

# REPORT OF THE THIRD MEETING OF THE JASTARNIA GROUP

Copenhagen, Denmark  
19 - 21 February 2007

**ASCOBANS**  
Agreement on the Conservation  
of Small Cetaceans of the  
Baltic and North Seas

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## **Report of the Third Meeting of the UNEP/ASCOBANS Jastarnia Group Copenhagen, Denmark, 19-21 February 2007**

### **1. Opening of the Meeting**

Maj Munk welcomed participants on behalf of the host organisation, the Danish National Forest and Nature Agency.

### **2. Statement by the new acting Executive Secretary of ASCOBANS, Robert Hepworth**

Mr Hepworth introduced himself and Heidrun Frisch, who would be the ASCOBANS Marine Mammal Consultant as from 1 April 2007. He stressed that in this transitional period CMS/ASCOBANS was anxious to ensure the best possible service, and that several specialist CMS officers would be working to continue to make ASCOBANS an even greater success in the future. This was undoubtedly what Parties had intended when they took the merger decision at MOP5. He had been impressed by the enormous expertise available within the Parties, and how this was being put to good use.

Regarding the harbour porpoise, and in view of the 2010 target, he was pleased that improved acoustic monitoring methods were now being developed, and that a project to obtain more reliable data on the Baltic populations, led by Sweden, was in preparation. In order to facilitate progress, the Secretariat would make every effort to provide funding for a project planning workshop to be held in mid-2007.

Despite the tight budget situation, he was able to outline three likely sources of funding for projects: a) a total grant of 30,000 USD from UNEP over the next three years, which would be split about equally between the Baltic and the North Sea, i.e. making 15,000 USD available for projects related to the Jastarnia Plan; b) the German voluntary contribution of 25,000 EUR per year, c) approximately 30,000 EUR per year in voluntary contributions from Parties whose annual subscriptions had been reduced by the merger. Parties to whom this applied (e.g. Denmark, Finland and Sweden) had indicated that they would "top up" their contributions to the original level, so the Group might decide to request firm commitments from these countries to finance Jastarnia projects.

### **3. Adoption of Agenda**

The agenda as circulated on 17 January 2007 was adopted unchanged.

### **4. Implementation of the Jastarnia Plan**

#### **a. Bycatch reduction**

#### ***Identification of areas with high bycatch and known use of harmful fishing gear:***

Jarmo Vilhunen reported no such areas in Finland. Harbour porpoises were very rare in Finnish waters and no bycatch had been reported in the last 12 months. In fact the last report had been in 1999, so it was difficult to identify particular areas or harmful fishing gear.

Valdis Pilats reported that in Latvia there had also been no recent reports of cetacean bycatch.

Sara Königson said that in 2006 there had been only one report of a bycaught harbour porpoise in Sweden. This had been in Horner Bay in the south, from a part-time fisherman using a set net. In the Baltic very few of the boats using set nets were in the category covered by the EU observer scheme, i.e. > 15 metres in length.

Iwona Kuklik reported that in Poland the only bycatch hotspot so far identified was Puck Bay, but no bycatch reports had been received in 2006, probably due to fishermen being unwilling to cooperate.

Jonas Teilmann said that it was difficult to identify particular areas in Denmark. There was a lot of bycatch - and many porpoises - in northern Danish waters, and occasionally also in other areas, though this lessened progressively towards the east. There was no organised bycatch reporting system, so reports were received by chance and were not reliable. As from summer 2007, the reports from observers were expected to improve this situation over time, although these would only be from larger boats.

Karl-Hermann Kock reported that Germany had not yet established the observer scheme required by EU regulations. There were no identified hotspots, but there was bycatch all over the western Baltic, though very little east of Rügen. Very few German fishermen reported bycatch, a situation that had not changed in recent years.

Piotr Gruszka reported that Coalition Clean Baltic and Green Federation GAJA had produced an eight page brochure (*The Baltic Harbour Porpoise Needs Protection*) which included a map showing harbour porpoise sightings and bycatch in the Baltic proper, as reported by countries between 1980 and 2005.

### ***Reduction of fishing effort:***

The Group's Chairman, Stefan Bräger, recalled that some of the action points defined at the last meeting (JG2) were still outstanding. One of these was the project to collate fishing effort data. No candidates had been suggested to undertake this task, and no funding had been offered. Indeed, some of the recommendations in the Jastarnia Plan itself, including this one, might no longer be valid. For this reason this meeting would undertake a re-evaluation of the Plan, under Agenda Item 5.

Jarmo Vilhunen suggested that fishing effort was currently being reduced because lower fish stocks were making fishing less profitable. As all fishermen were now required to keep a log of their activities, a different approach might now be appropriate. He suggested that the data needed were available in landing statistics etc. The available data needed to be examined by an expert, in a proper project with adequate funding.

Iwona Kuklik felt that fishing effort data from the Baltic was invaluable as background information for the Jastarnia Plan, and was certainly needed to justify the demand for a reduction in set gillnet fishery. Under the EU reporting requirements the number of boats using bottom-set gillnets would soon become known. Currently 20 fishing vessels were using driftnets in Poland. Further delay should be avoided, the information was now published on the EU web site, making collating it easier. Even if it was not comprehensive, the data already available could be combined with that from the EU monitoring programme, although observer coverage might be too low to provide meaningful data in the Baltic. She reminded the meeting that until recently such information had been "top secret" in Poland; now that it was available it should be put to use. Even a simple count of boats and types of nets would contribute to the overall picture.

Karl-Hermann Kock doubted that such data would help in identifying or solving problems. He thought equally valuable results could be achieved by concentrating resources on trials with alternative fishing gear and the use of pingers. The original aim of collecting fishing effort data had been to identify bycatch hotspots, but other relevant factors had since emerged. As an example he recalled the large number of part-time fishers along the German coast: these estimated 620 were thought to catch as many porpoises as the professional fishermen, but were not required to submit effort data.

Jarmo Vilhunen pointed out that the cod recovery plan had led to a 10% reduction in effort for all cod license holders in Finland, and not just for vessels over 8m hull length.

Reiterating points she had made at previous meetings, Petra Deimer pointed out that the Jastarnia Plan recommended both immediate action as well as research. She also suggested that the Advisory Committee should discuss the practice, particularly in Germany, of re-issuing part-time fishing licences when a fisher retired, thus maintaining the total number unchanged.

Sara Königson said that as 90% of fishery in Sweden was for cod (i.e. 40 trawlers and 350 setnetters), the data collected through the Swedish Cod Action Plan - which also covered smaller vessels - gave quite an accurate picture. She suggested that the data might be used to create a model to demonstrate the expected reduction in bycatch that would result from planned reductions in fishing effort.

Jonas Teilmann thought that the collation of such data would at least reveal overall trends in effort reduction over time, although it was unlikely that the effort data available was sufficiently detailed to identify problem areas and methods (i.e. only the number of fishing days per vessel and ICES square). However, it might possibly show up the types of fisheries (e.g. setnets with >220 mm mesh size) that posed a high risk, allowing mitigation efforts to be targeted at these specifically, e.g. for pinger placement.

Stefan Bräger agreed that recommendations from the Jastarnia Group should be backed up by detailed information, e.g. on what type of gear had caused how much bycatch, so information on mesh size, the precise location etc. was needed. However, in the light of the difficulty of collecting this, and the reluctance of Parties to provide funding, it might make more sense to pursue research on alternative fishing gear instead.

Jan Erik Holmberg quantified the current Swedish fishing effort for cod to be 143 days (with 110 mm mesh size), with an expected reduction of 15% in 2008. Fishing for flounder, however, would use similar nets (120 mm mesh size). Jonas Teilmann clarified that flounder nets were only 2m high, whereas cod nets extended 4m into the water column. In Sweden, a maximum of 10% cod was permitted in flounder fishery, with a maximum of 200 kg in 2006, but flounder fishery had been reduced by 77% in Sweden.

The EU provided a clear definition of driftnets, which excluded the Polish semi-driftnets. According to Jan Erik Holmberg, semi-driftnets consisted of no more than two 100m nets. In Sweden, 53 vessels were receiving compensation for no longer fishing with driftnets.

### ***Implementation of the use of alternative fishing gear:***

Finland: No information.

Sweden: Trials would continue with (Norwegian) cod pots, which were also being tested in Ireland, Norway and the USA with workshops in the USA (2006) and in Ireland (2007). Two commercial fishers would start testing these 1m x 1.5m floating traps, which could be used with or without bait,

in the Öresund. Research was also being done on smaller traps in coastal areas for perch to replace gillnets. Only trials with small traps for pike perch had been done in the Baltic. Logbook data for five years (2000-2005) showed that the use of hook/longline fishery had increased, while gillnet fishery had decreased. Much research was being done on this, and fishermen were changing (see report "The Swedish longline fishery in the South Baltic: an analysis of logbook data", attached as Annex 1).

Poland: No information.

Denmark: In Denmark some fishermen had substituted driftnets with long-lines, but other bycatch, as well as periods when fish did not feed, posed problems. EU funding for pingers had stopped and policing of pinger use was difficult. Some fish traps and pound nets were being used along the coast, but this was declining since trawlers came closer to the shore. High bycatch of other fish was a problem.

A short report on the work being done by Finn Larsen on alternative fishing gear was approaching completion. In summary, fish pots for cod were not well accepted, although they worked well in some areas. Because of the small quotas fishermen preferred mixed fishery. The use of longlines was more promising and some had changed to this method.

### ***Implementation of pinger programme***

Stefan Bräger distributed copies of a DVD produced by the RSPCA in the United Kingdom about Regulation (EC) 812/2004. This was intended for distribution to fishermen and had been produced in various languages with the assistance of the ASCOBANS Secretariat.

Finland: There was no enforcement of the EU regulation on the use of pingers with certain net types, and no coordinated pinger programme. There was a very large part-time fishery using nets, but harbour porpoises were so rare that implementation would be difficult – though pingers might be useful to protect dolphins and seals.

Sweden: Coastal fisheries suffered severely from seal damage, and a study had been done to see if pingers attracted seals. Damage was found to be higher in nets with active pingers compared to those with inactive pingers or dummies. Interactive pingers might be a solution to the seal problem, and further trials were needed. There was as yet no control of the use of pingers, and it was not clear what proportion of fishers were using them, although funding was available for their purchase, and fishermen had been thoroughly informed about the new regulation. The RSPCA DVD would be sent to part-time fishermen's organisations together with a letter giving details of where pingers could be purchased etc.

Poland: No information was forthcoming from fishery authorities on any Polish vessels fishing in ICES Area 24, and Polish fishermen showed little interest in pingers. However, a pinger programme, which was still being developed, would soon be implemented in Puck Bay. Polish fishermen were known to have been purchasing pingers in Sweden.

Denmark: The programme was being implemented where mandatory, but only a small part of the gillnet fishery was required to use pingers. Denmark had a funding programme similar to the Swedish one.

Germany: So far the Ministry responsible for fisheries (BMELV) had not taken action on implementing EU regulations on pingers or on-board observers in the Baltic, although onboard observers had been required on Baltic setnetters (>80 mm mesh size) since January 2006 and pingers had been

mandatory in subarea 24 since January 2007. Instead there were only fisheries observers (not marine mammal observers) and pingers on only six or seven North Sea gillnetters.

Lithuania: Five vessels were using driftnets in the non-regulated area, but were not currently using pingers.

Jonas Teilmann reported that in Denmark, pingers were only mandatory in a small area (ICES subarea 24) and for larger vessels (over 12m hull length). As this was an area with a relatively high density of harbour porpoises, the extension of the regulation to cover the inner Danish waters and small vessels might be justified. Finn Larsen was currently preparing a report for the IWC on his experiments with pinger spacing, which showed that the distance between them could be increased considerably; e.g. to 500-600m instead of 100-200m, with little loss of effectiveness. This might reduce costs. The experiments were now being repeated with different types of pinger.

The group discussed the general reluctance of fishermen to use pingers and agreed that stressing the ecological benefits of saving porpoises was the best approach. Public concern following incidents of cetacean bycatch reported in the media might increase pressure to comply with regulations.

The meeting discussed the use of pingers in general. Mats Amundin thought that interactive pingers would allow coastguards to check them from the surface. Sara Königson said that the high cost of pingers might force vessels of less than 10m hull length to stop fishing. Jonas Teilmann reported that Finn Larsen's study suggested that wider spacing of pingers

Karl-Hermann Kock suggested that part-time fishing licenses should be phased out and not re-issued, and the Secretariat should send a letter asking the German Ministry of Food, Agriculture and Consumer Protection to stop the issue of new part-time licences and to phase out the existing ones.

Jarmo Vilhunen felt that the Jastarnia Group should issue recommendations to help improve EC Regulation 812/2004. Representatives of the Jastarnia Group might want to take part in meetings of the Baltic Regional Advisory Committee, and invite its members to Jastarnia Group meetings.

Iwona Kuklik reported that EC Regulation 2187/2005, (Scientific Assessment of Gear Types, attached as Annex 2), was due for evaluation by 31 December 2007, and suggested that the Secretariat should send a letter to the EU DG for Fisheries and Maritime Affairs to remind them of the significance of Article 27 of that Regulation.

## **b. Research and monitoring**

### ***International database on opportunistic sightings, strandings and bycatch***

Stefan Bräger reported on part of Germany's Jastarnia Project, the international Baltic porpoise database that was being hosted by Germany until the end of 2007. This included data from various organisations, as well as from Denmark, Finland, Estonia and Poland. The database was currently online, but dormant, but it was hoped it could be continued, either with further German funding or a contribution from one or more other donors. It needed a committed person to maintain it, probably full time.

## **Genetics**

The workshops on the genetics of the harbour porpoise in the Baltic that had been scheduled for early February had unfortunately had to be postponed, and would now probably be held in late September 2007 in Bonn.

Ralf Tiedemann gave a presentation on a research project on the genetics of the Baltic harbour porpoise, which was being conducted at the University of Potsdam. This three-and-a-half-year study was funded by the German government as part of their contribution to the Jastarnia Plan. There would be a three-day meeting on harbour porpoises in early November 2007, which would include a presentation of the final results.

