

DG Environment and DG Maritime Affairs and Fisheries  
European Commission  
B-1049 Brussels  
Belgium  
By e mail to:  
MARE-D3@ec.europa.eu; pascale.colson@ec.europa.eu  
BSAC 2021-2022\_30

Copenhagen Wednesday 15<sup>th</sup> December 2021

**Re: Action plan to conserve fisheries resources and protect marine ecosystems:  
targeted consultation - reply from the BSAC**

Thank you for inviting and encouraging the Advisory Councils to take part in the consultation on the Action plan. The BSAC Secretariat prepared and developed a draft in consultation with the BSAC Executive Committee members. The BSAC Executive Committee was informed of the final product, and written consultation was concluded on Monday 13<sup>th</sup> December 2021.

Again, the multiple-choice survey provided is very difficult for us reply to, given its format and sometimes differing views amongst the BSAC members. Please find at the end of this letter a written contribution from the BSAC. It attempts as far as possible to address the questions. Where there are differing views, these are indicated.

Some important issues already raised by the BSAC are re-stated in the reply. The BSAC encourages a thorough evaluation of the Technical Measures Regulation and development of concrete outcomes before finalisation of the MSFD review, currently underway. Whilst synergies between fisheries and environmental policy are important, there are also other human activities that have an impact on the environment. In this context, collaboration with HELCOM and BALTFISH on the updated Baltic Sea Action Plan is important. The BSAC continues to repeat calls for a speeding up of the legislative procedures applied when dealing with the technical measures, so they can be adapted to the changing circumstances at sea.

Kind regards,



Esben Sverdrup-Jensen, Chair BSAC Executive Committee

Copy to: DG Mare Baltic Unit, BALTFISH Member States; HELCOM

## **Action plan to conserve fisheries resources and protect marine ecosystems: Your opinion counts – take part in targeted consultation<sup>1</sup>**

### **BSAC reply to the Commission**

#### **1 and 2 Introduction and about you: General remarks**

The BSAC is again sending a written statement. The questionnaire, which also includes multiple-choice questions, is very difficult to reply to. It is a difficult format, and views amongst the BSAC members differ.

#### **3 GENERAL QUESTIONS**

The BSAC gave a reply to the Commission's consultation on the functioning of the Technical Measures Regulation<sup>2</sup> - providing experience with the Regulation.

The BSAC was in consensus on calling for efforts to be made to speed up the legislative procedures applied when dealing with the technical measures, so they can be adapted to the changing circumstances at sea.

The BSAC was also of the opinion that the Technical Measures Regulation should have both an environmental and an economic dimension. The BSAC invites the Commission to re-visit the BSAC reply.

Some issues raised by the BSAC in 2015 and 2017 were not included in the revised Technical Measures Regulation and the BSAC, meaning that there are issues outstanding for the BSAC.<sup>3</sup>

The BSAC notes that the Commission's report on implementation of the Technical Measures Regulation<sup>4</sup> was delayed because of COVID; it only comes out 2 years after the regulation entered into force.

---

<sup>1</sup> [https://ec.europa.eu/oceans-and-fisheries/news/action-plan-conserve-fisheries-resources-and-protect-marine-ecosystems-your-opinion-counts\\_en](https://ec.europa.eu/oceans-and-fisheries/news/action-plan-conserve-fisheries-resources-and-protect-marine-ecosystems-your-opinion-counts_en)

<sup>2</sup> <http://www.bsac.dk/BSAC-Resources/BSAC-Statements-and-recommendations/BSAC-reply-to-the-Commission-questionnaire-on-the>

<sup>3</sup> <http://www.bsac.dk/BSAC-Resources/BSAC-Statements-and-recommendations/2015-01-01-BSAC-recommendations-on-technical-measures>  
<http://www.bsac.dk/BSAC-Resources/BSAC-Statements-and-recommendations/BSAC-recommendations-on-technical-measures>

<sup>4</sup> The Commission report and Staff Working Document are here:  
<http://www.bsac.dk/BSAC-Resources/Documents-section/Commission>

The work on the Action Plan must ensure a proper evaluation of the Technical Measures Regulation in all its facets. At the same time as the aim of this work is to look closely at the synergies between fisheries and environmental policies, there are many other human activities that have an impact on the environment – too many to list here – so technical measures for the fisheries are only one piece of the jigsaw in ecosystem based management.

