



Birdlife position on the New Technical Measures Framework

1. Introduction

As part of the Common Fisheries Policy (CFP) reform, the Commission is developing a proposal for a new over-arching framework for the conservation of fishery resources through technical measures for the protection of marine organisms, covering the North Sea and Atlantic and replacing Regulation 850/1998 and related regulations.

According to the Commission's Oct 2012 roadmap¹, its proposal must '*ensure the protection of marine biological resources and the reduction of the impact of fishing activities on fish stocks and on marine eco-systems. It must also be clearly aligned with other elements of the CFP regulation, e.g. multiannual plans and the discard policy as well as environmental conservation legislation including the Habitats Directive, the Birds Directive and the Marine Strategy Framework Directive (MSFD) (2008/56).*'

The technical measures in the Mediterranean and Baltic Seas are foreseen to be compatible with the new measures proposed for the North Sea and Atlantic. In addition, the EU should continue to promote the adoption of new and improved technical measures for the protection of marine resources within RFMOs, applicable to EU vessels fishing in these international waters.

A significant interaction that has mostly escaped the attention of statutory technical measures is the incidental catch of seabirds. The EU Plan of Action (EU-PoA) for reducing incidental catches of seabirds in fishing gears (COM(2012)665final²; see 3.2, below for details) states that '*available data indicates seabird mortality is substantial in a number of areas within EU fisheries. Recent estimates report bycatch by the EU fishing fleet at ca 200,000 seabirds annually in EU waters*' (one estimate indicates that Baltic Sea fisheries alone may inflict mortality on this scale: see 6.1 below).

In this paper, BirdLife Europe submits its recommendations for reducing seabird bycatch for consideration in the Commission's forthcoming proposal for a new technical measures framework. Specific recommendations are made for the North Sea and Atlantic, along with reflection on harmonisation with the other EU sea basins.

¹ http://ec.europa.eu/governance/impact/planned_ia/docs/2013_mare_002_tm_protection_marine_organisms_en.pdf

² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0665:FIN:EN:PDF>

2. Summary of BirdLife recommendations

BirdLife would strongly welcome:

- a strong framework for environmental integration provided by the reformed CFP;
- the Commission's intent to give full expression to this in a new technical measures framework which is fully aligned with the Birds and Habitats Directives and the achievement and maintenance of good environmental status under the Marine Strategy Framework Directive;
- the approach of a new overarching horizontal framework regulation with specific chapters for different sea basins, and the aim of aligning technical measures between them.

In the context of the legal commitment to an enhanced ecosystem-based approach to fisheries and the new EU Seabird Plan of Action, there is an unprecedented mandate for the inclusion of seabird bycatch mitigation measures in the horizontal framework with measures tailored to different métiers in the respective EU regional seas, at both global and site-specific (especially Natura 2000) spatial scales.

In the new technical measures framework, BirdLife urges the Commission to propose 10 horizontal elements, namely:

- i. For mitigating seabird bycatch, define terms such as bird-scaring/tori line, line weighting/integrated weight longlines and night-setting and, as appropriate, variations in longline fishing associated with such measures, especially bottom-set (or demersal) longline and pelagic longline.
- ii. Ensure under multiannual plans the inclusion of specific technical measures to assist the achievement of maximum sustainable yield of the relevant fisheries by 2015, and to minimize adverse impacts on the wider marine ecosystem.
- iii. Application of technical measures should be in accordance with, respectively, a precautionary approach and an ecosystem-based approach to fisheries management, in keeping with relevant environmental legislation, namely the Birds and Habitats Directives and the Marine Strategy Framework Directive.
- iv. Subject to risk analysis for seabird bycatch, pelagic longline fisheries in the region covered by this Regulation shall apply ICCAT measures for seabird bycatch reduction.
- v. Appropriate technical measures contributing to the achievement of the conservation objectives of designated Natura 2000 sites shall be adopted as a pre-condition of access to fishing opportunities in those areas and subject to appropriate assessment as necessary.
- vi. Appropriate technical measures contributing to maintaining or restoring the favourable conservation status of other MPAs (e.g. OSPAR) and Important Bird Areas (IBAs) shall be adopted as a pre-condition of access to fishing opportunities in those areas.
- vii. Bottom trawls and others gears with potentially adverse impact should be excluded from SACs proportionate to the sensitivity of the qualifying feature(s), risk assessment and the conservation objectives of the site.
- viii. Bottom trawls and others gears with adverse impact on the benthos should be excluded from all reef SACs.
- ix. Where there is significant bycatch conflict with seabirds, and in the absence of effective deterrents (notably pingers) or modifications of the gear, gill-nets and other static gears should either be subject to spatial and/or temporal bans during periods of highest risk or else there should be transition to alternative fishing gears

(e.g. fish-traps) with proven negligible impact on birds.

- x. Where the application of technical measures, particularly area closures, is likely to lead to the displacement of fisheries, additional measures should be taken to mitigate any transfer of potentially damaging fishing effort to other sensitive areas.

A number of specific recommendations for implementing technical measures are made in respect of:

- Area closure for sandeel fishing in the North Sea
- SPA Frisian Front gill-net fishery
- The Gran Sol demersal longline fishery for hake

For data-poor regions fisheries recommendations are made for bycatch of:

- Balearic Shearwaters in purse seines in Portugal
- 'Iberian' guillemot in gill-nets in NW Spain
- Common Guillemot in W France

The status of incidental bycatch of seabirds and other taxa in other sea basins (Baltic Sea, Mediterranean Sea, Black Sea) is briefly described.

With regard to control measures related to the implementation of technical measures, BirdLife considers it necessary to implement adequate levels of observer coverage or remote monitoring technology for monitoring seabird bycatch in order to provide representative data, to verify efficacy of prescribed mitigation measures and to inform their further development. BirdLife and other eNGOs also strongly promote inclusion of a requirement to include data collection on bycatch of seabirds and other non-target species in the revision of the EU Multi-Annual Plan for Data Collection (2014-2020) in order to generate the necessary monitoring and reporting.