The aim of the study had been to establish whether the harbour porpoises of the Baltic were divided into subpopulations. A comparison of a total of 289 samples, 203 of which were from the Baltic, had revealed significant differences between the samples from the North Sea and Skagerrak on the one hand and the animals from the rest of the area on the other. In his view therefore the harbour porpoises of the Baltic should be considered as a separate population from a management point of view. However, although differences were observed between neighbouring areas, the number of samples had not been large enough to define geographical borders between the various subpopulations.

Jonas Teilmann reported the continuation of the genetics project together with Mats Amundin to study harbour porpoise population structure. It was hoped also to include historic samples and samples from Germany.

## **Monitoring programmes in fisheries**

Mats Amundin gave a presentation on a project being undertaken with the Swedish Board of Fisheries to test an interactive pinger that included a click logger. This was being done with the cooperation of fishermen, in an area where they had previously questioned the presence of harbour porpoises. The device was intended to be used with set nets, was easy to handle and appealed to the technically-minded local fishermen. The hydrophone could be removed in order to download the data or recharge the batteries. The fishermen were being paid a small compensation for their efforts. The study was expanding from very small beginnings and would hopefully also be extended to other countries soon.

Penina Blankett reported that there had been three sightings of harbour porpoises in Finland, though only one was confirmed. Finland was cooperating closely with Mats Amundin in Sweden and trying to find funding for various projects, including a study with 200 click detectors.

Valdis Pilats reported that a LIFE project concerned with acoustic surveys had started in 2006, using stationary hydrophones during the ice-free season. The purpose was to identify potential protected areas off the coasts of Latvia, Lithuania, Estonia and Russia.

Sara Königson reported that funding had been requested for a pilot study of a video system to monitor cetacean bycatch on fishing boats. This might eventually replace observers, and it had been agreed that observers would assist with the preliminary trials with the cameras. The Swedish database on opportunistic sightings was working well, with every entry being followed up and subjected to a quality check. A poster giving information on where to report sightings was being distributed to fisheries organisations.

Iwona Kuklik reported that Poland had been involved in the German Jastarnia Project, sharing samples, and final results were expected at the meeting in November. An application for funding

for research on alternative gear and pinger use in the Puck Bay area was being prepared. She had no information on the Polish observer programme, and regretted that there were not more fisheries representatives present to provide this.

Jonas Teilmann reported that the Danish genetics project on porpoise population structure was expected to finish analysis in 2007. A genetic analysis of the historical catches in the Lille Belt area was also planned. Acoustic monitoring had started in January 2007, using a towed array in potential Natura 2000 areas in inner Danish waters; the Danish part of the Baltic proper was not included because this had been covered by German aerial surveys. Six surveys would be done during 2007 to monitor seasonal changes. Furthermore, monitoring with T-PODs was being done from a Swedish vessel - together with Per Berggren also in Swedish waters; it was hoped from this to develop guidelines on the use of porpoise detectors (T-PODs), calibration etc. to ensure that the data collected was internationally comparable. Among other problems, T-PODs tended to lose sensitivity over time and need frequent recalibration. A PDF version of the publication in press would be available soon. Various experiments were in progress to study the effects of noise, for example during the construction of windfarms, on behaviour, as well as physical damage to hearing etc., e.g. playback experiments of ramming noise (and later possibly of seismic) were monitored with T-PODs and visually at Fyns Höved. These studies were also relevant in the light of the planned detonation of dumped wartime munitions in the Kiel Bight.

Stefan Bräger reported that a workshop on the use of static acoustic monitoring had been held in the Oceanographic Museum in Stralsund on 4 September 2006. The proceedings of this would be published soon.

Jonas Teilmann was also continuing satellite and acoustic tagging of live-caught harbour porpoises to monitor movements and behaviour under water. The data collected would be used to create a habitat model with the aim of establishing animals' preferences. Another study was using acoustic loggers to record background noise to assess the effect of this on behaviour. A report on the very interesting results of his experiments on pinger habituation and habitat exclusion would be available very soon.

Karl-Hermann Kock reported that the German aerial survey data from four years from the German exclusive economic zone (EEZ) would be analysed by the end of the year. Further funding for this was not yet available, and he suspected that a survey every second year would be sufficient, perhaps alternating between the Baltic and the North Sea. Experienced observers were essential, and these were difficult to retain. The survey was a baseline study, and showed that animals moved offshore in winter and inshore in summer. It should also be possible to observe populations trends, and identify areas of high abundance. The survey results will also be used to fulfil German reporting obligations to the EU and possibly aid the selection and designation of marine protected areas.

Petra Deimer reported that GSM had been collecting opportunistic sighting data since 2002, and the number of reports received continued to rise as the project became more well-known (approx. 900 sightings in 2006). Although an increasing number of people sailed in the eastern Baltic, there were no reported sightings of harbour porpoises from there. Coalition Clean Baltic had offered to support the project all over the Baltic, but funding was needed. With a total of 9,000 sightings, what had started as a public awareness exercise was now changing, and the data gave an overview of distribution, and could help identify potential Natura 2000 sites. The sightings were published on an interactive website\* by the German Federal Agency for Nature Conservation (BfN), and an English version would be available in time for the International Day of the Baltic Harbour Porpoise in May.

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\* <http://www.habitatmare.de/de/schweinswalsichtungen1b.php>

Laura Janulaitiene reported that so far there was no research or monitoring taking place in Lithuania.

### **c. Marine protected areas**

Jonas Teilmann gave a presentation on the Danish tracking project (1997-2007) that involved tagging 58 live-caught animals (24 marked near Skagen and 34 in inner Danish waters) and year-round satellite tracking of their movements. This had revealed several areas of high concentration: Öresund, Store Belt, Lille Belt, Flensburg Fjord, and Fehmarn Belt. Although it was not clear if these were the only such areas, it was important that these at least had been identified and that the animals there could be protected. Acoustic studies with T-PODs were also being done to verify the findings, which however also tied in well with the results of the German aerial survey and opportunistic sightings. Further research with a larger number of tagged animals would be needed to obtain more detailed information, for example about seasonal movements.

He noted that many of the areas identified spanned national boundaries, i.e. between Denmark and Sweden or Denmark and Germany, so bilateral cooperation was called for, although identifying Natura 2000 sites was normally a national exercise. Three of the areas identified (the entrance to the Öresund, Flensburg Fjord and the Fehmarn Belt) were likely to be particularly important for the re-colonisation of the rest of the Baltic.

A one-day workshop on marine protected areas would be held in San Sebastián on Sunday, 22 April 2007.

### **d. Public awareness**

#### ***Standardized campaign for reporting across Baltic***

Recommendation 12 (s. Report of JG2, 2006) had called for more information material in languages of the Baltic states. The Group felt that there was an urgent need for material in Russian, but it was not clear if this was already being prepared. It was also important for Russia to join ASCOBANS, though this did not seem immediately likely. Karl-Hermann Kock suggested that inviting Russian scientists to attend meetings would at least ensure the flow of information in the mean time.

Penina Blankett suggested that the annual Baltic Sea Day held in St Petersburg in March would be a good opportunity to present ASCOBANS in Russia. She reported that in Finland the annual harbour porpoise sighting campaign was taking place, also related to the Year of the Dolphin, and that the Finnish Harbour Porpoise Action Plan had meanwhile been finalised and published. An English summary would be attached to this report (see Annex 3) and copies of the complete plan in Finnish or Swedish are available on request from the Secretariat.

In Latvia, the International Day of the Baltic Harbour Porpoise (IDBHP) had been celebrated by the Natural History Museum. Furthermore, the Fisheries Research Institute, which was responsible for the analysis of log books and organised observers, had reported no sightings or bycatch of cetaceans.

Laura Janulaitiene reported that the Museum of Natural History in Lithuania had celebrated IDBHP in 2006 with lectures and leaflets, and planned to do so again in 2007. The Fisheries Research Institute was now targeting fishermen, but with limited success because of resistance to the EU regulation.

Sara Königson reported on a new poster and DVD that had been distributed through observers and fisheries organisations; IDBHP had again been celebrated in Sweden. There were also plans for a campaign to raise awareness of the effects of noise from motorboats etc. on porpoises and seals.

Iwona Kuklik reported on the unveiling of a harbour porpoise statue by the harbour in Gdynia during the ECS conference held there in 2006. This was very popular, and had been integrated into an event for IDBHP. The University of Gdansk had submitted a series of articles about the harbour porpoise for the local newspaper for the coastal region, e.g. on genetic diversity, and the cooperation between Danish and Polish scientists.

In Denmark, the popular Fjord & Baelt Centre gave daily presentations with its porpoises to some 80-90,000 visitors annually; for several years Fisheries and Maritime Museum in Esbjerg had had a web site called "Focus on Whales", which reported on cetacean news, but this needed funds for its regular maintenance.

Petra Deimer reported on media activities by GSM, including an IDBHP press conference, and contacts with marinas and yacht clubs. There had been an event in autumn 2006 to launch a photographic competition. GSM also planned to update its video "Small Whale in Big Trouble", for which it requested funding.

Iwona Kuklik again referred to the brochure *The Baltic Harbour Porpoise Needs Protection* produced in Poland by Coalition Clean Baltic and Green Federation GAJA (see page 2 above). Additional copies were available on request.

The Secretariat was asked to help organise events for the upcoming IDBHP on 20 May 2007.

#### **e. Cooperation**

Stefan Bräger had no further information regarding Recommendation 10 ("The Advisory Committee should explore the possibility of commissioning a report on EU legislation relevant to harbour porpoise conservation"). Regarding the list of Natura 2000 sites for seals, Penina Blankett confirmed that this had been sent to HELCOM by the EU. Rüdiger Stempel had visited the HELCOM Executive Secretary in 2006, and she had confirmed HELCOM's interest in cooperating with ASCOBANS on harbour porpoises.

Iwona Kuklik reported that Poland and CCB were two of the leading bodies in HELCOM on harbour porpoises. CCB had submitted a proposal for the Baltic Sea Action Plan (BSAP) which included almost all the Jastarnia Plan, but the HELCOM document as it now stood included only two brief mentions of the harbour porpoise. The Polish Secretariat of HELCOM was now working on a new proposal about harbour porpoises, and hoped that this would be considered. Penina Blankett reported that there would be a stakeholder meeting on the BSAP in March 2007 in Helsinki. The Action Plan was an ongoing project, and was still under discussion with more meetings planned.

Karl-Hermann Kock suggested communicating the expected AC14 decision on the amended Jastarnia Plan to HELCOM. As in the past, Penina Blankett would continue to represent ASCOBANS at HELCOM meetings.

The Group regretted that CCB was not able to attend this meeting and confirmed that cooperation would be continued, and that a CCB representative should be invited to attend AC14. The AC should also send a representative to the Baltic RAC.

## **5. Re-evaluation of the Jastarnia Plan**

Introducing this topic, Stefan Bräger said that the group had been asked to examine the Plan and make suggestions for amendments to AC14, which should endorse them, and return them to the Group for the text of the Plan to be finalised accordingly. The suggested discussion points agreed by the group can be found in Annex 4 to this report.

## **6. Election of a new Chair for the Jastarnia Group**

No decision was made on a new Chairperson. The outgoing chair, Stefan Bräger, agreed to present the results of the Group's meeting to AC14.

## **7. Date and venue of the next meeting**

Mats Amundin communicated an invitation from Sweden to hold the next meeting of the Jastarnia Group in Kolmården, from 25 - 27 February 2008. This offer was gratefully accepted.

## **8. Any other business**

None.

**Recommendations from the Third Meeting of the ASCOBANS Jastarnia Group,  
Copenhagen, 19-21 February 2007,  
to the ASCOBANS Advisory Committee (AC14)**

1. Parties should urge their relevant authorities to investigate ways of limiting part-time set-net fishery.
2. Parties should involve the stakeholders and develop a collaborative approach to engaging fishers in reporting bycatch.
3. ICES should be commissioned to clarify what data is available and for which areas on types of net, size of vessels etc. and to identify what relevant information is available in EU databases.
4. Parties should support studies on alternative fishing gear and interactive pingers.
5. Membership or observer status should be requested for ASCOBANS at meetings of the Baltic Sea Regional Advisory Council (Baltic RAC).
6. Funding should be provided for coordination and maintenance of the international Baltic Sea Harbour Porpoise Database after 2007.
7. Guidance should be provided on how to identify sites suitable for harbour porpoise conservation.
8. Funding should be provided for translation of information material for the general public and fishers into all Baltic languages.
9. These recommendations of the Jastarnia Group should be forwarded to all relevant organisations active in the Baltic.



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## The Swedish longline fishery in the South Baltic: an analysis of logbook data

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### Introduction

Fishing for cod with bottom set gillnets is mainly carried out along the south coast of Sweden. The gillnet fishery is concentrated in coastal waters, but larger vessels also operate further offshore. Coastal or inshore fisheries are of great importance to the local population in many coastal villages. Inshore fishing is often carried out by a single fisherman, making daily fishing trips and returning every night to harbour. Inshore fisheries, tend to suffer from diminishing fish stocks and structural problems. In addition to these problems, the inshore fisheries are also the fisheries most subjected to damage caused by seals (Königson, 2007). Fishing for cod is carried out from early autumn until late spring. Bottom set gillnets are set in fleets of up to 15000 meter long, normally with a mesh size of around 110 mm. However, in certain areas and time periods, a mesh size of 120 mm is used.

In the same area as the bottom set gillnets are placed, a longline fishery for cod is also carried out.. According to fishermen, longlines are more catch efficient than nets during certain time periods and areas. The main component of a longline fishing system is bait, hook, gangion and mainline together with associated deck machinery and fishing vessel. Hooks are placed along a line with about 3 to 4 meters in between each hooks. The lines with hooks are placed on the bottom with the hooks floating just above the bottom. Around 2500 (sometimes up to 4000) hooks can be set out during one fishing occasion. Before set, they are baited with herring. Bait is one of the most important elements determining selectivity and efficiency (Lokkeborg, 1989).

Harbour porpoises are known to get by-caught in bottom set gillnets. To reduce the by-catches fishing gear may be modified so that they catch less porpoises. Currently, the most effective modification known is the attachment of acoustic deterrents (pingers) to gillnets. Pingers are effective and do decrease the by-catches in bottom set gillnets (Read, 2000; SMRU, 2001; Larsen et al., 2002; Vinther & Larsen, 2002). However, reducing fishing effort in fisheries that bear a high risk of entangling harbour porpoises should lead to a decrease of by-catch. By fishing with alternative fishing gear such as longlines the risk of entanglement for harbour porpoises may decrease. Therefore it is important to study the longline fisheries to consider its potential as an alternative fishing gear to bottom set gillnets. This study is based on data from the EU-logbook relating the Swedish longline and gillnets fisheries. We have studied the development of both gillnet and longline fisheries from the year 2000 until 2005.