Moreover, there will not be a root and branch reform of the Common Fisheries Policy. The Commission intends to report on the functioning of the CFP by the end of 2022: the BSAC is anxious to see the results of the Action Plan presented there. Some stakeholders have referred to Articles in the CFP Basic Regulation that are connected with technical measures (amongst others Articles 7, 8 and 15): these require discussion and clarification in order to see how they can effectively assist ecosystem based fisheries ecosystem through technical measures.

This consultation comes alongside the consultation to review the MSFD (consultation ended 24<sup>th</sup> October 2021 – the BSAC provided a reply <sup>5</sup>). The Commission has set a busy agenda. It is important that the work is properly coordinated. The BSAC thinks that work on reviewing the Technical Measures with the Action Plan must come first. The BSAC encourages concrete outcomes/results from this Action Plan before doing/finalising the review of the MSFD and proposing possible amendments. The BSAC is aware of the recently updated HELCOM BSAP<sup>6</sup> where there are actions relevant to fisheries and fisheries management awaiting implementation.

## **Q2 has a list of general statements**

**There are six proposed actions and considerations that participants are invited to express agreement/disagreement with:** size selectivity improvements to avoid small fish; species selectivity improvements to avoid catching sensitive species; better protect marine ecosystems (as function of climate and ecosystem services); better protect marine habitats; better protect sensitive marine species, marine environment protection to go hand in hand with the protection of fishers' livelihoods.

The BSAC has a clear buy-in into the need for continued improvements in size and species selectivity; better protection of marine ecosystems; better protection of habitats and sensitive species from ALL human uses, taking into account fishers' livelihoods and communities, as well as securing fish as food. The problem is to balance environmental concerns with the livelihoods and activities of commercial and recreational fishers.

The BSAC underlines the need for more and better communication between different Baltic stakeholders, such as fishers, scientists, administrators and NGOs.

---

<sup>5</sup> <http://www.bsac.dk/BSAC-Resources/BSAC-Statements-and-recommendations/BSAC-reply-to-the-Commission-Consultation-on-Marin>

<sup>6</sup> <https://helcom.fi/baltic-sea-action-plan/2021-update-process/>

The BSAC is aware that compromises are necessary, taking into account all human activities that have an impact on the marine environment.

### Question 3

#### 4 Conserving fisheries resources - selectivity

There are 5 questions here related to selectivity Q3 – Q7

The BSAC gives full support to improvements to selectivity in order to match changing conditions at sea and ecosystem developments. In line with this, the regulatory and legislative process has to be fast and adaptive. The Commission report was positive about the regionalised approach; but more speed and ambition are needed to develop and agree joint recommendations. The BSAC agrees.

One eNGO points out that new, innovative gears are, however, totally redundant if there are no fish to fish for, such as in the case of cod. The problems in the Baltic Sea and ecosystem needs are less linked to gear innovation per se, especially regarding active gears, and it may well even be counter-productive to keep focus on that, instead of simply leaving the fish alone.

Q3 Too many catches of juveniles or of sexually mature fish

There are not too many catches of juveniles as such. It is about catches of small, but mature fish. The current policy approach to selectivity leads to the protection of the weakest fish individuals from every year class. So far, mesh size tells us what big fish is (the L50 approach). Taking into consideration the structure of fish stocks, there is no "right approach" to targeting big fish. A healthy composition of the catches is important. Targeting only small or large fish is not really possible in practice. The size of the caught fish decreases with an increasing or too high fishing effort. The protection of small fish is not an adequate definition of the objective. The correct wording is protecting juvenile fish – avoiding catches of juvenile fish. According to research, when it comes to cod, small specimens of about 30 cm are mature adults. The argument for protecting small animals is incomprehensible. In this particular case, small does not mean young.