3. The environmental dimension

3.1 The legal framework

We welcome the growing alignment and coherence across EU fisheries and environmental legislation in respect of extending the scope of technical measures to address taxa other than commercial fish species. The Commission's intent to align the new technical measures framework with, respectively, the Habitats Directive, the Birds Directive, and the Marine Strategy Framework Directive is indicative of this.

The Commission's 2011 proposal for a new basic regulation on fisheries referred (Art 14) to a specific technical measures framework which would:

(a) contribute to maintaining or restoring fish stocks above levels capable of producing maximum sustainable yield through improvements in size-selection and where appropriate species selection;

(b) reduce catches of undersized individuals from fish stocks;

(c) reduce catches of unwanted marine organisms;

(d) mitigate the impact of fishing gear on the ecosystem and the environment, with particular regard to the protection of biologically sensitive stocks and habitats.

In relation to (c) and (d) above, Art 7 of the compromise text³ on CFP reform is explicit in the specifying ecosystem-based technical measures, notably:

2(b)(i): modifications or additional devices to improve selectivity or to minimise the negative impact on the ecosystem;

2(b)(ii): modifications or additional devices to reduce the incidental capture of endangered, threatened and protected species, as well as other unwanted catches;

2(e): specific measures to minimise the negative impact of fishing activities on marine biodiversity and marine ecosystems, including measures to avoid and reduce as far as possible unwanted catches.

In the new basic regulation (Art 5, 14), we also note the unprecedented environmental scope of the definition of technical measures, namely ‘measures that regulate the species composition, size composition of catches and *impacts on components of the ecosystems* resulting from *fishing activities* through conditioning the use and structure of fishing gear and restriction of access to fishing areas;’

Aligned with this, and in the context of the Integrated Maritime Policy, is the Commission’s proposal⁴ on the European Maritime and Fisheries Fund (EMFF). Relevant here is Preamble 9: ‘*contribute to the protection of the marine environment as set out in the Directive 2008/56/EC... (Marine Strategy Framework Directive).*’ In pursuit of this, the EMFF (Preamble 42) should also ‘*support the reduction of the impact of fishing on the marine environment in particular through the promotion of eco innovation, more selective gears and equipment as well as measures aiming at protecting and restoring marine biodiversity and ecosystems and the services they provide, in line with the EU Biodiversity Strategy to 2020.*’ The EMFF may thus support investments in equipment for ‘*reducing unwanted catches of commercial stocks or other by-catches*’ (Art 36, 1b), and support ‘*management, restoration and monitoring NATURA 2000 sites*’ (Art 38, 1d) and other marine protected areas in the context of the MSFD (Art 38,1e).

STECF’s (July 2013) review⁵ of the data collection framework (DC-MAP) lends strong support to EMFF support for the development of measures designed to mitigate the impact of fisheries on ‘*non-fisheries protected species (including for example marine mammals, birds, marine turtles, sharks)*’. STECF takes the view that, once fisheries have been identified which incur significant bycatch of – and therefore have ‘*high impact*’ on – such non-target species, financial resources under the EMFF could be allocated to:

‘(a) fund studies on mitigation measures, (b) monitor the effectiveness of such mitigation measures, and (c) to assist fishers in allocating increased resources to the use of more environmentally fishing gears.’

³ http://cfp-reformwatch.eu/wp-content/uploads/2013/06/2013-06-14_Basic_regulation_on_the_CFP_final_compromise_text.pdf

⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0245:FIN:EN:PDF>

⁵ http://stecf.jrc.ec.europa.eu/documents/43805/544890/2013-07_STECF+13-12+-+Review+of+DC-MAP+part+2_JRC83566.pdf

3.2 EU Seabird Plan of Action

The Commission has adopted a Plan of Action (EU-PoA) for reducing incidental catches of seabirds in fishing gears (COM(2012)665final) in response to advice from ICES that there is a significant problem of seabird bycatch in EU waters. Fishing gears inflict mortality on a number of endangered, threatened and protected species, including the Critically Endangered Balearic shearwater *Puffinus mauretanicus*. This species and indeed all the other victims of bycatch in EU waters are protected by the EU Birds Directive.

The EU-PoA breaks new ground in being the first PoA under the FAO's IPOA-Seabirds to follow the FAO's Best Practice Technical Guidelines⁶ for reducing seabird bycatch in fishing gears. In so doing, the EU-PoA addresses all fishing gears (not just longlines) which incur seabird bycatch, and is also notable in addressing not only EU waters but also external waters wherever EU-flagged vessels operate.

The Objective of the EU-PoA goes further than 'reducing', rather it requires '*to minimize and, where possible, eliminate the incidental catches of seabirds, with priority action focusing on individuals belonging to at least 49 threatened species of seabird populations by EU vessels operating in EU and non-EU waters, as well as by non-EU vessels operating in EU waters. For other seabirds where the populations are stable but bycatch is at levels that are cause for concern, bycatch should be reduced as a first step towards bycatch elimination*'.

The strength and ambition of this objective is in keeping with the Art 5 of the Birds Directive which requires protection for all wild birds by prohibiting various acts including, most relevant to fisheries, deliberate killing or capture by any method. In legal terms, the scope of Art 5 is not only an intention to capture or kill but also an acceptance of the possibility of capture or killing. This then imposes an obligation on fishing vessels to eliminate seabird bycatch to the maximum extent possible.

Specific Objective 3 of the EU-PoA is Implementation of mitigation measures where information indicates occurrence of seabird bycatch. This recommends a number of actions, including for the Commission the overarching action to: '*Propose the incorporation of relevant mitigation measures under the technical measures regulation being developed in the context of the reform of the CFP and also ensure the inclusion of specific measures under multiannual plans, as a matter of priority where appropriate and urgently required*'.

The first action in Specific Objective 3 also specifies that '*Mitigation measures should comply with minimum technical standards as set out in BirdLife and ACAP (Agreement on the Conservation of Albatrosses and Petrels) guidelines*⁷.' (Globally, 13 countries have ratified the ACAP, including Spain, France and UK).