### Methods

All licensed commercial fishermen are obliged to keep records of their operations, in accordance with the EU log book system, and to report these records to the Swedish Board of Fisheries. There are two ways for the fisherman to report fishing effort and catch, depending on the size of the boat. The captain aboard fishing vessels with a length of 10 meter or more must daily report their catch, fishing gear, number of nets or hooks, and fishing position. For fishermen using fishing vessels with a length of less than 10 meter, a monthly journal is kept instead. In the latter case, catch data et cetera are summed per type of fishing gear and month. Positions of fishing localities are not noted;

instead the coordinates of the fishing harbour. In the inshore fishery, the main effort is given in the monthly record. Voluntary information regarding seal interaction and by-catch of marine mammals can be entered into both types of reports.

Both daily and monthly log book records for the longline and gillnet cod fisheries, for the period 2000 to 2005 was used. The studied area was south of N 59° 30' in the Baltic, including the sound between Denmark and Sweden (Öresund). When analysing effort and catch per unit effort (CPUE) data, only data from the daily logbook was used. This was because of the less quality of the effort data in the monthly logbook. Approximately 50 percent of the entries to the logbook for gillnet and longline fisheries in this area were noted in the daily records. Fishing effort from longline and gillnet fisheries were summarized per month and per ices squares. The average CPUE per month for 2005 was calculated for longline and gillnets fisheries, to be able compare the two fishing methods catch efficiency.

## Results and discussion

In general, the number of fishermen fishing for cod with bottom set gillnets has decreased over the past six years (Table 1). However the number of fishermen reporting to the monthly and daily log-book and using only longlines has increased. Fishermen that alter between longlines and gillnets have also increased over the years.

Table 1. Number of fishermen reporting to the daily or montly log-book using gillnets or longlines when fishing for cod from 2000 until 2005. Number of fishermen using both longlines and gillnets are also noted.

Year	Daily journal (>10m)			Monthly journal (<10m)			Daily and monthly journal			
	Hook	Net	Both	Hook	Net	Both	Hook	Net	Both	
2000	16	201	16	30	215	27	46	416	43	
2001	39	190	33	42	210	34	81	400	67	
2002	35	172	27	34	210	22	69	382	49	
2003	48	178	38	39	190	28	87	368	66	
2004	63	162	51	50	160	35	113	322	86	
2005	100	238	75	43	133	25	143	371	100	

Fishing effort for boats over 10 meter of length has been analysed. The results show that fishing effort for gillnet fisheries (meter net and hours) has decreased by approximately 25% over the period. The effort (number of hooks and hours) for the longline fisheries has doubled. Both the effort data and the increasing number of fishermen fishing with hooks indicates that the gillnet fisheries in Sweden are getting replaced by longline fisheries to a certain extent.

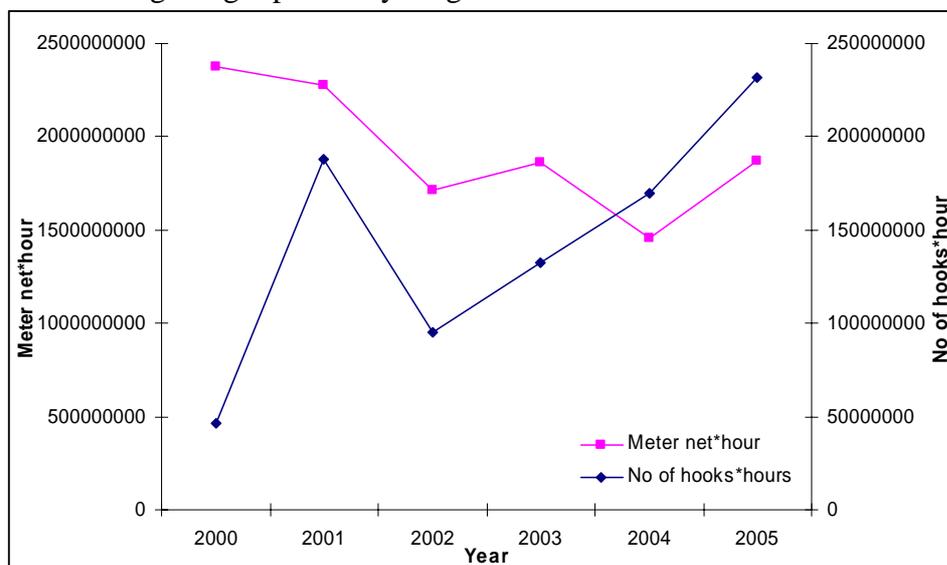
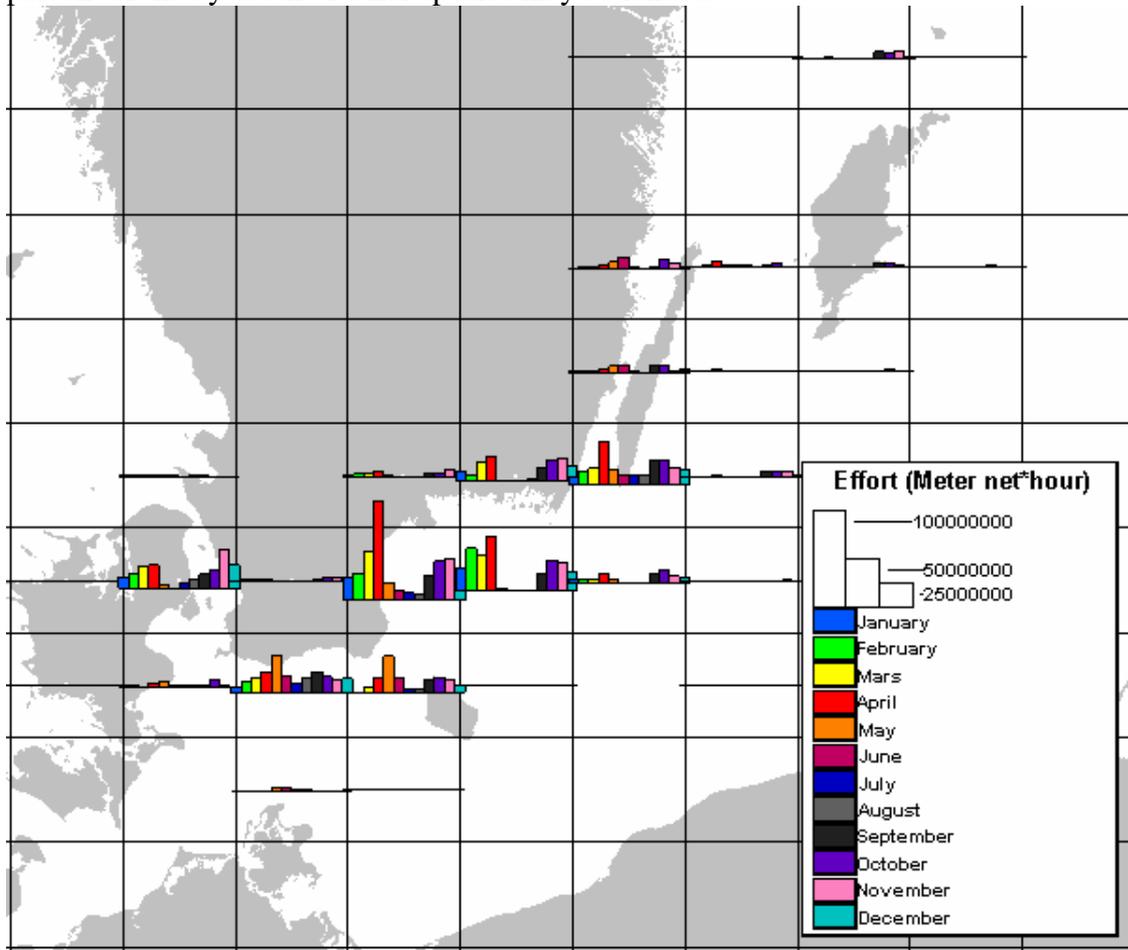


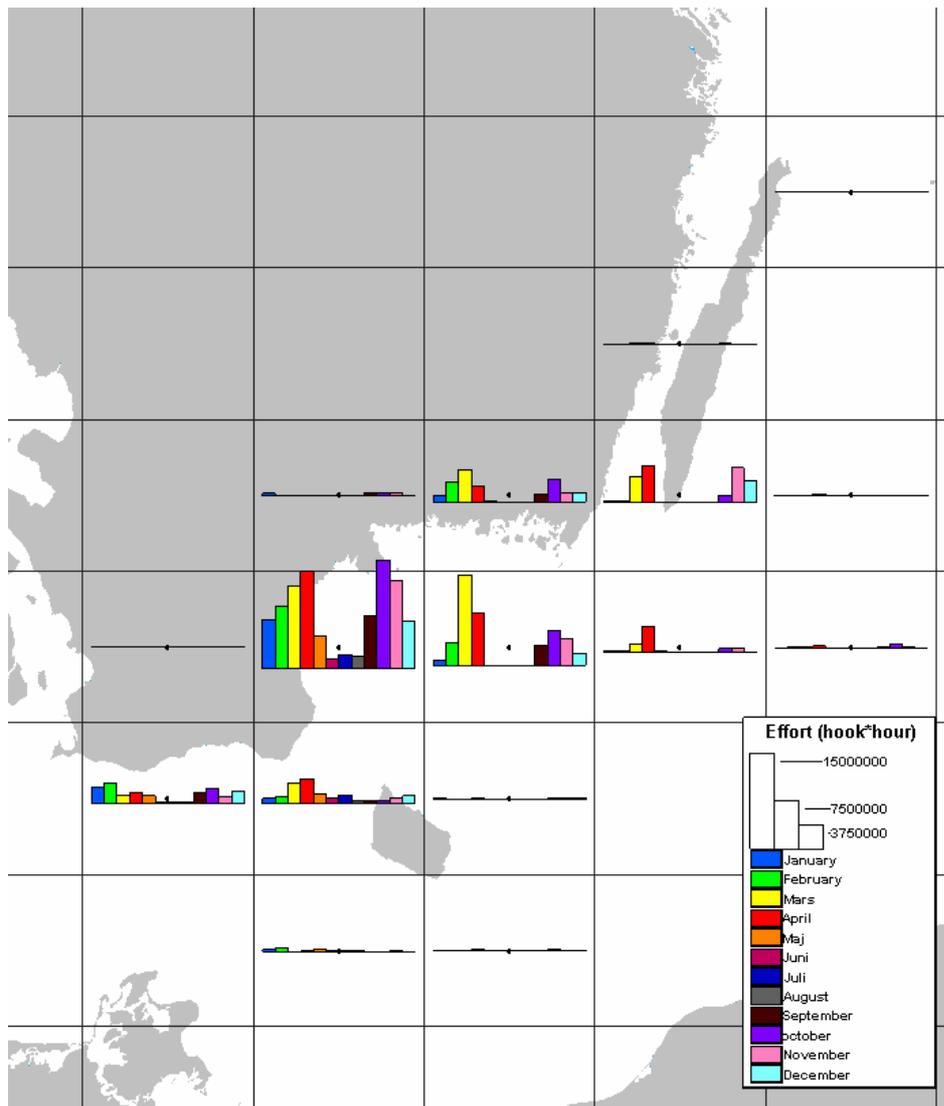
Figure 1. The summarised effort per year for the bottomset gillnet and the hook fisheries in the southern Baltic.

The bottom set gillnet fisheries for cod is concentrated in the southern Baltic. This is also the area where EU-regulation 812/2004, concerning protection of porpoises is being implemented. In these areas, specified by the regulation, bottom set gillnets and driftnets have to be equipped with so called “pingers” if used from vessels larger than 12 m.

Cod is fished all year around with an increase in the early spring (Figure 2a, b). Fishing for cod during the spawning season (summer) is prohibited. However, until 2006, it was still permitted to land up to 200 kg of “by-caught” cod per week during the summer. From 2006 only cod landed as 10 percent of the by-catch of other species may be landed.



A.



B.

Figure 2a and b. The spatial and temporal distribution of the bottom-set gillnet fisheries (A) and the longline fisheries (B) for cod. Effort from the logbook 2005 is summarized for every ices square and month.

The longline fisheries is centred in the same areas and during the same time periods as the gillnet fisheries. Around 2500 hooks are set during an average fishing trip, according to the logbook. The hooks are placed with 3.70 meter spacing depending on where the lines are set. If set on a ridge, spacing is often about one to two meters in between each hook. The average CPUE for longline fisheries during 2005 was 0.009 kg cod per hook and hour. The average CPUE for gillnets 2005 was 0.003 kg cod per meter net and hour. It is not easy to compare the CPUE for different fishing gear. However, if we assume there is one hook every three meter, then the catch per meter fishing gear and hour for longlines is 0.003 kg cod per meter line and hour. This gives us the same catch per meter fishing gear as for gillnets. Although the longlines catch ability vary over the season (Figure 3). Higher catch efficiency than gillnets during certain time periods is probably the reason why longlining has increased.