One eNGO points out that a recent analysis of the development and use of selective gears in flatfish fisheries expressed concern that the use of the codend (designed to let the small fish go and capture the large individuals) may prove counter-productive in the management of the diminishing Baltic cod stocks where the large individuals are the ones of most importance for reproduction. To counteract this, a combination of codend models and roofless gear (which is size independent) must be mandatory in all flatfish fisheries in the whole of the Baltic Sea, in order to gain the most efficient bycatch reduction, and thus give the cod a chance to recover.<sup>7</sup>

---

<sup>7</sup> References: Svedäng, H., & Hornborg, S. (2017). Historic changes in length distributions of three Baltic cod (*Gadus morhua*) stocks: Evidence of growth retardation. *Ecology and Evolution*, 7(16), 6089–6102. <https://doi.org/10.1002/ece3.3173>

#### *Q4 Innovative fishing techniques*

By way of introduction to this discussion, managers should take the perspective that there cannot be one universal solution for the Baltic Sea fisheries. This is also the case for innovative fishing techniques. One size cannot fit all. Given the environmental and technical differences in the fisheries in different parts of the Baltic Sea, there is a real need to go towards solutions that are developed locally. Otherwise, the effect will remain the same.

The BSAC highlights the development of and use of selective grids, and the "envelope codend". Their use depends on the fishing grounds and the stocks. For example, pontoon traps have been developed for use in calm Swedish/Finnish waters where storms are not as heavy as in other areas or in the open sea. Gears have to be tailored to where the fishermen are working.<sup>8</sup>

Since July 2021, a trial with modified cod fyke nets has been running in Germany together with the Environmental Action Germany (DUH). This has shown quite promising results so far.<sup>9</sup> The background for the cod fyke project was an earlier project from BfN (Bundesamt für Naturschutz) which showed that gears like cod traps, jigging machines, long line systems and pontoon traps cannot be used in practice, as the fishermen had predicted.<sup>10</sup> Upon request, the data basis has to be expanded before detailed interim results can be released.

There are pelagic fisheries innovations that are not put to use in the Baltic Sea that could have a positive effect on reducing bycatch. There are several examples of sorting grids placed in large or very large trawls that can select out larger non-target fish (even mammals) such as cod or salmon etc. Such gears are already available and the Action Plan should note such options to be implemented also in the Baltic Sea.

*For example, a T90 excluder separates pelagic catches*

According to recent news, Cosmos Trawl has designed a selective trawl that is showing promising results. It has been designed and developed with Nordsøtrawl, the workshop of Cosmos Trawl in Thyborøn, northern Jutland. Ten trawls have already been supplied to Danish, Norwegian and Swedish vessels. The company is now waiting for the authorities to approve this gear for commercial use in the trawl fishery. The trawl is shaped as a conical section which is placed in the belly of the trawl, made in T90 net at the front and square shaped net further back. Inserted into this are two square shaped plastic panels attached to the sides and designed to guide seals and small mammals out through the back part of the cone, which leads to an opening in the bottom panel of the belly.

---

Link to analysis: <https://balticeye.org/en/fisheries/flatfish-and-cod-by-catch/>

<sup>8</sup> Almost all trials have their merits, because they show that people are trying to figure out some new ideas. Of relevance are water flow and pressure related to the velocity, because it tells a lot about fish reaction on the gear (also from escape perspective). Krzysztof Stanuch, Baltic Net, personal communication.

<sup>9</sup> Data not yet available.