In the case of technical measures for mitigating incidental catch of seabirds, it is widely understood (e.g. CCAMLR, FAO) that a combination of measures and practices is generally

⁶ <ftp://ftp.fao.org/docrep/fao/011/i0459e/i0459e00.pdf>

⁷ <http://www.acap.aq/index.php/en/component/search/?searchword=mitigation%20measures&searchphrase=all&Itemid=101>

most effective at mitigation. This is also the experience of BirdLife International's Albatross Task Force (ATF⁸) which currently works with fishermen on land and at sea in 8 countries in Southern Africa and Latin America to develop and tailor the optimum combination of measures for reducing seabird bycatch while maintaining fishing efficiency and safety. In our recommendations (below), therefore, a suite of measures may be proposed, as appropriate to a particular fishery.

3.2.1 Impact Assessment of mitigation measures for seabird bycatch

In 2011, the UK Marine Resources Assessment Group (MRAG Ltd) in collaboration with Lamans and Poseidon, completed a study⁹ to assess existing mitigation measures and their effectiveness in key areas where incidental catches of seabirds have been identified as occurring, based on a study by the ICES Working Group on Seabird Ecology (WGSE 2008¹⁰, 2010¹¹). Six case study fisheries were used to explore the scale and extent of seabird bycatch, assess fishers' perception of the issue, identify existing and potential mitigation measures, and assess their cost-effectiveness.

The study concluded (§7.2.1, p. 142) that: *'Mitigation measures should be introduced and enforced as soon as possible in fisheries in which there is a likelihood that incidental catches of seabird populations are at unsustainable levels, particularly when the species caught are threatened or are being impacted by a number of different fisheries'*.

As indicated above, however, the Birds Directive requires that mitigation measures should be introduced even if these incidental catches are not occurring at levels which are unsustainable for the relevant seabird populations. In addition, the precautionary approach should apply as required by the Common Fisheries Policy.

Conclusion (3.1): In the context of the legal commitment to an enhanced ecosystem-based approach to fisheries and the new EU Seabird Plan of Action, there is an unprecedented mandate for the inclusion of seabird bycatch mitigation measures in the horizontal framework with measures tailored to different métiers in the respective EU regional seas, at both global and site-specific (especially Natura 2000) spatial scales.

4. Horizontal framework for technical measures

BirdLife supports the approach of a new overarching horizontal framework. Other than the afore-mentioned reform of the fisheries basic regulation, as well as the Habitats Directive, Birds Directive and MSFD and EMFF, we propose that the recital to this framework should also include reference to, inter alia:

⁸ http://www.rspb.org.uk/Images/atf_annual_report_2011_tcm9-319048.pdf

⁹ http://ec.europa.eu/fisheries/documentation/studies/seabirds_2011_en.pdf

¹⁰ <http://www.ices.dk/reports/LRC/2008/WGSE/WGSE2008.pdf>

¹¹ <http://www.ices.dk/reports/SSGEF/2010/WGSE10.pdf>

- COM(2012)665final. *Action plan for reducing incidental catches of seabirds in fishing gears.*
- FAO (2008) *Report of the expert consultation on best practice technical guidelines for IPOA/NPOA-Seabirds*, Bergen, Norway, 2-5 September 2008. FAO Fisheries and Aquaculture Report No. 880 (FIIT/R880(En)). Rome.
- ICCAT 2007 Commission Rec. 07-07. *Recommendation by ICCAT on reducing incidental by-catch of seabirds in longline fisheries* [entered into force June 2008].
- ICCAT 2010 Commission Rec. 10-10. *Recommendation by ICCAT to establish minimum standards for fishing vessel scientific observer programs.* [entered into force Aug 2011].
- ICCAT 2011 Commission Rec. 11-09. *Supplemental Recommendation by ICCAT on reducing incidental by-catch of seabirds in ICCAT longline fisheries* [entered into force June 2012]¹².

We propose that the revised technical measures framework should include, inter alia, the following horizontal elements:

- i. **For mitigating seabird bycatch, define terms such as bird-scaring/tori line, line weighting/integrated weight longlines and night-setting and, as appropriate, variations in longline fishing associated with such measures, especially bottom-set (or demersal) longline and pelagic longline.**
- ii. **Ensure under multiannual plans the inclusion of specific technical measures to assist the achievement of maximum sustainable yield of the relevant fisheries by 2015, and to minimize adverse impacts on the wider marine ecosystem.**
- iii. **Application of technical measures should be in accordance with, respectively, a precautionary approach and an ecosystem-based approach to fisheries management, in keeping with relevant environmental legislation, namely the Birds and Habitats Directives and the Marine Strategy Framework Directive.**

¹² Up until the 2009 Regulation (EC No 43/2009) establishing fishing opportunities for Community vessels, ICCAT seabird mitigation measures for pelagic fisheries were transposed into the annual EC regulation (see Ch XIV, Art 88 of 43/2009), as indeed were the seabird measures for other RFMOs. However, subsequent to 2009, such seabird measures have not been transposed into these Fishing Opportunities Regulations. This coincides with entry of the Lisbon Treaty which only allows quantitative limitations and related measures to be part of the Fishing Opportunities Regulation adopted by the Council each year (see article 43(3) TFEU). Nevertheless, these RFMO measures are still legally binding on EU vessels.

- iv. **Subject to risk analysis for seabird bycatch, pelagic longline fisheries in the region covered by this Regulation shall apply ICCAT measures for seabird bycatch reduction.**

- v. **Appropriate technical measures contributing to the achievement of the conservation objectives of designated Natura 2000 sites shall be adopted as a pre-condition of access to fishing opportunities in those areas and subject to appropriate assessment as necessary.**

Justification:

The Commission has provided guidance¹³ on fisheries measures for Natura 2000 sites, which includes the following: *'In order to maintain or restore the conservation status of relevant habitats or species, Member States should assess if there is a need for fisheries management measures. Whenever a Member State requests regulatory fisheries management measures in order to fulfil conservation objectives, the Commission will evaluate the request and as appropriate take the necessary measures under the Common Fisheries Policy, based on scientific advice and after broad consultation with stakeholders, especially through the (R)ACs.'*

The Impact Assessment for the EU Seabird Plan of Action (PoA) states *'A number of marine Natura2000 sites exist in the case study fisheries and throughout the EU. However, fishery management measures have not yet been adopted for all sites. The introduction of mitigation measures, gear restrictions, seasonal and temporal closures, should also concentrate on these sites.'*