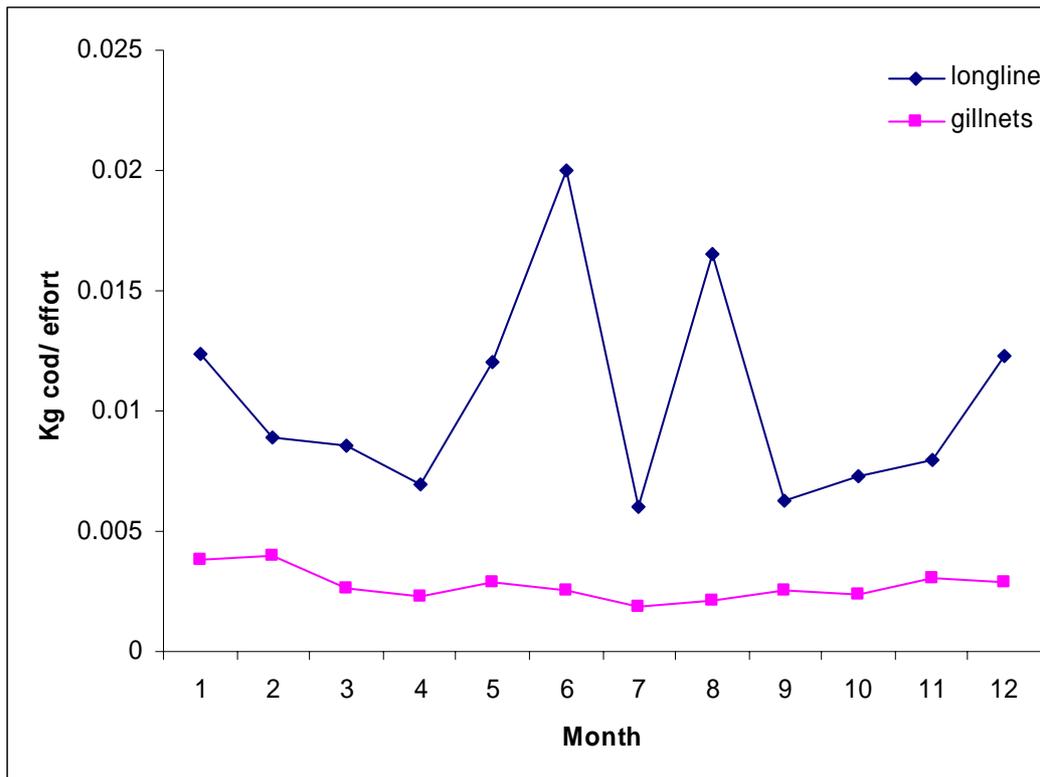


Figure 3. CPUE for longlines (kg cod per hook and hour) and bottom set gillnets (kg cod per meter net and hour).

According to fishermen there are certain areas and time periods when cod do not bite and thereby do not get caught on the longlines. Longlines are baited fishing gear and the variation of the CPUE is affected by two factors -fish availability to the gear and vulnerability or catchability to the gear (Engås & Lökkeborg, 1994; Arreguin-Sa´nches, 1996). the variation in the catchability is dependent on the environmental variables on fish activity, feeding motivation and the ability to detect, locate and consume the bait (Stoner, 2004). Lokkeborg & Pina (1997) found that fish diurnal rhythms in activity can be explained as reflecting variations in feeding motivation; higher catches during certain time periods can be explained as a reflection of changes in diurnal activity rhythms, corresponding to changes in photoperiod. Lokkeborg et al., (1989) also observed these changes in activity for Cod and Haddock during a certain time period. Hunger and search for food and feeding intensity can be closely related to temperature and the water temperature does vary over the season. The abundance of natural prey species can affect hunger levels and feeding motivation, hence this can also affect the catchability of longlines. Abundance of suitable prey can also mask and compete with the cues from the baited longlines. In addition, many other factors can determine if a certain area during a particular time period is suitable for long line fisheries.

There are no economic data that calculate fuel consumption and working time among other factors relating only on the longline fisheries in Sweden. Therefore it is not possible to investigate if longline fishery is more cost effective than the gillnet fisheries. However, longline fisheries is considered to be an environmental-friendly and low fuel cost fishery with low discards of undersized fish and non-target species (Bjordal, 1989; Lökkeborg and Bjordal 1992; Bjordal and Lokkeborg, 1996). On the other hand, longlining involves hard work and is definitely more time consuming than gillnet fisheries. You have to bait the hooks before setting them and then remove bait not taken before baiting and resetting them again. There is an automatic system available for this but the cost for that system including hooks and line is around 17 500 Euro. Many fishermen do not use an automatic system, probably because investing in a new system is risky at times when restrictions in fisheries are common and fish stocks are declining. Fishermen have also complained that when fishing with long-lining gear you have to be two persons. This is not cost efficient, and coastal fishermen often can't afford to have employees. Another problem with the hook fisheries is the by-catch of small cod. The amount of by-caught small cod on longline fisheries in the Baltic has not

been investigated. It is known that the size of the hooks can adjust the size of the caught fish but at this moment further studies need to be carried out to investigate the amount of by-catch in the Baltic Sea.

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## I

(Acts whose publication is obligatory)

**COUNCIL REGULATION (EC) No 2187/2005**

**of 21 December 2005**

**for the conservation of fishery resources through technical measures in the Baltic Sea, the Belts and the Sound, amending Regulation (EC) No 1434/98 and repealing Regulation (EC) No 88/98**

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 37 thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the European Parliament <sup>(2)</sup>,

Whereas:

(1) Pursuant to Articles 2 and 4 of Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy <sup>(3)</sup>, the Council is to establish, taking into account available scientific, technical and economic advice, Community measures necessary to ensure exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions. To that end, the Council may adopt technical measures to limit fishing mortality and the environmental impact of fishing activities.

(2) The accession of the Community to the Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts, as amended by the Protocol to the Conference of the representatives of the States Parties to the Convention (hereinafter referred to as the Gdansk Convention) was approved by Decision 83/414/EEC <sup>(4)</sup>.

(3) Since it was established by the Gdansk Convention, the International Baltic Sea Fishery Commission (IBSFC) has adopted a body of measures for the conservation and management of fishery resources in the Baltic Sea. It notified the Contracting Parties of certain recommendations to modify those technical measures.

(4) It is appropriate for the Community to give effect to such recommendations. However, since the IBSFC may be superseded by bilateral cooperation with the Russian

Federation, the Community rules should not follow strictly those recommendations but should rather seek to establish a comprehensive and consistent system of technical measures for Community waters, based on the existing rules. There is scope for simplification in some cases where the existing rules are unnecessarily detailed and/or cannot be justified for the conservation of resources.

(5) Regulation (EC) No 88/98 <sup>(5)</sup> laid down certain technical measures for the conservation of fishery resources in the waters of the Baltic Sea, the Belts and the Sound.

(6) The application of Regulation (EC) No 88/98 has brought to light certain deficiencies in that Regulation which have resulted in problems of application and enforcement and which should be rectified, notably by defining target species and required catch percentages applicable for different mesh size ranges and geographical areas when fishing with certain gears.

(7) The manner in which the percentages of target species and of other species are to be calculated should be defined.

(8) The minimum size of each species should be fixed taking into account the selectivity of the mesh size of the fishing gear which can be used for that species.

(9) Scientific information indicates that there are large by-catches of juvenile cod in eel fishery with trawls. The fishing of eel with active gear should therefore be prohibited.

(10) The Gulf of Riga is a unique and rather sensitive marine ecosystem which requires special measures to ensure sustainable exploitation of its resources and to minimise the impact of fishing activities. Article 21 of the 2003 Act of Accession, therefore, provides that the Council is to amend Regulation (EC) No 88/98 before the date of accession with a view to adopting the necessary conservation measures in the Gulf of Riga.

<sup>(1)</sup> OJ C 125, 24.5.2005, p. 12.

<sup>(2)</sup> Opinion delivered on 13 October 2005 (not yet published in the Official Journal).

<sup>(3)</sup> OJ L 358, 31.12.2002, p. 59.

<sup>(4)</sup> OJ L 237, 26.8.1983, p. 4.

<sup>(5)</sup> OJ L 9, 15.1.1998, p. 1. Regulation as last amended by Regulation (EC) No 289/2005 (OJ L 49, 22.2.2005, p. 1).

- (11) In order to control fishing activities, access to the Gulf of Riga should be subject to special fishing permits as referred to in Council Regulation (EC) No 1627/94 of 27 June 1994 laying down general provisions concerning special fishing permits <sup>(1)</sup>.
- (12) Scientific information indicates that, for cod, towed gears without exit window and with normal diamond knotted netting in the codend and the extension piece are less selective than those with the BACOMA type exit window or where the netting in the codend and extension piece is turned 90°. It is therefore appropriate not to allow, within Community waters and for Community vessels, the use of towed gears without the BACOMA type exit window or without the netting in the codend and extension piece being turned 90° when cod is a target species.
- (13) Regulation (EC) No 1434/98 <sup>(2)</sup> laid down conditions under which herring may be landed for industrial purposes other than direct human consumption.
- (14) In order to simplify the complex rules of Regulation (EC) No 1434/98, the provisions of that Regulation that are of relevance for the Baltic Sea should be replaced by general provisions on unsorted landings in this Regulation. Regulation (EC) No 1434/98 should be amended accordingly.
- (15) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission <sup>(3)</sup>.
- (16) Amendments to Annex I and to Appendices 1 and 2 to Annex II to this Regulation should also be adopted in accordance with Decision 1999/468/EC.
- (17) By reason of the number and scope of the changes to be made to the rules, Regulation (EC) No 88/98 should be repealed and replaced by a new text,

HAS ADOPTED THIS REGULATION:

#### CHAPTER I

#### SCOPE AND DEFINITIONS

##### Article 1

##### Subject matter and scope

This Regulation lays down technical conservation measures in relation to the taking and landing of fishery resources in the

maritime waters under the sovereignty or jurisdiction of the Member States and situated in the geographical area specified in Annex I.

#### Article 2

#### Definitions

For the purposes of this Regulation:

- (a) 'active gear' means any fishing gear for which the catch operation requires an active movement of the gear, including in particular towed gears and encircling gears;
- (i) 'trawl' means gear which is actively towed by one or more fishing vessels and consisting of a net having a cone- or pyramid-shaped body (as trawl body) closed at the back by a codend;
- (ii) 'beam trawl' means gear with a trawl net open horizontally by a steel or wooden tube, the beam, and netting with ground chains, chain mats or tickler chains, actively towed on the bottom by the vessel engine;
- (iii) 'Danish seine' means encircling and towed gear, operated from a boat by means of two long ropes (seine ropes) designed to herd the fish towards the opening of the seine. The gear made up of net, which is similar to a bottom trawl in design and size, comprises two long wings, a body and a bag (codend);
- (iv) 'dredges' means a net or metal basket mounted on a frame of variable shape and size, the lower part of which carries a scraper blade, sometimes toothed;
- (v) 'purse seine' means encircling gear made up of net where the bottom is drawn together by means of a purse line at the bottom of the net, which passes through a series of rings along the groundrope, enabling the net to be pursed and closed;
- (b) 'passive gear' means any fishing gear for which the catch operation does not require an active movement of the gear, and includes gillnets, entangling nets, trammel nets, trap-nets, lines, pots and traps. The nets may consist of one or more separate nets which are rigged with top, bottom and connecting ropes, and may be equipped with anchoring, floating and navigational gear;
- (i) 'gillnet' and 'entangling net' means gear made up of a single piece of net and held vertically in the water by floats and weights. It catches living aquatic resources by entangling or enmeshing;

<sup>(1)</sup> OJ L 171, 6.7.1994, p. 7.

<sup>(2)</sup> OJ L 191, 7.7.1998, p. 10.

<sup>(3)</sup> OJ L 184, 17.7.1999, p. 23.

- (ii) 'trammel net' means gear made up of two or more pieces of net hung jointly in parallel on a single headline and held vertically in the water by floats and weights;
- (iii) 'lines' means a number of connected lines, either set at the bottom or drifting, each bearing a large number of baited hooks;
- (c) 'hooks' means a bent, sharpened piece of steel wire usually with barb;
- (d) 'immersion time' means the period from the point of time when the nets are first put in the water until the point of time when the nets are fully recovered on board the fishing vessel;
- (e) 'square-meshed netting' means a construction of netting mounted so that of the two sets of parallel lines formed by the mesh bars, one set is parallel to, and the other at right angles to the long axis of the net;
- (f) 'codend' means the last 8 m of the trawl, having either a cylindrical shape, i.e. the same circumference throughout, or a tapering shape;
- (g) 'strengthening bag' means a cylindrical piece of netting completely surrounding the codend of a trawl and which may be attached to the codend at intervals;
- (h) 'back strap' means the rearmost round strap attached to the codend, measured when the meshes are stretched lengthwise;
- (i) 'lifting strap' means a piece of rope encircling the circumference of the codend or the strengthening bag, if any, and attached to it by means of loops or rings;
- (j) 'round strap' means a piece of rope encircling the circumference of the codend or the strengthening bag and which is attached to it;
- (k) 'flapper' means a piece of netting fastened inside an active gear net in such a way that it allows catches to pass from the front to the rear of the gear but limits their possibility of return;
- (l) 'codend buoy' means a buoyant unit attached to the codend;
- (m) 'buoy rope' means a rope connecting a cod-end buoy to that part of the fishing gear being supported or marked;

- (n) 'extension piece' means an untapered section of the trawl having a cylindrical shape, i.e. the same circumference as the codend throughout, attached to or a continuation of the codend.

## CHAPTER II

### NETS AND CONDITIONS FOR THEIR USE

#### SECTION I

#### Target species

##### Article 3

#### Target species and minimum mesh sizes

1. For each of the subdivisions listed in Annex I, the ranges of mesh size admissible for each target species shall be as defined in Annex II when fishing with trawls, Danish seines and similar gears and as defined in Annex III when fishing with gillnets, entangling nets and trammel nets. No part of the gears or nets shall have a mesh size less than the smallest mesh size within each mesh size range.
2. The minimum percentage of the target species among the living aquatic resources retained on board for each geographic subdivision and each range of mesh size is set out in Annex II and Annex III.
3. During any fishing voyage when dredges are carried on board, the retention on board and the landing of any quantity of living aquatic resources shall be prohibited unless at least 85 % of the live weight thereof consists of molluscs and/or *Furcellaria lumbricalis*.
4. The use, within a subdivision, of gillnets or entangling nets having mesh sizes smaller than those referred to in Annex III shall be prohibited.
5. The use, within a subdivision, of trammel nets with mesh size in that part of the net having the largest meshes that does not correspond to one of the categories set out in Annex III unless the mesh size in the part of the net having the smallest meshes is smaller than 16 mm shall be prohibited. If the mesh size in the smallest meshes is less than 16 mm, all meshes with a mesh size above 16 mm shall correspond to the categories set out in Annex III.
6. For each fishing voyage, landings shall be prohibited whenever the catch taken in the subdivisions listed in Annex I, and retained on board, does not comply with the corresponding conditions laid down in Annex II or Annex III.