<sup>10</sup> Power point (Dr Kim Cornelius Detloff) made available to BSAC Secretariat

Mammals and seals swim unharmed out through this opening, whilst the fish pass through the panels and into the codend. This selective mechanism has been called the T90 excluder specially designed for pelagic fishery in the North Sea. It been demonstrated to be extremely effective where pelagic gear is used. The idea behind the gear design is to select out all bigger fish such as saithe, cod and haddock as well as small mammals such as seals and whales out of the trawl. The same principle could be used in other fisheries such as herring and mackerel. The success rate in separating the fish and mammals is 100%. The link includes a short video which shows how the gear works<sup>11</sup>.

#### *Q5 Difficulties when adopting gears*

Trials with new/innovative or more selective gears should be planned to the widest possible extent in cooperation between fishermen and scientists. Gears should be tested on a voluntary basis by fishermen within the commercial fishery. The final decision on which option(s) to choose to be made compulsory should be taken after the trials have taken place in the commercial fishery. The BSAC has experienced that it is time consuming to develop innovative gears, have them scientifically assessed, and get them through the legislative procedure, even under the regionalisation process provided for in the Regulation. Cumbersome bureaucracy prolongs the introduction of new fishing gears adapted to the situation in the fishery, to the detriment of fisheries and nature conservation.

Technical and editorial amendments to regulations are time consuming. For example, the BSAC, together with BALTFISH, has proposed amendments to the cod end; the BSAC has made clear problems with wording in the Commission delegated acts. This clearly proves and demonstrates the serious approach taken by the BSAC and BALTFISH.

Another example of time-consuming processes is the outstanding need for an implementing regulation to adopt detailed rules for technical specifications of gears (See Commission Staff Working Document page 35 top paragraph about this<sup>12</sup>). This was raised by the BSAC at its Executive Committee meeting on 6<sup>th</sup> May 2021.<sup>13</sup>

---

<sup>11</sup> [https://fiskerforum.dk/trawl-t90-excluder-adskiller-pelagiske-fangster/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=fiskerforum\\_daglig\\_nyhedsopdatering&utm\\_term=2021-11-25](https://fiskerforum.dk/trawl-t90-excluder-adskiller-pelagiske-fangster/?utm_source=newsletter&utm_medium=email&utm_campaign=fiskerforum_daglig_nyhedsopdatering&utm_term=2021-11-25)

<sup>12</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021SC0268&from=EN>

<sup>13</sup> **The representative of DG Mare** explained that there is at present a legal void with respect to the interpretation of the technical specifications of BACOMA and T90 codends. This void will be filled in by the implementing rules, which will be published in the near future. He stated that any gears built in conformity with the technical specifications laid down in the Annex to the Technical Measures Regulation are legal to use. At present, the Technical Measures Regulation allows the use of a 120 mm T90 codend or of 105 mm fitted with a 120 mm Bacoma exit window. As a principle, the gear stated in Annex VIII must be used. There are two types of derogations provided under Part B, points 1.2 (i) and (ii). Those under (ii) require a Joint Recommendation and a Delegated Act. Referring to the mesh size allowed when catching sandeel, only meshes less than 16 mm can be used.

<http://www.bsac.dk/Meetings/BSAC-meetings/Executive-Committee-meeting-with-EFCA>

At the beginning of 2019 year, a research team, working with the SSF organisation Darłowska Group of Fish Producers and Shipowners cooperated on fishing gear developments for the coastal Baltic zone<sup>14</sup>. They prepared the Baltic Fish Pots Project. They created a prototype of alternative gears, designed to be both fishermen-friendly and seal-friendly. The main goals of the project were to:

- reduce seal-fisheries conflict
- reduce bycatch
- increase value of catch
- develop sustainable fishing methods

Unfortunately, this initiative of cooperation between scientists and fishermen and the project has drowned in the legislative procedure.<sup>15</sup>

Q6 what priority can be given to the challenges listed in Q5

There should be close involvement of fishermen from the start, so their ideas and recommendations are listened to and tried. Other stakeholders should be consulted on all recommendations and ideas of the fishermen. New gears should preferably not be made compulsory until they have been tested under commercial conditions. The introduction of a new gear should not exclude subsequent later introduction of another gear with similar or better selection. There is data, there is research, testing and piloting is ongoing, fishermen are already very aware, financial support is available, legislative measures are there, control and enforcement is provided for. These are all difficult to prioritise, but they need to work together in a more optimal way.