The EU-PoA states that the Plan *'will be supported by the increased establishment of fishery management measures in Special Protection Areas created under the Birds Directive (Article 4).'*

Reflecting this, the Actions of the EU-PoA include: *'Progress the development and implementation of fisheries management measures to protect seabirds in designated SPAs under the Birds Directive (Article 4).'*

The EU-PoA further states that *'Demonstrable use of seabird friendly gear should be a pre-condition for access to fishing opportunities in such areas where seabirds are a qualifying feature and where bycatch threatens their favourable conservation status.'*

- vi. **Appropriate technical measures contributing to maintaining or restoring the favourable conservation status of other MPAs (e.g. OSPAR) and Important Bird Areas (IBAs) shall be adopted as a pre-condition of access to fishing opportunities in those areas.**

¹³ http://ec.europa.eu/environment/nature/natura2000/marine/docs/fish_measures.pdf

Justification:

The objective of achieving good environmental status under the MSFD calls for the establishment of a coherent network of marine protected areas which are not restricted to Natura 2000 sites but also include other areas contributing to the networks of individual Member States and of regional sea basins. The EU PoA (and its Impact Assessment) states that in addition to the need to establish measures for SPAs, *'Member States will be encouraged to adopt similar measures within the network of Important Bird Areas (IBA)¹⁴.'*

Reflecting this, the Actions of the EU-PoA include: *'Progress the development and implementation of fisheries management measures to protect seabirds in designated SPAs under the Birds Directive, in other MPAs, including those established in overseas countries and territories as well as in IBAs and extend these to the wider seas where required.'*

The introduction of mitigation measures, gear restrictions, and seasonal and other temporal closures, should therefore be considered for all relevant MPAs and IBAs, not just Natura 2000 sites.

- vii. Bottom trawls and others gears with potentially adverse impact should be excluded from SACs proportionate to the sensitivity of the qualifying feature(s), risk assessment and the conservation objectives of the site.**

- viii. Bottom trawls and others gears with adverse impact on the benthos should be excluded from all reef SACs.**

Justification

The final 'EMPAS' Report¹⁵ (p.97) concludes that *'Full exclusion of bottom trawling from all reefs has the greatest potential to achieve favourable conservation status for the habitat and its typical species. The report continues that 'If this is not practical, priority for exclusion of bottom trawling should be given to areas with high ecological importance and to those areas that have been identified as having low and/or no fishing activities.'*

- ix. Where there is significant bycatch conflict with seabirds, and in the absence of effective deterrents (notably pingers) or modifications of the gear, gill-nets and other static gears should either be subject to spatial and/or temporal bans**

¹⁴ BirdLife International (2011). Important Bird Areas factsheets. <http://www.birdlife.org>

¹⁵ <http://www.ices.dk/projects/empas/WKFMMPA08.pdf>

during periods of highest risk or else there should be transition to alternative fishing gears (e.g. fish-traps) with proven negligible impact on birds.

- x. Where the application of technical measures, particularly area closures, is likely to lead to the displacement of fisheries, additional measures should be taken to mitigate any transfer of potentially damaging fishing effort to other sensitive areas.

5. Specific Technical Conservation Measures for regional seas

5.1 Atlantic and North Sea

5.1.1 Maintenance of the area closure for sandeel fishing in the North Sea

The proposal (COM(2012) 298 final) to amend 850/98 argues (p. 6, §8) that *'In the light of advice from STECF linking low sandeel availability to the poor breeding success of kittiwakes, an area closure in ICES Subarea IV should be maintained.'*

BirdLife Rec: We strongly support long-term maintenance of the current area closure to sandeel fishing.

Justification

According to the UK Joint Nature Conservation Committee (JNCC)¹⁶, the Black-legged Kittiwake *Rissa tridactyla*, whose changing status is most closely linked to sandeel abundance and which triggered the establishment of the closed area in the North Sea in 2000, experienced a 41% decline in abundance in the UK between 2000 and 2011. Most of this was driven by declines on the North Sea coast of Scotland where the index of abundance has declined steadily since the late 1980s, reaching the lowest point yet recorded in 2011. JNCC concludes that *'It seems likely, given the declining trend in productivity [of kittiwake] recorded in Scotland since 1986, coupled with falling [adult] survival rate, that the decline will continue'*.

5.1.2 Gill-net fishery on SPA Frisian Front

BirdLife Rec: We support the Dutch Government's proposal (and endorsing advice from ICES¹⁷) for a ban on gill-netting on the Frisian Front from June-Nov (inclusive).

¹⁶ <http://jncc.defra.gov.uk/page-2889>

¹⁷ http://www.ices.dk/committe/acom/comwork/report/2012/Special%20Requests/NL_Frisian_Front.pdf

Justification

The SPA Frisian Front (awaiting designation) in the North Sea is an area of high productivity, lying roughly 75 km to the north of Den Helder and occupying ~ 2,880 km². The Front lies in the transition area between the shallow sandy grounds of the Southern North Sea and the deeper muddy bottoms of the Oystergrounds. Here, the sea floor drops 10 – 15m in a relatively short distance and there is separation between various water masses, generating significant nutrient loads and plankton production. This supports high abundance of small pelagic fish in late summer, in turn attracting large numbers of seabirds, some of which meet criteria which qualify for SPA designation under the Birds Directive.

In terms of fisheries interactions on the Frisian Front, the key species is Common Guillemot *Uria aalge*. More than 20,000 guillemots reside regularly, especially in the post-breeding months when birds of UK origin swim to the Front with their young to feed and moult. Adult guillemots and their flightless young enter the area July-Aug from a NW direction (mainly from Scottish breeding colonies) but it is regarded as precautionary to consider protection from June (inclusive) as sea warming may advance the risk period in future years. Moulting adult guillemots additionally occupy the Frisian Front in Aug-Nov, after which winter storms start to break down the front. The total vulnerable period is therefore June-Nov.

The main fishing effort in the Frisian Front is beam-trawling (Neths, UK, Germany), followed by otter trawl and gill-net fisheries (mostly non-Dutch) for flatfish. Gill-netting effort is low but, on evidence from similar fisheries, and considering the age spectrum of the guillemot assemblage, the bycatch risk was classified as 'high' by the Dutch FIMPAS (Fisheries Measures in Protected Areas¹⁸) process.