*Article 4***Calculation of percentages of target species**

1. The percentages of target species referred to in Annexes II and III shall be calculated as the proportion by live weight of all species listed in Annexes II and III which are either retained on board after sorting or landed.
2. The percentage of target species and of other species shall be obtained by aggregating all quantities of target species and of other species listed in Annexes II and III retained on board.
3. The quantities of species listed in Annexes II and III that have been transhipped from a fishing vessel shall be taken into account when calculating the percentages of target species for that vessel.
4. The percentages of target species may be calculated on the basis of one or more representative samples.

*SECTION II***Active gear***Article 5***Structure of fishing gear**

1. No device shall be used which obstructs or otherwise diminishes the mesh in the codend.
2. By way of derogation from paragraph 1, it shall be permitted to attach to the outside of the lower half of the codend of any active gear, any canvas, netting or other material which has the purpose of preventing or reducing wear. Such material shall be attached along the forward and lateral edges of the codend only.
3. By way of derogation from paragraph 1, when fishing with trawls, Danish seines or similar gears with a mesh size less than 90 mm, it shall be permitted to attach to the outside of the codend a strengthening bag. The mesh size of the strengthening bag shall be at least twice as large as that of the codend and in no case less than 80 mm.

A strengthening bag may be attached at the following points:

- (a) at its forward edge;
- (b) at its rear edge; or
- (c) circumferentially between the rear and front part.

A strengthening bag may be laced:

- (a) circumferentially to the codend and the extension piece around one row of meshes; or
  - (b) longitudinally along a single row of meshes.
4. By way of derogation from paragraph 1, it shall be permitted to:
    - (a) use in active gear a non-return net or flapper. The flapper may be attached either inside the codend or in front of the codend. The provisions on minimum mesh sizes laid down in Annex II shall not apply to the flapper. The distance from the point of forward attachment of the flapper to the rear end of the codend shall be at least three times the length of the flapper;
    - (b) attach to the outside of any part of the codend a sensor dedicated to the measurement of the volume of the catches;
    - (c) use round straps and a lifting strap attached to the outside of the codend when fishing with trawls, Danish seines or similar gears with a mesh size smaller than 90 mm;
    - (d) use one lifting strap attached to the outside of the codend when fishing with trawls, Danish seines or similar gears with a mesh size equal to or larger than 90 mm;
    - (e) attach floats on the two lateral selvedges of the codend;
    - (f) use a back strap attached to the outside of the codend. The distance between the back strap and the codline shall be equal to or smaller than 50 cm.

*Article 6***Specific prohibited structures**

Use of the following shall be prohibited:

- (a) any codend in which the number of equal sized meshes around any circumference of the codend increases from the front end to the rear end;
- (b) any extension piece in which the circumference at any point is smaller than the circumference of the foremost end of the codend to which the extension piece is joined;
- (c) any codend of mesh size equal to or greater than 32 mm in which any mesh is not diamond or square;
- (d) any trawl, Danish seine or similar gear with a mesh size equal to or larger than 90 mm to which a codend is attached by any means other than being sewn into that part of the net anterior to the codend;

- (e) any trawl, Danish seine or similar gear with a mesh size equal to or larger than 90 mm having more than 100 open diamond meshes and less than 40 open diamond meshes in any circumference of the codend, excluding the joining or the selvages;
- (f) any codend where the stretched length of the top half is not approximately equal to the stretched length of the bottom half.

#### Article 7

### Selectivity in trawl fisheries for cod

The Commission shall, on the basis of advice from the Scientific, Technical and Economic Committee for Fisheries, present to the Council not later than September 2007 an assessment of the selectivity on cod of active gears for which cod is recognised as target species.

#### SECTION III

### Passive gear

#### Article 8

### Dimensions and immersion time

- Where fishing is conducted using gillnets, entangling nets or trammel nets, the use of more than 9 km of nets for vessels with an overall length of up to and including 12 m and 21 km of nets for vessels with an overall length of more than 12 m shall be prohibited.
- The immersion time of the nets referred to in paragraph 1 shall not exceed 48 hours.
- By way of derogation from paragraph 2, the immersion time of nets referred to in paragraph 1 when fishing under the ice cover shall not be limited.

#### Article 9

### Restrictions on driftnets

- From 1 January 2008 it shall be prohibited to keep on board, or use for fishing, driftnets.
- In 2006 and 2007, a vessel may keep on board, or use for fishing, driftnets if authorised to do so by the competent authorities of the flag Member State.
- In 2006 and 2007, the maximum number of vessels which may be authorised by a Member State to keep on board, or use for fishing, driftnets shall not exceed 40 % and 20 % respectively of the fishing vessels which used driftnets during the period 2001 to 2003.

4. By way of derogation from paragraph 3, in subdivisions 25 to 32 the maximum number of vessels which may be authorised by a Member State to keep driftnets on board or use them for fishing shall not exceed 40 % of the fishing vessels which used driftnets during the period 2001 to 2003.

5. Member States shall communicate to the Commission by 30 April each year the list of vessels authorised to carry out fishing activities using driftnets.

#### Article 10

### Conditions for driftnets

- The master of a fishing vessel using driftnets shall keep a logbook in which he shall record the following information on a day-to-day basis:
  - the total length of the nets on board;
  - the total length of the nets used in each fishing operation;
  - the quantity, date and position of by-catches of cetaceans.
- All fishing vessels using driftnets shall keep on board the authorisation referred to in Article 9(2).

#### SECTION IV

### Common provisions on gear and its use

#### Article 11

### Determination of mesh size and twine thickness

Commission Regulation (EC) No 129/2003 of 24 January 2003 laying down detailed rules for determining the mesh size and thickness of twine of fishing nets <sup>(1)</sup> shall apply.

#### Article 12

### Reaching of required catch percentages

- Quantities of living aquatic resources caught in excess of permitted percentages specified in Annexes II and III may not be landed but shall be returned to the sea before each landing.
- Notwithstanding paragraph 1, whenever during a fishing voyage a vessel leaves any of the groups of subdivisions listed in Annexes II and III, the minimum percentage of target species as set out in Annexes II and III caught and retained on board from that geographical area shall be met within two hours.

<sup>(1)</sup> OJ L 22, 25.1.2003, p. 5.

## Article 13

**Conditions for use of gear**

1. Gear that may not be used within a certain geographical area or during a certain period shall be stowed away in such a manner that it is not ready for use in the prohibited area or during the prohibited period. Reserve gear shall be stowed away separately and in such a manner that it is not ready for use.
2. Fishing gear shall be considered not ready for use if:
  - (a) in the case of trawls, Danish seines and similar gears with the exception of pair trawl:
    - (i) the trawl boards are made fast to the inner or outer side of the bulwark or the gallows,
    - (ii) sweep lines or warps are unshackled from the trawl boards or weights;
  - (b) in the case of pair trawl, the wing tip weights are unshackled and stowed away;
  - (c) in the case of lines, gillnets, entangling nets and trammel nets:
    - (i) the nets are stowed under a lashed cover,
    - (ii) the lines and hooks are kept in closed boxes;
  - (d) in the case of purse seines, the main or bottom wire is unshackled from the seine.
3. By way of derogation from paragraph 1, where any gear is used for which cod (*Gadus morhua*) is defined as a target species in accordance with Annexes II or III, no other type of gear shall be kept on board.

## CHAPTER III

**MINIMUM LANDING SIZE OF FISH**

## Article 14

**Measurement of fish**

1. A fish shall be regarded as undersized if it is smaller than the minimum size specified in Annex IV for the relevant species and the relevant geographical area.
2. The size of a fish shall be measured from the tip of the snout, with mouth closed, to the extreme end of the tail fin.

## Article 15

**Retention on board of undersized fish**

1. Undersized fish shall not be retained on board or be transhipped, landed, transported, stored, sold, displayed or offered for sale, but shall be returned immediately to the sea.
2. For fish other than those defined in Annex II as target species for the mesh size categories 'smaller than 16 mm' or '16 to 31 mm' caught with trawls, Danish seines or similar gears of a mesh size less than 32 mm, or with purse seines, paragraph 1 shall not apply, provided that those fish are not sorted and not sold, displayed or offered for sale for human consumption.

## CHAPTER IV

**RESTRICTIONS RELATING TO CERTAIN AREAS, TYPES OF FISHERIES OR LIVING AQUATIC RESOURCES**

## Article 16

**Prohibited areas**

It shall be prohibited throughout the year, to fish with any active gear in the geographical area enclosed by sequentially joining with rhumb lines the following positions, which shall be measured according to the WGS84 coordinate system:

1. 54° 23' N, 14° 35' E
2. 54° 21' N, 14° 40' E
3. 54° 17' N, 14° 33' E
4. 54° 07' N, 14° 25' E
5. 54° 10' N, 14° 21' E
6. 54° 14' N, 14° 25' E
7. 54° 17' N, 14° 17' E
8. 54° 24' N, 14° 11' E
9. 54° 27' N, 14° 25' E
10. 54° 23' N, 14° 35' E

## Article 17

**Restrictions on fishing for salmon and sea trout**

1. The retention on board of salmon (*Salmo salar*) or sea trout (*Salmo trutta*) shall be prohibited:
  - (a) from 1 June to 15 September in waters of subdivisions 22 to 31;
  - (b) from 15 June to 30 September in waters of subdivision 32.

2. The area of prohibition during the closed season shall be beyond four nautical miles measured from the baselines.

3. By way of derogation from paragraph 1, the retention on board of salmon (*Salmo salar*) or sea trout (*Salmo trutta*) caught with trap-nets shall be permitted.

#### Article 18

##### Restrictions on fishing for eel

The retention on board of eel caught with any active gear shall be prohibited throughout the year.

#### Article 19

##### Restrictions on unsorted landings

1. Unsorted catches shall be landed only at ports and landings sites where a sampling programme referred to in paragraph 2 is in operation.

2. Member States shall ensure that an adequate sampling programme allowing effective monitoring of unsorted landings by species is in place.

### CHAPTER V

#### SPECIFIC MEASURES FOR THE GULF OF RIGA

#### Article 20

##### Special fishing permit

1. In order to fish in subdivision 28-1, vessels shall hold a special fishing permit issued in accordance with Article 7 of Regulation (EC) No 1627/94.

2. Member States shall ensure that vessels, to which the special fishing permit referred to in paragraph 1 has been issued, are included in a list, containing their name and internal registration number, made publicly available via an Internet website, the address of which shall be provided to the Commission and Member States by each Member State.

3. Vessels included in the list shall satisfy the following conditions:

(a) the total engine power (kW) of the vessels within the lists must not exceed that observed for each Member State in the years 2000-2001 in subdivision 28-1; and

(b) the engine power of a vessel must not exceed 221 kilowatts (kW) at any time.

#### Article 21

##### Replacement of vessels or engines

1. Any individual vessel on the list referred to in Article 20(2) may be replaced by another vessel or vessels, provided that:

(a) such replacement does not lead to an increase in the total engine power as indicated in Article 20(3)(a) in the Member State concerned, and

(b) the engine power of any replacement vessel does not exceed 221 kW at any time.

2. An engine of any individual vessel included in the list referred to in Article 20(2) may be replaced, provided that:

(a) the replacement of an engine does not lead to the vessel's engine power exceeding 221 kW at any time, and

(b) the power of the replacement engine is not such that replacement leads to an increase in the total engine power as indicated in Article 20(3)(a) for the Member State concerned.

#### Article 22

##### Trawling prohibition

In subdivision 28-1, fishing with trawl shall be prohibited in waters of less than 20 m in depth.

### CHAPTER VI

#### GENERAL PROVISIONS

#### Article 23

##### Prohibited fishing gear and practices

1. The catching of living aquatic resources using methods incorporating the use of explosives, poisonous or stupefying substances, electric current or any kind of projectile shall be prohibited.

2. The sale, display or offer for sale of living aquatic resources caught using methods referred to in paragraph 1 shall be prohibited.

*Article 24***Scientific research**

1. This Regulation shall not apply to fishing operations conducted solely for the purpose of scientific investigations subject to the following conditions:

- (a) the fishing operations must be carried out with the permission and under the authority of the Member State or Member States concerned;
- (b) the Member State or Member States in whose waters the research is carried out must have been informed in advance of the fishing operations; and
- (c) the vessel conducting the fishing operations must carry on board an authorisation issued by the Member State whose flag the vessel is flying.

2. Notwithstanding paragraph 1, living aquatic resources caught for the purposes specified in paragraph 1 cannot be sold, stored, displayed or offered for sale, unless:

- (a) they meet the minimum landing sizes listed in Annex IV and, for resources for which fishing opportunities are fixed, such opportunities are not exhausted; or
- (b) they are sold directly for purposes other than human consumption.

*Article 25***Artificial restocking and transplantation**

This Regulation shall not apply to fishing operations conducted solely for the purpose of artificial restocking or transplantation of living aquatic resources which are carried out with the permission and under the authority of the Member State or Member States concerned. Where the artificial restocking or transplantation is carried out in the waters of another Member State or Member States, all the Member States concerned shall be informed in advance.

*Article 26***Measures taken by Member States applying solely to fishing vessels flying their flag**

1. Member States may, for the conservation and management of stocks or to reduce the effect of fishing on the marine eco-system, take technical measures designed to limit fishing opportunities which:

- (a) supplement measures set out in Community fisheries Regulations; or
- (b) go beyond minimum requirements set out in Community fisheries Regulations.

2. Measures referred to in paragraph 1 shall apply solely to the fishermen of the Member State concerned and shall be compatible with Community law.

3. The Member State concerned shall communicate such measures without delay to the other Member States and the Commission.

4. Member States shall supply the Commission, on its request, with all information needed for the assessment of whether the measures comply with the conditions laid down in paragraph 1.

5. If the Commission concludes that the measures do not comply with the conditions laid down in paragraph 1 it shall adopt a decision requiring the Member State to withdraw or modify the measures.

*Article 27***Scientific assessment of gear types**

By 1 January 2008, the Commission shall ensure that a scientific assessment of the effects of using in particular gillnets, trammel nets and entangling nets on cetaceans is conducted and its findings presented to the European Parliament and Council.

## CHAPTER VII

**FINAL PROVISIONS***Article 28***Implementing rules**

Detailed rules for the implementation of this Regulation shall be adopted in accordance with the procedure referred to in Article 30(2) of Regulation (EC) No 2371/2002.

*Article 29***Amendments to the Annexes**

Amendments to Annex I and to Appendices 1 and 2 to Annex II shall be adopted in accordance with the procedure referred to in Article 30(3) of Regulation (EC) No 2371/2002.