The BSAC refers to the ICES advice on innovative gear (from October 2020)<sup>16</sup> - also mentioned in the Commission Questionnaire.

ICES, in its 2020 advice on innovative gear, from the WKING Workshop, uses the term innovative to cover a broader spectrum than catch efficiency. It notes that the term innovative should be further developed. Selectivity, mitigation impacts on the marine environment, invasive species, as well as fuel economy are all essential ingredients when considering technical measures. The advice notes the research and development going on in the scientific community. What is missing is the involvement of the fishermen from an early stage to consider user-friendliness of new technologies and to promote uptake and buy-in of new developments. The BSAC supports that there should be a three-yearly review of the Technical Measures Regulation in order to review the level of uptake of innovative gears and their use.

---

<sup>14</sup> West Pomeranian University of Technology in Szczecin, Faculty of Food Sciences and Fisheries

<sup>15</sup> The project applied for funding from the European Maritime and Fisheries Fund (EMFF), but did not obtain financing. No data or results of cooperation to present.

<sup>16</sup> Advice and report:

[https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/Special\\_Requests/eu.2020.12.pdf](https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/Special_Requests/eu.2020.12.pdf)

<https://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/EOSG/2020/WKING%20Report%202020.pdf>

The catalogue created by ICES in its advice includes several gears that have been trialled and tested in the Baltic: mini Danish seine, pontoon trap, pearl-nets, nemos and roofless gear, shift from gillnets to pots, acoustic deterrent devices, and boat seine. Most of these are already in use.

Q7 calls for factual / scientific evidence giving socio-economic information on the practical implementation of any of the actions listed under Q6 which can be documented with evidence. These are:

- Further data collection on the state of fishery resources and the marine environment, for instance through strengthening the scientific capacity
- Further research on innovative gears and/or fishing techniques
- Better accessibility of the data collected / the results of research projects
- Further testing/piloting of innovative gears and/or fishing techniques
- Awareness raising / training on innovative gears and/or fishing techniques
- Financial support for the development and market uptake of more innovative gears and fishing techniques
- Legislative measures at national, regional or EU level e.g. to limit the use of certain harmful gears, to close certain areas or seasons to fishing, or to ensure the use of technical or operational solutions to reduce by-catches of non-commercial species
- Further enforcement of existing legislation

Closing such large areas such as SDs 24,25,26 in the Baltic bring with it negative socio-economic effects for the sector. Positive ecosystem effects need to be documented.

Not all alternative fishing gears have shown to be beneficial.

Some eNGOs feel that the Baltic Sea, and in particular the development of the cod stocks, is in a way evidence of a failed approach. The race for more selective gears has overshadowed the real need to slow down and dramatically lower catches, wanted or unwanted. Constantly selecting the larger individuals has had dramatic effects, and this must be avoided in other regions. Much lower quotas, keeping fleet capacity in check, as well as greater freedom for fishermen to modify gears might in the past have made all the difference. The Action Plan should consider the need for selective gears in other sea areas in light of developments in the Baltic Sea, and issue a much higher degree of caution.

## **5 Protecting marine ecosystems – sensitive habitats**

### **5.1 Transversal questions on protecting marine ecosystems**

This is basically about seabed habitats, but also protecting marine habitats.

In its special advice from 2021, from WKTRADE<sup>17</sup>, ICES explored five management scenarios that could be used to reduce pressure and impact on the seabed caused by bottom trawling. It modelled the consequences of their implementation for bottom trawling with vessels greater than 12 metres.