The Dutch proposal for fisheries measures for SPA Frisian Front is therefore a seasonal ban on gill-netting from 1 June – 30 Nov each year. On the basis of the FIMPAS analysis, in September 2012 the Dutch Government submitted a request to ICES seeking advice on the degree to which the implementation of the proposed fisheries measures will progress the Frisian Front SPA towards the achievement of the conservation objectives. In their response (Nov 2012: see footnote 10), ICES, though they judged gill-net effort to be negligible, concurred that gill-netting should be banned on a precautionary basis from June-Nov.

BirdLife considers that in the present state of knowledge, it is not possible to differentiate between potentially different gill-net configurations on the Frisian Front so the ban should initially apply to any gill-net or trammel net used there. It may be possible to exempt some configurations in the future if evidence can be provided to establish that they incur no/negligible bycatch. It is possible that potential mitigation measures such as high-visibility netting panels may influence this but for gill-nets such approaches are as yet little advanced in comparison with mitigation for longlines and trawls.

For all types of gill-nets it will be important to collect data on bycatch rates to validate the need for a seasonal ban and to develop tailored mitigation solutions.

¹⁸ ICES 2012. Report of the FIMPAS Workshop 3 – Management proposals for Dogger Bank, Cleaver Bank and Frisian Front, 24-26 Jan 2011. Den Helder, The Netherlands. ICES Advisory Committee, 32pp.

5.1.3 The Gran Sol demersal longline fishery for hake (ICES areas VI, VII, VIII a,b,d,e)

5.1.3.1 Description of fishery and impact on seabirds

In 2006-07, an independent onboard survey¹⁹ was made of the spatial and temporal interaction between the Gran Sol fishery (W Ireland, ICES VII) and seabirds. At that time, the fleet consisted of about 35 Galician demersal longline vessels operating on average ~165 days per year in the area and targeting mainly hake and black bream. At any one time, 16 vessels were estimated to be fishing, though actual fishing effort needs further revision. Lines were set mostly at night and at dawn.

Three surveys were undertaken, representing the entire seasonal spread of the fishery, during which the number of hooks set, the proportion monitored, and the seabird bycatch was recorded, along with any influencing conditions – notably the use or otherwise of deck lighting at the stern of the vessel. During the course of the study, a total of 238,025 hooks was set on the observed vessels using deck lighting.

An average rate of 1.008 birds per 1000 hooks was estimated, which would equate to a total of 56,307 seabirds of six species captured per year by the Spanish fleet activity, given the fishing effort reported above. This rate is *very high* by global standards, at the time representing the highest estimated average annual mortality of seabirds in any single global fishery²⁰. By far the most heavily impacted species was Great shearwater *Puffinus gravis* (annual estimated total bycatch > 39,000), a species not currently believed to have a declining global population (though few, if any, relevant data exist). Nevertheless, the sheer scale of the numbers caught is cause for concern. Further study is required to verify that the bycatch rate is routinely of this magnitude, and total figures should be reassessed after properly scaling up fishing effort.

Of particular concern are ICES areas VIIIa and VIIIb. No bycatch data have been available until recently but the first qualitative survey results have been obtained through the Interreg FAME project (Future of the Atlantic Marine Environment²¹). Preliminary results suggest that the potential impact of fishing gears on seabirds could be particularly high, given that these areas are part of the main non-breeding grounds (especially July-October) of Balearic shearwater *P. mauretanicus*, Europe's most threatened seabird, for which demersal longlining has been identified as one of the two main threats²². Areas VIII a and b include a wider variety of seabirds species than the more pelagic areas, including several ETP species.

For monitoring of the Gran Sol fishery, see 7.1 (below).

¹⁹ Barros, A. 2007. Embarcados en Gran Sol. La Garcilla, 130: 15-17. The study was conducted by SEO/BirdLife, through an agreement with the port authority of Celeiro (Lugo Province, Galicia) that was endorsed by the Dept of Environment of the Government of Galicia aiming to promote sustainable fisheries for seabirds in the Gran Sol fishing grounds. The data given here in §2.4.1 are a combination of Barros 2007 and SEO/BirdLife unpubl, summarized in http://www.birdlife.org/eu/pdfs/Shadow_Community_Plan_of_Action_Sep_FINAL.pdf

²⁰ http://www.int-res.com/articles/esr_oa/n014p091.pdf

²¹ <http://www.fameproject.eu/en/>

²² http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/docs/puffinus_puffinus_mauretanicus.pdf

5.1.3.2 BirdLife recommendations for amending Gran Sol regulations

In the case of technical measures for mitigating incidental catch of seabirds, it is widely understood (e.g. CCAMLR, FAO) that a combination of measures and practices is generally most effective at mitigation. This is also the experience of BirdLife International's Albatross Task Force (ATF²³) which currently works with fishermen on land and at sea in 8 countries in Southern Africa and Latin America to develop and tailor the optimum combination of measures for reducing seabird bycatch while maintaining fishing efficiency and safety.

Under Specific Objective 3 of the EU-PoA, responsible parties (a combination of the Commission, Member States and RFMOs) are asked, by the end of 2013 at latest, to:

Implement proven mitigation measures in the Gran Sol, Mediterranean and non-EU waters (where not already required to do so). In these fisheries at least two of the following mitigation measures should be used:

- Night setting with minimum deck lighting*
- Bird scaring lines (Tori lines)*
- Line weighting*

Mitigation measures should comply with minimum technical standards as set out in BirdLife and ACAP guidelines.

As a suite of measures is generally optimum, BirdLife agrees with the recommendation of the EU-PoA to use 2 out of 3 listed mitigation measures; this 'menu' approach follows that used in ICCAT and other tuna RFMOs for pelagic longlining. Given that on the Gran Sol the main species at risk – Great Shearwater – is probably a quite deep diver, line weighting is likely to be particularly effective. If night-setting is adhered to, then line weighting should take priority over a bird-scaring line. If day-setting is unavoidable (fishermen try to set at night but the whole process can extend beyond sunrise, particularly in summer), then a bird-scaring line should be used in conjunction with line weighting.