*Article 30***Amendments to Regulation (EC) No 1434/98**

Regulation (EC) No 1434/98 is hereby amended as follows:

1. in Article 1, paragraph 2 shall be deleted;
2. in Article 2, paragraphs 2 and 3 shall be deleted;
3. in Article 3, paragraph 1 shall be replaced by the following:

‘1. Catches of herring taken:

- in Regions 1 and 2 with towed nets of minimum mesh size equal to or greater than 32 mm, or
- in Region 3 with towed nets of minimum mesh size equal to or greater than 40 mm, or
- in Regions 1, 2 or 3 with any fishing gear other than towed nets,

shall not be landed for purposes other than direct human consumption unless they are first offered for sale for direct human consumption and fail to find a buyer.’;

4. in Article 3, paragraph 2 shall be replaced by the following:

‘2. However, any herring caught with any fishing gear within the conditions specified in Article 2 may be landed for purposes other than direct human consumption.’

*Article 31***Repeal**

Regulation (EC) No 88/98 shall be repealed.

References to the repealed Regulation shall be construed as references to this Regulation and shall be read in accordance with the correlation table in Annex V.

*Article 32***Entry into force**

This Regulation shall enter into force on the seventh day following its publication in the *Official Journal of the European Union*.

It shall apply from 1 January 2006.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 21 December 2005.

*For the Council*  
*The President*  
B. BRADSHAW

## ANNEX I

**Subdivisions of the geographical area referred to in Article 1 to be measured according to the WGS84 coordinate system****Subdivision 22**

The waters bounded by a line drawn from Hasenøre Head (56° 09' N, 10° 44' E) on the east coast of Jutland to Gniben Point (56° 01' N, 11° 18' E) on the west coast of Zealand; then along the west coast and south coast of Zealand to a point situated at longitude 12° 00' E; from there, due south to the island of Falster; then along the east coast of the island of Falster to Gedser Odde (54° 34' N, 11° 58' E); then due east to longitude 12° 00' E; then due south to the coast of Germany; then in a south-westerly direction along the coast of Germany and the east coast of Jutland as far as the point of departure.

**Subdivision 23**

The waters bounded by a line drawn from Gilbjerg Head (56° 08' N, 12° 18' E) on the north coast of Zealand to Kullen (56° 18' N, 12° 28' E) on the coast of Sweden; then in a southerly direction along the coast of Sweden to the Falsterbo lighthouse (55° 23' N, 12° 50' E); then through the southern entrance to the Sound to the Stevns lighthouse (55° 19' N, 12° 28' E) on the coast of Zealand; then in a northerly direction along the east coast of Zealand as far as the point of departure.

**Subdivision 24**

The waters bounded by a line drawn from the Stevns lighthouse (55° 19' N, 12° 28' E) on the east coast of Zealand through the southern entrance to the Sound to the Falsterbo lighthouse (55° 23' N, 12° 50' E) on the coast of Sweden; then along the south coast of Sweden to the Sandhammaren lighthouse (55° 24' N, 14° 12' E); from there to the Hammerodde lighthouse (55° 18' N, 14° 47' E) on the north coast of Bornholm; then along the west and south coasts of Bornholm to a point situated at longitude 15° 00' E; from there due south to the coast of Poland; then in a westerly direction along the coasts of Poland and Germany to a point situated at longitude 12° 00' E; then due north to a point situated at latitude 54° 34' N and longitude 12° 00' E; then due west to Gedser Odde (54° 34' N, 11° 58' E); from there, along the east and north coast of the island of Falster to a point situated at longitude 12° 00' E; from there, due north to the south coast of Zealand; then in a westerly and northerly direction along the west coast of Zealand as far as the point of departure.

**Subdivision 25**

The waters bounded by a line drawn from a point on the east coast of Sweden at latitude 56° 30' N and proceeding due east to the west coast of the island of Öland; then, after passing south of the island of Öland to a point on the east coast situated at latitude 56° 30' N, due east to longitude 18° 00' E; then due south to the coast of Poland; then in a westerly direction along the coast of Poland to a point situated at longitude 15° 00' E; then due north to the island of Bornholm; then along the south and west coasts of Bornholm to the Hammerodde lighthouse (55° 18' N, 14° 47' E); then to the Sandhammaren lighthouse (55° 24' N, 14° 12' E) on the south coast of Sweden; then in a northerly direction along the east coast of Sweden as far as the point of departure.

**Subdivision 26**

The waters bounded by a line drawn from a point situated at latitude 56° 30' N and longitude 18° 00' E and proceeding due east to the west coast of Latvia; then in a southerly direction along the coasts of Latvia, Lithuania, Russia and Poland to a point on the Polish coast situated at longitude 18° 00' E; then due north as far as the point of departure.

**Subdivision 27**

The waters bounded by a line drawn from a point on the east mainland coast of Sweden situated at latitude 59° 41' N and longitude 19° 00' E and proceeding due south to the north coast of the island of Gotland; then in a southerly direction along the west coast of Gotland to a point situated at latitude 57° 00' N; then due west to longitude 18° 00' E; then due south to latitude 56° 30' N; then due west to the east coast of the island of Öland; then, after passing south of the island of Öland, to a point on its west coast situated at latitude 56° 30' N; then due west to the coast of Sweden; then in a northerly direction along the east coast of Sweden as far as the point of departure.

**Subdivision 28-1**

The waters bounded in the west by a line drawn from 57° 34,1234' N, 21° 42,9574' E to 57° 57,4760' N, 21° 58,2789' E, then southwards to the southernmost point of the peninsula of Sörve and then in a north-eastern direction along the east coast of the island of Saaremaa; and in the north by a line drawn from 58° 30,0' N, 23° 13,2' E to 58° 30,0' N, 23° 41,1' E.

**Subdivision 28-2**

The waters bounded by a line drawn from a point situated at latitude 58° 30' N and longitude 19° 00' E and proceeding due east to the west coast of the island of Saaremaa; then, southwards along the west coast of Saaremaa to latitude 57° 57,4760' N and longitude 21° 58,2789' E; then south to a point situated at latitude 57° 34,1234' N and longitude 21° 42,9574' E; then following the Latvian coast southwards to a point situated at latitude 56° 30' N; then due west to longitude 18° 00' E; then due north to latitude 57° 00' N; then due east to the west coast of the island of Gotland; then in a northerly direction to a point on the north coast of Gotland situated at longitude 19° 00' E; then due north as far as the point of departure.

**Subdivision 29**

The waters bounded by a line drawn from a point on the east mainland coast of Sweden situated at latitude 60° 30' N and proceeding due east to the mainland coast of Finland; then in a southerly direction along the west and south coasts of Finland to a point on the south mainland coast situated at longitude 23° 00' E; then due south to latitude 59° 00' N; then due east to the mainland coast of Estonia; then in a southerly direction along the west coast of Estonia to a point situated at latitude 58° 30' N; then due west to the east coast of the island of Saaremaa; then, after passing north of the island of Saaremaa, to a point on its west coast situated at latitude 58° 30' N; then due west to longitude 19° 00' E; then due north to a point on the east mainland coast of Sweden situated at latitude 59° 41' N; then in a northerly direction along the east coast of Sweden as far as the point of departure.

**Subdivision 30**

The waters bounded by a line drawn from a point on the east coast of Sweden situated at latitude 63° 30' N and proceeding due east to the mainland coast of Finland; then in a southerly direction along the coast of Finland to a point situated at latitude 60° 30' N; then due west to the mainland coast of Sweden; then in a northerly direction along the east coast of Sweden as far as the point of departure.

**Subdivision 31**

The waters bounded by a line drawn from a point on the east coast of Sweden situated at latitude 63° 30' N and proceeding, after passing north of the Gulf of Bothnia, to a point on the west mainland coast of Finland situated at latitude 63° 30' N; then due west as far as the point of departure.

**Subdivision 32**

The waters bounded by a line drawn from a point on the south coast of Finland situated at longitude 23° 00' E and proceeding, after passing east of the Gulf of Finland, to a point on the west coast of Estonia situated at latitude 59° 00' N; then due west to longitude 23° 00' E; then due north as far as the point of departure.

## ANNEX II

**Trawls, Danish seines and similar gear:  
mesh size ranges, target species and required catch percentages applicable**

Target species	Mesh size range (mm)						
	< 16	16 ≤ and < 32	16 ≤ and < 105	32 ≤ and < 90	32 ≤ and < 105	≥ 90 <sup>(1)</sup>	≥ 105 <sup>(2)</sup> (3)
	Groups of subdivisions						
	22-32	22-27	28-32	22-23	24-27	22-23	22-32
	Minimum percentage of target species						
	90 <sup>(1)</sup>	90 <sup>(1)</sup> (2)	90 <sup>(1)</sup>	90 <sup>(1)</sup> (4)	90 <sup>(1)</sup> (4)	90	100
Sand eels ( <i>Ammodytidae</i> )	*	*	*	*	*	*	*
Sprat ( <i>Sprattus sprattus</i> )		*	*	*	*	*	*
Herring ( <i>Clupea harengus</i> )			*	*	*	*	*
Sole ( <i>Solea vulgaris</i> )						*	*
Plaice ( <i>Pleuronectes platessa</i> )						*	*
Whiting ( <i>Merlangius merlangus</i> )						*	*
Brill ( <i>Scophthalmus rhombus</i> )						*	*
Dab ( <i>Limanda limanda</i> )						*	*
Flounder ( <i>Platichthys flesus</i> )						*	*
Lemon sole ( <i>Microstomus kitt</i> )						*	*
Turbot ( <i>Psetta maxima</i> )						*	*
Cod ( <i>Gadus morhua</i> )							*

(1) The catch retained on board shall consist of no more than 3 % of cod by live weight.

(2) Only trawls, Danish seines and similar gears with Bacoma exit window or with T90 codend and extension piece with mesh size and specifications as laid down in Appendices I and II shall be authorised.

(3) The use of beam trawl shall not be authorised.

(4) The catch retained on board may consist of up to 40 % of whiting by live weight.

(5) The catch retained on board may consist of up to 45 % of herring by live weight.

## Appendix 1

**Specifications of top window codend BACOMA****1. Description***(a) Identification of window*

(i) The window shall be a rectangular section of netting in the codend. There shall be only one window.

*(b) Size of the codend, extension piece and the rear end of the trawl*

(i) The codend shall be constructed of two panels, joined together by selvages one on each side of equal length.

(ii) The minimum mesh size of the diamond meshes shall be 105 mm. The material of the yarn shall be of polyethylene threads with a single twine thickness of no more than 6 mm or with double twine thickness of no more than 4 mm respectively.

(iii) The use of codends and extension pieces which are made of only one piece of net material and have only one selvage shall be prohibited.

(iv) The number of open diamond meshes, excluding those in the selvages, at any point on any circumference of any extension piece shall not be less or more than the maximum number of meshes on the circumference of the front end of the codend (Figure 1).

*(c) Location of window*

(i) The window shall be inserted into the top panel of the codend (Figure 2).

(ii) The window shall terminate not more than four meshes from the codline, inclusive of the hand-braided row of meshes through which the codline is passed (Figure 3 or 4).

*(d) Size of window*

(i) The width of the window, expressed in number of mesh bars, shall be equal to the number of open diamond meshes in the top panel divided by two. If necessary, it will be allowed to maintain at the most 20 % of the number of open diamond meshes in the top panel divided evenly on the both sides of the window panel (Figure 4).

(ii) The length of the window shall be at least 3,5 m.

(iii) By way of derogation from point ii the length of the window shall be at least 4 m if a sensor dedicated to the measurement of the volume of the catches is attached to the window.

*(e) Netting of window*

(i) The meshes shall have a minimum mesh opening of 110 mm. The meshes shall be square meshes i.e. all four sides of the window netting will be cut all bars.

(ii) The netting shall be mounted such that the bars run parallel and perpendicular to the length of the codend. The netting shall be knotless braided single twine or netting with similar proven selective properties. Knotless netting means netting which is composed of meshes of four sides in which the corners of the meshes are formed by the interweaving of the twines of two adjacent sides of the mesh.

(iii) The diameter of the single yarn shall be at least 5 mm.

*(f) Other specifications*

(i) The mounting specifications are defined in Figures 3 and 4.

(ii) The length of the lifting strap shall not be less than:

1. 4 m for a codend of circumference of between 100 and 89 diamond meshes measured in front of the window;

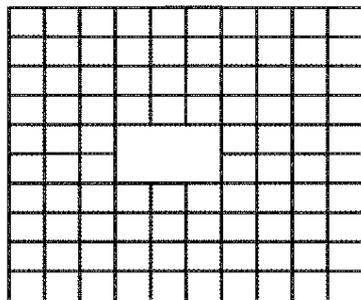
2. 3,5 m for a codend of circumference between 88 and 75 diamond meshes measured in front of the window and;
  3. 3 m for a codend of circumference of less than 75 diamond meshes measured in front of the window.
- (iii) A back strap shall not encircle the BACOMA exit window. It shall be made of rope not more than 20 mm in diameter and be at least 2 m long.
  - (iv) A codend buoy shall be spherical in shape and have a maximum diameter of 40 cm. It shall be fastened through the buoy rope to the cod line.
  - (v) A flapper shall not overlap the BACOMA exit window.

## 2. Conditions for the repair of square mesh panels

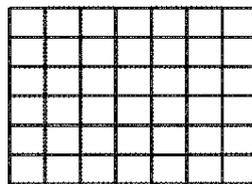
### (a) General conditions

- (i) The use of a square mesh BACOMA exit window which has 10 % or more meshes repaired shall be prohibited.
- (ii) Square meshes which have been damaged shall be repaired according to the prescribed method.
- (iii) A repaired mesh is any mesh where the mesh opening is reduced by a repair of damaged meshes or by the joining of two pieces of knotless square mesh netting.

