties and concerns they have identified. The French report highlighted health and safety risks to crew and increased handling effort caused by entanglement of the devices in nets. It recommended a derogation to Reg 812/2004 to allow an experimental program to develop “*a less dangerous device*”, nominally the installation of a single powerful pinger under the vessel hull. The report of the Irish study similarly concluded that the results showed that the introduction of acoustic deterrent devices on gill nets and tangle nets in Irish fisheries will have major

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<sup>6</sup> Defra 2006 Review of UK Small Cetacean Bycatch Response Strategy. <http://www.defra.gov.uk/fish/sea/consERVE/cetaceans.htm>

<sup>7</sup> Seafish 2005. Trial of acoustic deterrents (‘porpoise pingers’) for prevention of porpoise (*Phocoena phocoena*) bycatch: phase 2 and 3 Endurance and Tangle net Trial. Financial Instrument for Fisheries Guidance (FIFG) project FEP 686A. Seafish report no. CR207

<sup>8</sup> See note 6

<sup>9</sup> See note 6

<sup>10</sup> See AC14/Doc.14(S) Reports from Parties and Range States on implementation of Council Regulation (EC) No. 812/2004

<sup>11</sup> See notes 4 and 5 above

<sup>12</sup> Le Berre, N. 2005. Impact of the introduction of cetacean pingers on the security and the work conditions onboard the western Channel gillnetters. Institut Maritime de Prevention.

<sup>13</sup> Cosgrove R., D. Browne & S. Robson 2005. Assessment of Acoustic Deterrent Devices in Irish Gill Net and Tangle Net Fisheries. Marine Technical Report : Project 05MT07, BIM

implications for fishermen in terms of cost, slowing fishing operations and possibly safety issues.

As a result of these representations, the Commission convened a technical expert meeting in April 2006 to consider the issues raised. The outcome of this meeting is summarised in a Commission paper<sup>14</sup> which concluded that the difficulties identified in terms of safety and handling considerations, could not be considered as insurmountable to the proper implementation of pinger requirements for gill nets and for smaller vessels using short sets of larger mesh nets. However, for those vessels using very long sets of tangle nets, the problems of entanglement and gear snarling have not been resolved.

### **Where next?**

We are deeply concerned about the lack of progress towards the implementation of the pinger requirements of EC Regulation 812/2004. Despite many of the technical and procedural problems likely to be encountered during the commercial use of this technology being identified by trials in fisheries in the Celtic Sea some six to eight years ago, and further elucidated and expanded upon by a variety of deployment trials since then, it appears that Member States are still some way from implementing effectively the pinger requirements of EC Regulation 812/2004.

Member States clearly have the option of allowing fishing operations to continue without the use of pingers as specified, under the derogations provided for in Articles 2 and 3. In this context, the UK has embarked on a sea trial of the more powerful Italian DDD model<sup>15</sup>, that emits sounds at a peak amplitude of 165dB, as opposed to the 130-150dB specified in the Regulation. The use of considerably louder devices that could be spaced much more widely, thus cutting costs and handling problems, was proposed by UK fishermen involved in the recent deployment trials.

However, the potential increase in the extent and intensity of noise associated with this development has heightened existing concerns over the potential for widespread use of pingers to cause damaging habitat displacement or behavioural changes to small cetaceans. The purpose of the current trial is to investigate any effects of the device on relative cetacean abundance and distribution and it does not involve actual fishing operations at this stage.

We assume that other Member States may also be planning or undertaking alternative or complementary lines of enquiry or development. However, we are worried that, without effective co-ordination, different national research efforts may duplicate output or take divergent courses that are not mutually supportive. Experience has shown that development and trialling of this type of technical measure can be very protracted if the work is not adequately resourced or rigorously conducted. It is also possible that, without further inducement, Member States will not prioritise further work to find a workable and effective solution. Indeed, some may be inclined to leave the onus on the Commission or others to find a solution, in the knowledge that their respective industries

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<sup>14</sup> Practical difficulties in implementing Council Regulation on by-catch of cetaceans (Reg. 812/2004) Outcome of the expert meeting.

<sup>15</sup> Mackay A & Northridge S (2007) Protocol for proposed SMRU acoustic and visual cetacean survey of the southwest English Channel and subsequent pinger trial, January 2007. Sea Mammal Research Unit, UK

have no desire or incentive to fulfil the pinger requirements of EC Reg. 812, and there is no proposal for alternative mitigation measures on the table.

## Recommendations

The requirement to use pingers in specified gillnet and entangling net fisheries under Article 2 of Regulation (EC) 812/2004 remains the key provision for effecting bycatch reduction in most of the fisheries in which bycatch of harbour porpoises has been identified as problematic in the ASCOBANS area. However, there is currently little if any implementation of this provision in many areas and fisheries and little apparent prospect of the situation being resolved in the near future.

**Therefore, the Advisory Committee is invited to consider as a matter of urgency taking the following actions:**

1. **To request** that the European Commission contacts EU Member States affected by the pinger requirements of EC Reg. 812/2004 to establish what measures each is taking either to implement the Regulation or to undertake the research and development work necessary to enable them to do so.
2. **To urge** the Commission to initiate a process to assess, co-ordinate and prioritise this work in order to ensure that it produces a swift and successful outcome.
3. **To identify** key issues to explore such as, for example:
  - the compatibility of pingers with current fishing gear and practices and whether the latter could be altered to accommodate their use through e.g. boat modifications, speed of operations etc.
  - whether there is scope to develop an ultra-low energy device (considerably smaller, cheaper and less energy demanding) that would also create less acoustic disturbance.
4. **To urge** the Commission to put forward proposals for alternative interim measures to reduce harbour porpoise bycatch, such as targeted restriction of fishing effort in the priority gear-types and fisheries.
5. In order to inform the above actions and also to better quantify current bycatch levels, **to recommend**, in cooperation with the Commission and other partner organisations, the collection of detailed information on the extent, type and distribution of static gillnet and tangle net effort (as recommended by MoP 5 Resolution No. 5: Incidental take of Small Cetaceans)<sup>16</sup>.

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<sup>16</sup> as outlined in document **AC14/Docxx** Collection and provision of fishing effort data, presented by Marine Connection and WDCCS and with reference to **AC14/Doc.18(C)** Evaluating the bycatch of small cetaceans in the ASCOBANS area, presented by the Chair of the Advisory Committee at this meeting.