To the extent possible, the technical measures Regulation should specify these individual options as follows:

BirdLife Rec: *Setting and hauling shall be done between dusk and dawn; vessel external lights must be reduced to those strictly necessary for navigation and fishing purposes.*

Justification: High visibility of baited hooks to seabirds is the principal driver of seabird bycatch in this fishery. There is therefore a strong onus on the fishery to constrain operations to the lowest levels of ambient and artificial light. BirdLife therefore proposes a measure to make night-setting a requirement.

²³ http://www.rspb.org.uk/Images/atf_annual_report_2011_tcm9-319048.pdf

Based on interviews with skippers under evaluation, the Public Comment Draft Report²⁴ (June 2011) for the MSC certification of the Grupo Regal vessels longlining for hake on Gran Sol states that:

'The main mitigation measure in terms of determining the scale of likely bycatch is simply whether deck lights are on, during night time hours at the time of shooting and hauling gear. The Grupo Regal Code of Conduct states that lights will be off, and the design of the vessel, with a substantial shelter deck means that light loss is low'.

BirdLife's recommendation is therefore to go beyond this Code of Conduct (= voluntary measure) and instead make the specification of setting time and vessel lighting mandatory for all demersal longline vessels on the Gran Sol, not just those seeking or under MSC certification.

A similar requirement should be legally binding on demersal longlining for hake elsewhere in EU waters (e.g. the Gran Sol vessels are understood to fish for hake further north in the summer).

BirdLife Rec: *Where daylight setting cannot be avoided, a bird-scaring line (to specified design) should be deployed.*

Justification: In the exception that daylight setting is inevitable, then experience from equivalent demersal longline hake fisheries elsewhere in the world shows that a bird-scaring ('tori' or 'streamer') line needs to be deployed during setting to minimise seabird bycatch. .

Bird-scaring lines are the most commonly prescribed mitigation measures for longline fisheries and regarded as one of the most effective. Trials with Norwegian demersal longliners deploying bird-scaring lines showed a 98% reduction in seabird bycatch. BirdLife Albatross Task Force demonstration projects have demonstrated that using a single bird-scaring line reduced seabird bycatch by ~85%.

Bird-scaring lines are inexpensive, simple to use (especially in demersal longline fisheries where entanglement risk with the longline is much reduced compared with pelagic longlines) and do not require modification of the fishing gear. However, to be most effective, it is important that the bird scaring line is well designed and complies with a specified configuration. Currently the design most commonly recommended for demersal longline fisheries is that prescribed by CCAMLR (SC-CCAMLR 2006²⁵) and detailed in the Birdlife/ACAP Factsheets. BirdLife considers that this specification would be appropriate for the Gran Sol fishery.

In the Public Comment Draft Report for the Grupo Regal vessels seeking MSC certification (see Gran Sol Rec 1, above), the Code of Conduct specifies using a bird-scaring line.

BirdLife Rec: Line weighting: *Given that the specification for line weighting in the Gran Sol fishery cannot be prescriptive in the Commission's revision of the technical measures Regulation, we suggest that the optimum configuration should be subject to evaluation by results-based research and development in collaboration with the fishermen. In particular, it is necessary to identify the line-weighting configuration needed to achieve a sink rate compatible with minimising seabird bycatch.*

²⁴ <http://www.msc.org/track-a-fishery/in-assessment/north-east-atlantic/grupo-regal-spain-hake-longline>

²⁵ This and other mitigation measures are detailed in BirdLife/ACAP Factsheets – see footnote 8.

Justification: Experience by BirdLife's ATF elsewhere in the world shows that in demersal longline fisheries where hake is the target species, line weighting is an alternative to a bird-scaring line but is not universally favoured because the fishermen like to leave intermittent lengths of line unweighted so that they can fish above the seabed. In the Mediterranean, demersal longliners (mainly targeting hake) are reluctant to use traditional line weighting for this reason. In Namibia, however, the ATF has shown a ~60% reduction in seabird bycatch using evenly spaced 5kg steel weights (and no bird-scaring line) instead of traditional use of stones (2-6kg) to weight the line. ATF experience shows that weight mass is critical for this mitigation measure to be effective.

BirdLife Rec: *Discharge of offal and unwanted catch shall be prohibited during setting and hauling.*

Justification

Especially in demersal (as distinct from pelagic) longline fisheries, discharge of offal and unwanted catch during setting and (to a lesser extent) hauling greatly increases the risk of seabird bycatch by attracting birds to demersal longline setting.

The EU-PoA, under Specific Objective 3, '*Recommends that all vessels implement on-board management of offal/discards to best practice guidelines*', and refers to the BirdLife/ACAP factsheets.

BirdLife therefore recommends, following these and the FAO Best Practice Technical Guidelines 2008 (Tables 2-4), prohibition of offal discharge from any part of the vessel during setting and hauling (or at least from the side of the longline vessel where hauling occurs, as in CCAMLR regulations).

BirdLife Rec: *All mitigation measures for setting longlines should equally apply to hauling longlines.*

Justification: This is a precaution on the assumption that some hooks will still retain bait and that seabirds may still be attracted to this and/or the catch of hake, black bream and other non-target species.

5.2 Data-poor areas and regions in need of investigation and mitigation

In certain areas and fisheries, BirdLife is aware of a potential or significant bycatch problem but is unable to recommend commensurate technical measures in the current state of knowledge. Generally, this is due either to lack of development of the necessary mitigation measures, or – even if they are available – insufficient knowledge on how to apply them proportionately. In some cases further risk assessment is required.

In such cases, revision of 850/1998 should flag and 'map' ways of establishing tailored solutions to a specified timeline.

Priorities in this category are as follows:

5.2.1 Bycatch of Balearic Shearwaters in purse seine nets (Portugal, ICES Area IX)

Evidence is emerging that purse seines can take significant bycatch of Balearic shearwaters in this region. Balearic shearwater is a Critically Endangered species. A questionnaire survey (2008-09, unpubl) by SPEA (BirdLife Partner) in Portuguese ports showed that purse seines took the highest proportion of Balearic shearwaters, followed by longlines (demersal), trawls, longlines (surface), and gillnets.