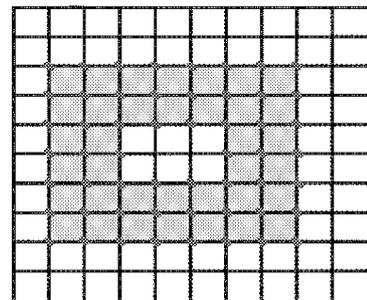
### (b) Method for repairing the damaged meshes in the BACOMA exit window



Punch



Patch



Repaired net with double meshes

- (i) Clean the hole.
- (ii) Count the meshes to be replaced. Prepare a patch using knotless braided single twine that is the same material, diameter and strength of the net needing to be patched.
- (iii) The patch should be no more than two meshes larger in each direction than the cleaned-up hole to provide sufficient netting to overlap the edges of the hole.
- (iv) Lay the patch over the hole and lace it to the existing netting using braided twine, as shown in the illustration.
- (v) Make sure to lace the crosses of the netting together.
- (vi) Continue lacing around the hole so that you have at least two rows of lacing around the patch.
- (vii) The patched hole will resemble the above illustration when finished.

Figure 1

Trawl gear can be divided into three different sections according to shape and function. The trawl body is always a tapered section. The extension piece is an untapered section normally manufactured of either one or two pieces of nets. The codend is also an untapered section often made of double twine in order to have a better resistance against heavy wearing. The part below the lifting strap is called lifting bag.

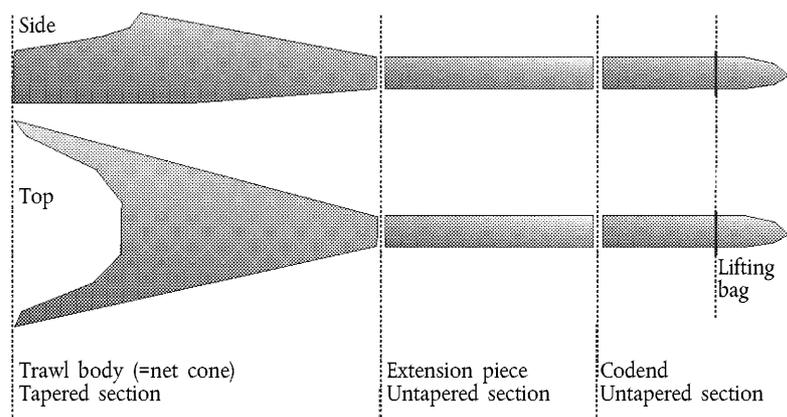


Figure 2

- A Extension piece
- B Codend
- C Escape window, square mesh panel
- 1 Upper panel, maximum 50 open diamond meshes
- 2 Lower panel, maximum 50 open diamond meshes
- 3 Selvedges
- 4 Joining round or lacing
- 5 Lifting strap
- 6 Back strap
- 7 Codline
- 8 Distance of window from codline (Figures 3 and 4)
- 9 Buoy rope
- 10 Codend buoy

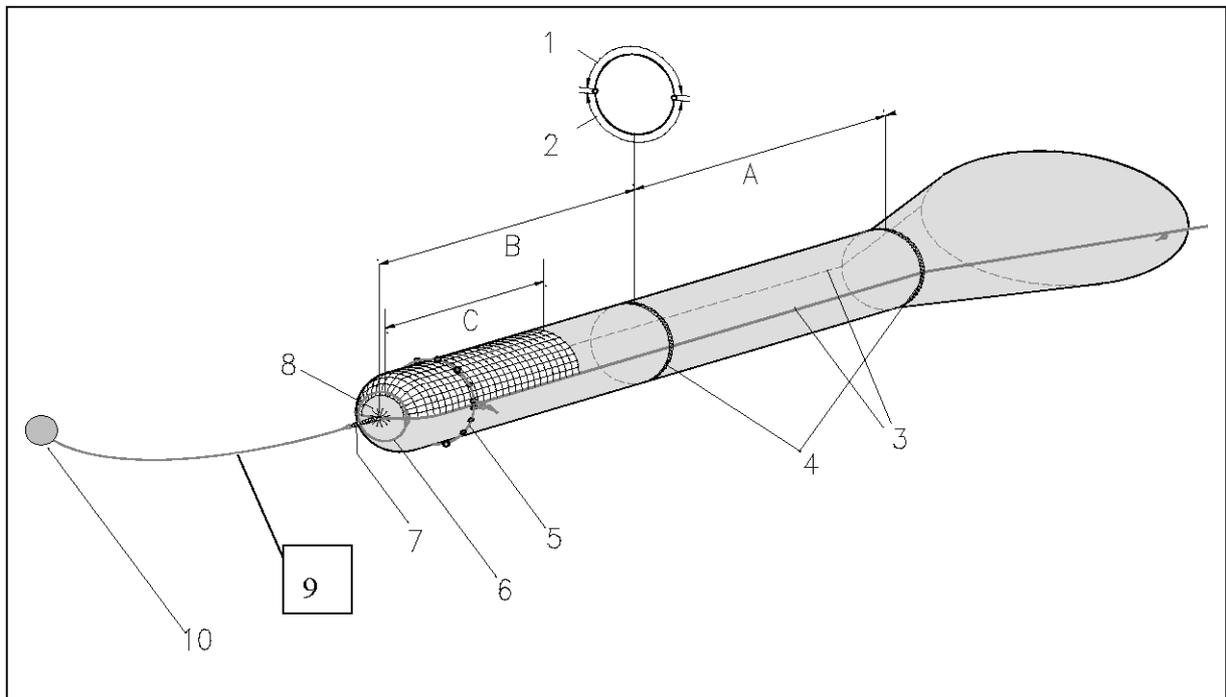


Figure 3

## MOUNTING OF WINDOW PANEL

- A 110 m square mesh panel (25bars)
- B Joining of square mesh panel to selvedge
- C Joining of square mesh panel to diamond mesh net, except edge bars of window from both sides  
Two diamond meshes/one bar in a square mesh
- D 105 mm diamond mesh net (maximum 50 open meshes)
- E Distance of the window panel from the codline. The window shall terminate not more than four meshes from the codline, inclusive of the hand-braided row of meshes through which the codline is passed
- F One row of hand-braided codline meshes

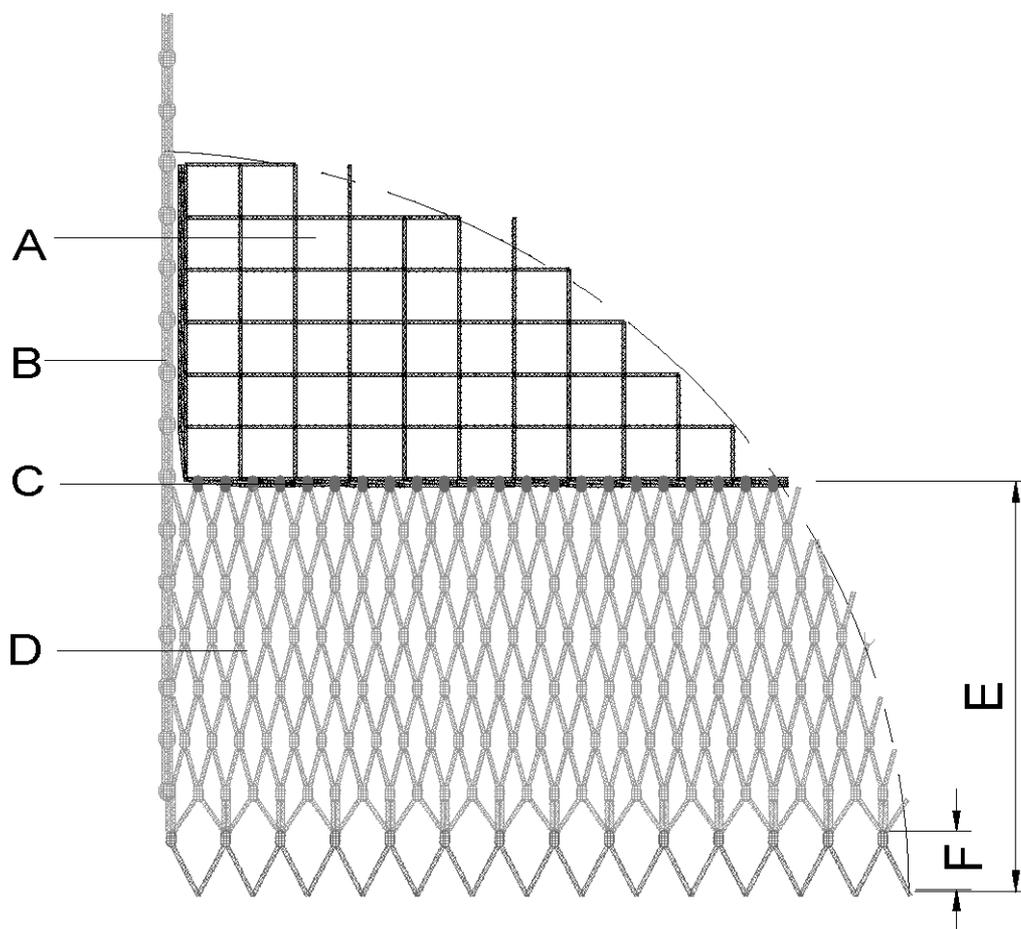
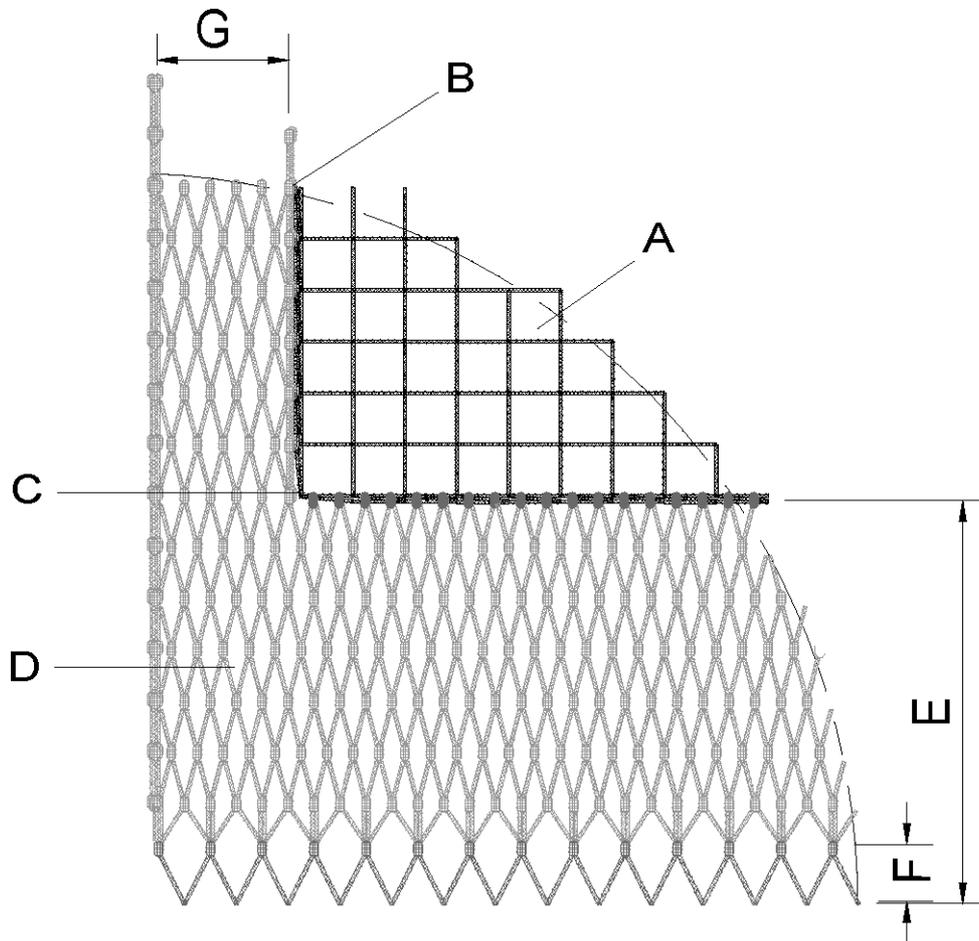


Figure 4

## MOUNTING OF WINDOW PANEL

- A 110 mm square mesh panel (20 bars)
- B Joining of square mesh panel to selvedge
- C Joining of square mesh panel to diamond mesh net, except edge bars of window from both sides  
2 diamond meshes/1 bar in a square mesh
- D 105 mm diamond mesh net (max 50 open meshes)
- E Distance of the window panel from the codline. The window shall terminate not more than 4 meshes from the codline, inclusive of the hand-braided row of meshes through which the codline is passed
- F One row of hand-braided codline meshes
- G Maximum 10 % in both sides of open meshes D



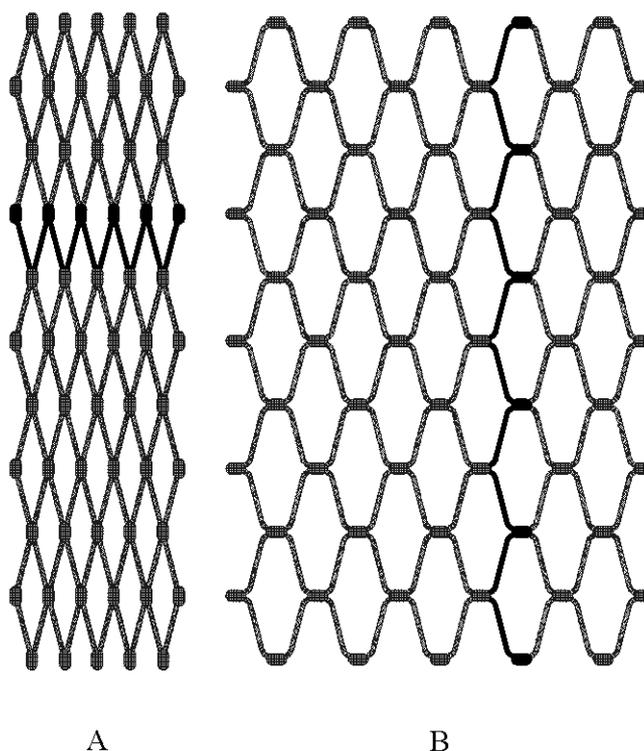
## Appendix 2

## SPECIFICATIONS OF THE TRAWL

## (a) Definition

1. T90 trawls are defined as trawls, Danish seines and similar gears having a codend and extension piece produced from diamond knotted netting turned 90° so that the main direction of run of the netting twine is parallel to the towing direction.
2. The direction of run of the netting twine in a standard diamond knotted net (A) and in a net turned 90° (B) is illustrated in Figure 1 below.

Figure 1



## (b) Mesh size and measurement

The mesh size shall be at least 110 mm. By way of derogation from Article 5(1) of Regulation (EC) No 129/2003, the mesh size in the codend and the extension piece shall be measured perpendicular to the longitudinal axis of the fishing gear.

