

First Meeting of the Scientific Committee of ACCOBAMS

Tunis, 3-5 October 2002

Recommendation 1.1

Acoustic devices used to avoid dolphin interaction with fishing activities and aquaculture have the potential to adversely impact cetacean and other animal populations. They may damage the hearing of cetaceans and, if used extensively, exclude them from significant portions of their habitat. These undesired effects are well documented for acoustic harassment devices (AHD) which are used, for example, to prevent animals from approaching aquaculture facilities; AHD produce high source levels (>185dB re 1 P at 1m) and operate primarily in the mid to high frequency range (c. 5-30kHz).

The Scientific Committee reiterated the recommendations of the Rome workshop (Reeves et al., 2001) and concludes that it is inappropriate to use AHDs to alleviate conflicts between cetaceans and fisheries or mariculture operations in the Agreement area. Member countries should strictly regulate the use of these potentially harmful devices.

In contrast, pingers are used primarily to alert cetaceans to existence of fishing gear and thus avoid entanglement. These are low-intensity (generally <150dB re 1 P at 1m) sources that operate in the mid to high frequencies between about 2.5-109kHz, with harmonics to much higher frequencies (Reeves et al., 2001). These devices are considered to be less invasive than AHD and their use is, in principle, oriented towards cetacean conservation.

Nevertheless, the Scientific Committee noted that if pingers are used extensively, they may produce significant noise pollution and possibly exclude cetaceans from certain areas. There have been few controlled studies of the efficacy of pingers in reducing by-catches in the Agreement area. The Scientific Committee recommended against the use of these acoustic alarms until controlled studies have been conducted and they have been shown to be effective in reducing by-catches and not harmful to cetacean populations. Furthermore, as in other areas, the Scientific Committee stressed that eventual implementation of any management scheme using pingers should be accompanied by an observer scheme designed to monitor their effectiveness over time.

Reeves, R.R.; Read, A.J. and Notarbartolo di Sciara, G. 2001. Report of the Workshop on Interactions between Dolphins and Fisheries in the Mediterranean: Evaluation of Mitigation Alternatives, Roma 4-5 May 2001. Istituto per la Ricerca Applicata al Mare (ICRAM), Via di Casalotti 300, 00166 Rome, 44pp.