No mitigation is currently known for purse seine nets.

BirdLife Rec: *Subject to research and development, the use of purse seine nets in ICES Area IX will be subject to mitigation measures by 2017 such that the bycatch of Balearic shearwaters and other seabirds is minimized.*

5.2.2 Bycatch of 'Iberian' guillemot (etc) in gill-nets (NW Spain, ICES Area IX)

Significant mortality of European shags *Phalacrocorax aristotelis* and auks has been reported from gill-nets in NW Spain. This coast represents the most southern extremity of the breeding range of the common guillemot *Uria aalge*, making it specially significant. According to Catry *et al* (2010)²⁶ local fishermen at Berlengas have always linked the continuous decline of this species with a steady increase of the local gillnet fisheries (introduced in the 1960s), also highlighted as causing the observed large-scale decline in Iberian guillemot populations by Munilla *et al.* (2007)²⁷. The Iberian population declined from about 20 000 pairs in the first half of the 20th century to fewer than 10 pairs at the end of that century. There have been no confirmed records of breeding in the region since 2007 although it is presumed there is still potential for immigration and population restoration if the threats are addressed, of which mitigation bycatch in gill-nets is considered a priority.

BirdLife Rec: *Subject to research and development, the use of gill-nets in ICES Area IX will be subject to mitigation measures by 2017 such that the bycatch of common guillemots and other seabirds is minimized.*

5.2.3 Bycatch of Common guillemot (etc) (W France, ICES areas VIII a and b)

A recent case (April 2012) was described in western France concerning several sites located near fishing ports. A massive bird stranding event occurred (around 100 individuals over a very short period) and the investigations and analyses carried out by the French Government identified fishing nets as the cause of the death. Most of birds were common guillemots *Uria aalge*, the rest common scoters *Melanitta nigra* and razorbills *Alca torda*. Stranded or injured birds are detected all year round on the west coast of France, but no quantitative data are currently available to elucidate possible links with fishing gear.

²⁶ Catry, P., Costa, H., Elias, G, Matias, R., 2010. Aves de Portugal: Ornitologia do território continental. Assírio e Alvim. 944pp.

²⁷ Munilla, I., Díez, C., Velando, A., 2007. Are edge bird populations doomed to extinction? A retrospective analysis of the common guillemot collapse in Iberia. *BIOLOGICAL CONSERVATION* 137, 359–371.

BirdLife Rec: *Quantitative bycatch data should be collected in this region in order to gain a better understanding of interactions with fisheries and potential mitigation.*

6. Other sea basins

The Commission, while not proposing to amend the separate technical measures regulations for the Baltic and Mediterranean, are mindful of the need for existing measures within these sea basins to be compatible with the new measures proposed for the North Sea and Atlantic (see Introduction, above). Similar harmonisation is presumably sought for Black Sea fisheries.

6.1 Baltic Sea

In the Baltic, attention falls on the unacceptably high levels of seabird bycatch in the high-effort static net fisheries, an issue of particular importance given the extensive SPA network in the region.

The EU-PoA summarises a recent review²⁸ of seabird bycatch in the Baltic (and eastern North Sea) which gives an cumulative annual estimate of between 90,000 and 200,000 birds (mostly divers, grebes, sea ducks, diving ducks, auks and cormorants) killed in static nets. Several of the impacted species are rare in the region and protected by international legislation. Steller's eider *Polysticta stelleri* is listed as Vulnerable by IUCN, and is an Annex 1 species in the Birds Directive, as are a number of the other species.

As such, the Baltic is the focal point for a the trialling of mitigation measures for gill-nets, and the potential switch to alternative gears (notably longlines, jigging, bait pots (or fish traps)). A number of demonstration projects is in progress. To this extent, experience in the Baltic is as likely to influence the mitigation of static gear fisheries in the North Sea/Atlantic as vice versa.

A strongly linked issue is bycatch and continuing decline of the Critically Endangered²⁹ Baltic subpopulation of the harbour porpoise *Phocoena phocoena*, currently estimated at fewer than 250 mature individuals. The most significant threat is incidental catches in various types of gillnets (including both set gillnets and driftnets), and to a lesser extent in trawls. The current bycatch, known to be at least seven porpoises per year, is thought to be unsustainable, and Baltic porpoises face potential extinction in the foreseeable future unless urgent action is taken to prevent anthropogenic mortality (ASCOBANS 2000, 2009³⁰).

The EU adopted a Council Regulation 812/2004 aimed at reducing the incidental catch of small cetaceans in fisheries in EU waters and including measures to restrict Baltic Sea drift net fisheries, mandatory use of acoustic deterrent devices (pingers) in some EU gillnet fisheries (Baltic Sea), and the use of onboard observers on vessels of over 15m in length.

²⁸ Žydelis, R., Bellebaum, J., Österblom, H., Vetemaa, M., Schirmeister, B., Stipniece, A., Dagys, M., van Eerden, M. and Garthe, S. 2009. Bycatch in gillnet fisheries - An overlooked threat to waterbird populations. *Biological Conservation*, 142: 1269-1281.

²⁹ <http://www.iucnredlist.org/details/17031/0>

³⁰ http://www.ascobans.org/pdf/mops/docs/MOP6_7-01_RevisionJastarniaPlan.pdf

The chief recommendations of ASCOBANS (2009) for immediate measures to reduce bycatch of Baltic harbor porpoise were:

- 1: Reduce fishing effort in certain fisheries;
- 2: Involve stakeholders in the work of reducing bycatch of harbour porpoises;
- 3: Replace fishing methods known to be associated with high porpoise bycatch (i.e. set nets) and introduce alternative gear that is considered less harmful;
- 4: Implement a pinger programme on a short-term basis.

To the extent possible, and where appropriate, synergy should be sought in the development and application of measures to minimise bycatch of harbour porpoise and seabirds, respectively, in Baltic Sea fisheries. In this regard, BirdLife recommendations **v**, **vi**, **ix** and **x** (above) for the North Sea and Atlantic are particularly relevant to the Baltic Sea.