## (c) Twine thickness

The material of the yarn of the codend and the extension piece shall be of polyethylene threads with a single twine thickness of no more than 6 mm or with double twine thickness of no more than 4 mm respectively. This provision shall not apply to the rear most row of meshes in the codend if fitted with a codline.

## (d) Construction

1. A codend and extension of turned meshes (T90) shall be constructed from two panels of equal dimensions, with the same number of meshes in width and length, and with the mesh orientation described above, joined by two lateral selvages. Each panel shall be constructed with non-slip knots and in such a way that the meshes remain fully open at all times when in use.
2. The number of open meshes in any circumference must be constant from the front part of the extension to the rear most part of the codend.

3. At the point of attachment of the codend or extension piece to the tapered part of the trawl, the number of meshes in circumference of the codend or extension piece must be 50 % of the last row of meshes of the tapered part of the trawl.

4. A codend and extension piece is illustrated in Figure 2 below.

(e) **Circumference**

The number of meshes in any circumference in the codend and the extension piece, excluding joinings and selvages shall be no more than 50.

(f) **Joining rounds**

The forward edge of the panels composing both codend and extension piece shall be fitted out with a braided row of half meshes. The aft edge of codend panel shall be fitted out by a full row of braided meshes able to guide the codline.

(g) **Lifting strap**

The length of the lifting strap shall be no less than 3,5 m.

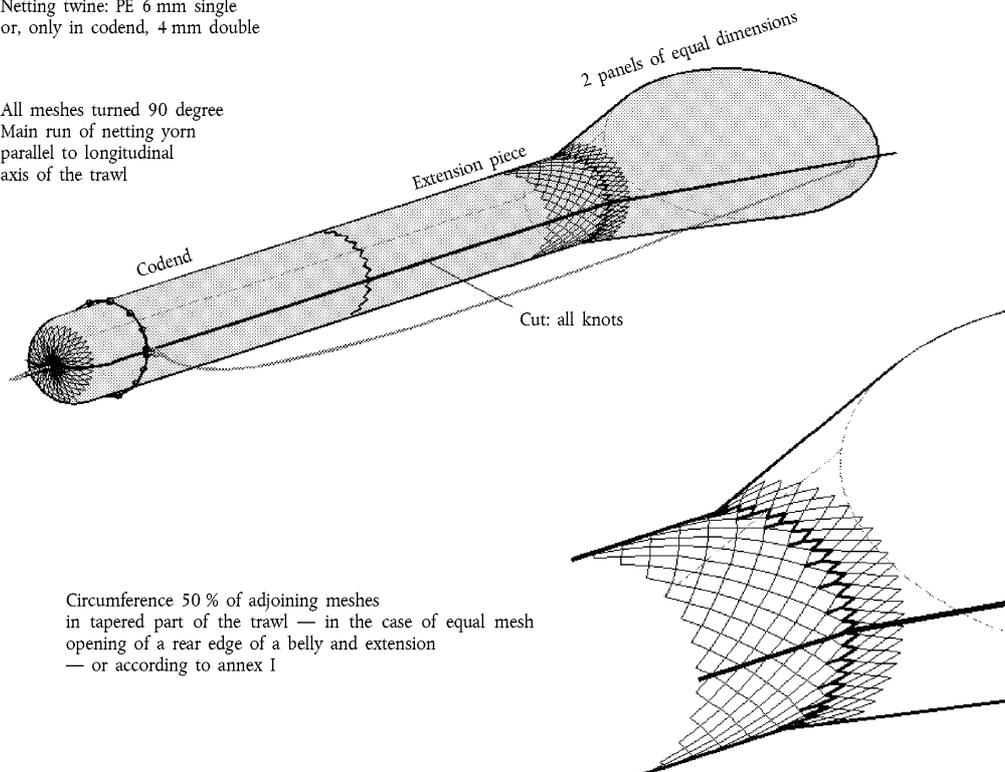
(h) **Codend buoy**

A codend buoy shall be spherical in shape and have a maximum diameter of 40 cm. It shall be fastened through the buoy rope to the codline.

**Figure 2**

Netting twine: PE 6 mm single  
or, only in codend, 4 mm double

All meshes turned 90 degree  
Main run of netting yarn  
parallel to longitudinal  
axis of the trawl



Circumference 50 % of adjoining meshes  
in tapered part of the trawl — in the case of equal mesh  
opening of a rear edge of a belly and extension  
— or according to annex I

## ANNEX III

## Gillnets, entangling nets and trammel nets: mesh size ranges and target species

Target species	Mesh size range (mm)				
	16 ≤ and < 110	32 ≤ and < 110	90 ≤ and < 156 <sup>(1)</sup>	110 ≤ and < 156	≥ 157
	Groups of subdivisions				
	28-32	22-27	22-23	22-32	22-32
	Minimum percentage of target species				
Sprat ( <i>Sprattus sprattus</i> )	90 <sup>(1)</sup>	90 <sup>(1)</sup>	90	90	100
Herring ( <i>Clupea harengus</i> )	*	*	*	*	*
Sole ( <i>Solea vulgaris</i> )	*	*	*	*	*
Plaice ( <i>Pleuronectes platessa</i> )			*	*	*
Whiting ( <i>Merlangius merlangus</i> )			*	*	*
Brill ( <i>Scophthalmus rhombus</i> )			*	*	*
Dab ( <i>Limanda limanda</i> )			*	*	*
Flounder ( <i>Platichthys flesus</i> )			*	*	*
Lemon sole ( <i>Microstomus kitt</i> )			*	*	*
Turbot ( <i>Psetta maxima</i> )			*	*	*
Cod ( <i>Gadus morhua</i> )			*	*	*
Salmon ( <i>Salmo salar</i> )					*

<sup>(1)</sup> The catch retained on board shall consist of no more than 3 % of cod by live weight.

<sup>(2)</sup> Such range of mesh size shall be admissible until 30 June 2006.

## ANNEX IV

**Minimum landing sizes**

Species	Geographical area	Minimum size
Cod ( <i>Gadus morhua</i> )	Subdivisions 22-32	38 cm
Flounder ( <i>Platichthys flesus</i> )	Subdivisions 22 to 25	23 cm
	Subdivisions 26 to 28	21 cm
	Subdivisions 29 to 32, south of 59° 30' N	18 cm
Plaice ( <i>Pleuronectes platessa</i> )	Subdivisions 22 to 32	25 cm
Turbot ( <i>Psetta maxima</i> )	Subdivisions 22 to 32	30 cm
Brill ( <i>Scophthalmus rhombus</i> )	Subdivisions 22 to 32	30 cm
Eel ( <i>Anguilla anguilla</i> )	Subdivisions 22 to 32	35 cm
Salmon ( <i>Salmo salar</i> )	Subdivisions 22 to 30 and 32	60 cm
	Subdivision 31	50 cm
Sea trout ( <i>Salmo trutta</i> )	Subdivisions 22 to 25 and 29 to 32	40 cm
	Subdivision 26 to 28	50 cm

## ANNEX V

## Correlation table

Council Regulation (EC) No 88/98	This Regulation
Article 1	Article 1
Article 2	—
Article 3(1) and (2)	Article 14
Article 3(3)	Article 15(1)
Article 3(4)	—
Article 3(5)	—
Article 4	—
Article 5(1) and (3)	Article 3
Article 5(2)	—
Article 6	Article 11
Article 7	Article 5
Article 8(1)	Article 13(1)
Article 8(2)	Article 13(2)
Article 8(3)	Article 16
Article 8(4)	Article 13(3)
Article 8a	Article 9
Article 8b	Article 10
Article 9(1)	Article 17
Article 9(2)	Article 8(1)
Article 10(1)	—
Article 10(2)	Article 23(1)
Article 10(3)	—
Article 10(4)	—
Article 11	Article 24
Article 12	Article 25
Article 13	Article 26
Article 14	Article 28
Article 15	Article 31
Article 16	Article 32
Annex I	Annex I
Annex II	—
Annex III	Annex IV
Annex IV	Annexes II and III
Annex V	Appendix 1 to Annex II
Annex VI	Annex V



## DOCUMENTATION PAGE

<i>Publisher</i>	Ministry of the Environment Land Use Department			<i>Date</i> September 2006
<i>Author(s)</i>	Ministry of the Environment: Working group of Ministry of the Environment on the harbour porpoise			
<i>Title of publication</i>	<b>Tumlaren i Finland. Förslag till åtgärder för skydd av tumlaren i Finland</b> (The harbour porpoise in Finland. Suggested actions for the protection of the harbour porpoise in Finland)			
<i>Publication series and number</i>	The Finnish Environment 40sv/2006			
<i>Theme of publication</i>	Nature			
<i>Parts of publication/ other project publications</i>				
<i>Abstract</i>	<p>The goal of the working group has been to develop an operating plan regarding Finland's approach to harbour porpoise conservation, as mandated by international and national conservation obligations for the species. General information about the harbour porpoise, and its habitat and characteristics are provided, and its occurrence in Finland since the mid 1800's. A harbour porpoise registry for the Finnish Environment Institute has been compiled from this information.</p> <p>The harbour porpoise has been observed in Finnish waters for at least 7000 years. Information about the occurrence of the harbour porpoise since the 1800's has been gathered from sightings reported in the Museum of Natural History archives, literature, news paper articles and collections of specimens. Based on these findings, the harbour porpoise has, before the 1940's, been a fairly common sight on Finnish coasts. The advent of particularly harsh weather conditions during the winters of the 1940's on the Baltic Sea resulted in a crash in the harbour porpoise population. Since then, the revival of the harbour porpoise population has been hindered by environmental toxins, a decrease in the quality of their habitats and by the species being accidentally caught in fishing nets. Underwater noise pollution and increased marine traffic are other factors that may inhibit the reviving of the harbour porpoise population.</p> <p>In 2001, Finland's Ministry of the Environment started a harbour porpoise sighting campaign, and as a result, sightings of the species have indeed increased. This does not imply, however, that the number of harbour porpoises is increasing. Rather, it is likely that people report their sightings more readily than before.</p> <p>The harbour porpoise is classified as a threatened species world wide. Under EU legislation, whales, including harbour porpoises, are listed in annex IV of the Habitats Directive, and are thus classified as a species in need of special protection. Additionally, the species is protected under various international environmental conservation agreements. The purpose of the ASCOBANS Agreement is to protect the small whales that inhabit the Baltic and North seas, This agreement includes a specific plan, the Jastarnia Plan, for the reviving of the Baltic harbour porpoise.</p> <p>Under Finland and Åland's legislation, the harbour porpoise is a protected species. Lately, the species has not been examined in reports by the Ministry of the Environment because there has been no evidence of its increase in Finland. Based on information collected for this study, the harbour porpoise may have increased in numbers also in Finnish territorial waters. The working group maintains that the assessment of the harbour porpoises' endangered status should be reviewed.</p> <p>The report presents different ways in which the protection of the harbour porpoise can be furthered in Finland. The working group holds to the importance of surveying the occurrence of harbour porpoises in Finland's territorial waters, and to participating in international research projects related to the species. Some of the species' protection action is based on EU legislation. This is true, for example, for fishing restrictions and monitoring programs. Additional ways of increasing publicity to raise harbour porpoise awareness are also suggested.</p>			
<i>Keywords</i>	harbour porpoise, <i>Phocoena phocoena</i> , toothed whale, harbour porpoise protection, ASCOBANS Agreement, Jastarnia Plan, harbour porpoise registry, fishing tackle entanglement, accidental whale by-catch			
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**Suggested discussion points for the re-evaluation of the Jastarnia Plan  
as determined during the third meeting of the Jastarnia Group  
in Copenhagen on 21 February 2007**

1. Define the area covered by the Jastarnia Plan under 2. "Objectives".
2. Update 3. "Background" and 4. "Status of the population(s)" by including new scientific results.
3. Include new (short) background chapters on:
  - a. fishing effort (including trends and Regulation (EC) 812/2004)
  - b. population structure
  - c. developing alternative fishing gear (ban of drift-netting already achieved)
  - d. marine protected areas (inc. Habitats Directive and HELCOM-BSPAs)
  - e. raising public awareness (recent achievements stressing the International Day of the Baltic Harbour Porpoise)
  - f. collaboration.
4. Suggest better cooperation with fishermen and suggest representation in fisheries organisations and vice versa.
5. Remind Parties to provide the essential data on set-netting effort through their national focal points.
6. Include the request for by-catch information to estimate total by-catch in chapter 5.iii "Compile standardised data on fishing effort".
7. Pingers should be requested in chapter 5.iv "Implement a pinger programme on a short-term basis" irrespective of vessel size (to address the problem by any means possible). Interactive pingers should be used/suggested in areas of seal conflict to increase the acceptance of pingers. Also, delete the first bullet point ("Modelling the sound propagation of pingers in the Baltic") as this has been done, and pingers are likely to work as well there as elsewhere.
8. Mention the existence and the requests of Resolutions No. 5 and No. 9 of MOP5.
9. Rephrase the paragraph on "cost-effectiveness" under 5.iv. on page 12.
10. Chapter 5. B. "Research and Monitoring" so far contains three bullet points:
  - a. re-phrase the second bullet point to include an international project with wide coverage using static acoustic monitoring to obtain trend data
  - b. introduce new bullet point: "Develop seal-proof interactive pingers"
  - c. introduce new bullet point: "Monitoring by-catch"
  - d. introduce new bullet point: "Effect of pingers" (inc. habituation and habitat exclusion)
  - e. natural habitat selection.

11. In the first bullet point under 5. D. "Public Awareness", delete the last part of the sentence after the comma ("...", possibly using as a model the Danish programme 'Look out for Whales and Dolphins in Danish Waters'.").
12. Introduce a new bullet point requesting assistance to establish an interactive Baltic porpoise web page for the storage of GIS-based data.
13. In the second paragraph of 5. E. "ASCOBANS Cooperation with Other Bodies" insert "the Regional Advisory Committee (RAC)" to replace "the International Baltic Sea Fisheries Commission (IBSFC)".
14. Rephrase the third paragraph of 5. E. "ASCOBANS Cooperation with Other Bodies" regarding HELCOM and EU and eliminate all mention of "IBSFC".
15. Update the reference list and cite new literature in the text (cf. point 2).