6.2 Mediterranean Sea

As the ICES WGSE (2008³¹) highlighted, the Mediterranean is a high-risk but data-poor region for seabird bycatch, arising from the presence of several species which are sensitive to bycatch and other threats on the basis of their restricted geographic range and small population size. The data scarcity arises because activity is dominated by artisanal fisheries whose activities are generally under-reported. Species known to experience incidental catch are Cory's, Balearic and Yelkouan shearwaters, Mediterranean shag, Audouin's and Yellow legged gulls^{32 33 34}.

High priority therefore needs to be given to identifying conflict 'hotspots' of overlap between seabirds and potentially harmful fisheries and fishing methods, and working with fishers to develop and tailor mitigation measures in the context of the high diversity of métiers and gear configurations operating in the region. Demersal and pelagic longlines and gill-nets (and variants, e.g. trammel nets) are key among these. Various initiatives, especially under LIFE(+), have already been undertaken in Malta³⁵ and in the Ionian Sea³⁶ (western Greece) but these have been essentially information-gathering surveys and further refinement is needed to be prescriptive about implementing technical mitigation measures.

In addition to seabirds, by-catch in Mediterranean gill-nets also contributes to declines in various dolphin populations, while the Critically Endangered Mediterranean monk seal is seriously

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<http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/lrc/2008/WGSE/WGSE2008.pdf>

32 http://www.gavines.org/carles/docs/CCarboneras_bycatch_Mediterranean_guidelines_web.pdf

33 http://www.rspb.org.uk/Images/plan_tcm9-163230.pdf

34 http://www.rspb.org.uk/Images/shadow_Community_Plan_of_Action_tcm9-246779.pdf

35 <http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=by-catch.pdf>

36 http://files.ornithologiki.gr/images/seabirds/Publications/91_g_Karr_.pdf

threatened with extinction³⁷. More than 60,000 sea turtles are caught annually in fishing gear, with mortality rates ranging from 10 - 50%³⁸.

6.2 Black Sea

Like the Mediterranean, the Black Sea is a data-poor region, particularly for knowledge of seabird bycatch. Bycatch studies in the western coast of the Turkish Black Sea have revealed significant impacts on cetaceans since 1990³⁹.

7. Control measures

For alignment with a new technical measures framework, it is envisaged that the Control Regulation 1224/2009 will also have to be amended, particularly in respect of the discard landing obligation⁴⁰. However, BirdLife considers that it will also be necessary to **implement adequate levels of observer coverage or remote monitoring technology for monitoring seabird bycatch in order to provide representative data, to verify efficacy of prescribed mitigation measures and to inform their further development. BirdLife and other eNGOs also strongly promote inclusion of a requirement to include data collection on bycatch of seabirds and other non-target species in the revision of the EU Multi-Annual Plan for Data Collection (2014-2020) in order to generate the necessary monitoring and reporting.**

Justification

The EU PoA has an action to: *'Adopt a precautionary approach where information is lacking or uncertain on seabird bycatch and undertake more extensive monitoring of fisheries falling into this category (A minimum 10% coverage in the short term should be aimed for).'*

In 2011, ICCAT recommendation (10-10) entered into force requiring each CPC to ensure with respect to its domestic observer programmes a minimum 5% observer coverage of fishing effort in each of the pelagic longline, purse seine and bait-boat fisheries. It further specified that for vessels <15m, where an *'extraordinary safety concern may exist that precludes deployment of an onboard observer, a CPC may employ an alternative scientific monitoring approach that will collect data equivalent to that specified in this recommendation in a manner that ensure comparable coverage.'*

The FAO's Best Practice Technical Guideline No. 7 addresses Observer Programmes in which States and RFMOs/As are encouraged to undertake six related actions. For an example of data

³⁷ <http://bycatch.nicholas.duke.edu/regions/Med/Mediterranean.pdf>

³⁸ Tudela, S. (2000). Ecosystem effects of fishing in the Mediterranean: An analysis of the major threats of fishing gear and practices to biodiversity and marine habitats. Report for FAO Fisheries Department (EP/INT/759/GEF). Rome, Italy: 45.

³⁹ Oztürk, B., A. A Oztürk, and A. Dede. (1999). Cetacean Bycatch in the Western Coast of the Turkish Black Sea in 1993-1997.

In P.G.H. Evans, J. Cruz, and J.A. Raga (Eds.) Proc. 13th Annual Conf. European Cetacean Society, Valencia, Spain. 1-134.

⁴⁰ http://ec.europa.eu/governance/impact/planned_ia/docs/2013_mare_108_omnibus_tm_and_control_regulations_en.pdf

collected by fishery observers at sea in relation to seabird incidental catch, see Table 5 in the FAO Guidelines.

Large offshore longline vessels, in particular, should be in scope for national observer programmes and data collection protocols. In keeping with ICCAT Rec 10-10 (see p. 7, above), in the case of smaller vessels (<15m) remote electronic technology capable of the equivalent level of monitoring should be implemented.

BirdLife is aware of only one fishery in EU waters in which significant seabird bycatch risk is known or suspected has established a national observer programme: since 2008, the Spanish Institute of Oceanography (IEO) has run an observer programme aboard pelagic longline vessels in the Spanish Mediterranean and Alboran Seas, covering about 5% of the fishing effort.

7.1 Monitoring of the Gran Sol fishery

BirdLife considers that the Gran Sol fishery (see 5.1.3, above) is in need of national observer coverage. According to the Marine Stewardship Council's (MSC) Public Comment Draft Report for the Grupo Regal vessels which form part of the Gran Sol fleet, *'the vessels under assessment have implemented detailed and comprehensive onboard reporting protocols for unintended bycatch, which lists all potential bird species and is supported by a species identification fact sheet'*.

So the need for monitoring is recognised. However, little is known about the implementation and effectiveness of the Grupo Regal approach which is part of a voluntary Code of Conduct, relying on the rigour of skippers. BirdLife considers that the potential scale of seabird bycatch on the Gran Sol fishery warrants going beyond a Code of Conduct to require the use of national onboard observers as the preferred option or, failing that, fit-for-purpose remote monitoring technology. The duration of such a programme could be dependent on the meeting objectives for seabird bycatch reduction and sustaining low bycatch rates.

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