---

<sup>17</sup> <https://www.ices.dk/sites/pub/Publication%20Reports/Forms/DispForm.aspx?ID=37785>



Bottom trawling is considered the main physical pressure on the seabed across the EU's marine waters. It is spatially aggregated to form core areas where bottom trawling effort and value of catch is high, and larger peripheral fishing areas where effort and value of catch is low. The advice does not completely exclude bottom trawling. ICES advises that some levels of bottom trawl fishing can be compatible with achieving seabed conservation objectives.

ICES also states that the Baltic Sea region experiences the lowest pressure from bottom trawling, with 73% untrawled at depths shallower than 200 m. The low pressure results in a relatively low impact from bottom trawls on benthic ecosystems when assessed at Baltic Sea level. Bottom trawling is very limited in the northern part and essentially only targets Baltic herring (*Clupea harengus membras*) or vendace (*Coregonus albula*) in coastal areas.

When closing areas to bottom trawling, an important choice is which areas to prioritize. Prioritizing the most trawled areas and prioritizing the least trawled areas have been advocated for. Intensively bottom trawled areas are where the largest impact reduction is realized when they are closed, but the cost to the fishery is often large. Whilst NGOs and managers prefer spatial measures (closures), including limiting all activities (fishing, shipping, construction, aquaculture) in such areas, fisheries prefer gear modifications.

There are 11 questions Q8 - Q18 here on protecting marine ecosystems. They call for factual or scientific evidence on what, if anything, is needed to protect seabed habitats inside and outside MPAs. Is there a need for measures under specific regulations.

The BSAC would state that in a Baltic context, the overriding need is to keep things simple, not over-legislate and provide full opportunity for all involved to discuss, develop and agree measures where necessary. The ICES special request advice is relatively new and the BSAC would like to take this up at a coming meeting.

Some eNGOs want to highlight that apart from bottom contacting gears, other fisheries must be considered. The ecosystem impacts of large removals of pelagic species sprat and herring, the growth of the stickleback population, coastal fisheries, and not least the recreational fishery, all have impacts and should be considered in the Action Plan. Knowledge is increasing about the importance of large predator fish to control cyprinids and stickleback in the more brackish to freshwater areas. There is also more knowledge about weak sub-populations of herring, and above all about the interactions between species. On top of that comes climate change, as well as the potential of so-called blue carbon, emphasising even more the value of a healthy ecosystem. The Action Plan should close some of the gaps that the CFP regulations do not cover and clarify the links to the MSFD criteria for fish stocks, as well as food webs and biodiversity.

## **5.2 Bottom trawling**

The BSAC refers to the section above 5.1 under protecting marine ecosystems – the issue is the same and referring to the ICES special request advice.

The ICES advice is not to impose a blanket ban on bottom trawling. It is more nuanced. The ICES advice is helpful and needs full discussion. Moreover, the Baltic is not so heavily fished by bottom trawling as other EU waters, although there is some, and some of it is in MPAs.

There is ongoing work in relation to the MSFD with respect to reporting and assessment work relating to the Descriptor 6 on seafloor integrity. Full opportunity should be provided to develop new and innovative gears that can in the long term replace bottom trawling.

There are 4 questions:

Q19 About evidence to support various actions relating to banning, limiting or allowing bottom trawling

Some eNGOs consider the Baltic situation so dire that demersal trawling has lost its place as a usable fishing method from an ecosystem and cost-benefit point of view. Cod can no longer be targetted and even “selective” gears will catch cod and continue to disturb the sea floor, re-suspending nutrients and pollutants. The plaice and non-quota species flounder has low economic value and a few years ago was considered a big bycatch problem, with massive discarding as a result. To leave the fish and benthic habitats alone is worth more than the costs of control, management and sales of the few fish left. It would be more honest and straightforward not to pin hopes on gear improvement at this stage.

One eNGO states that bottom trawling, as pointed out above by ICES, is comparably low in the Baltic Sea, while the condition of many fish species and the whole environment is in a terrible state. The most severe environmental problem in the Baltic Sea is eutrophication, and bottom trawling adds to this since it disturbs the denitrification process and thus lowers the resilience of the ecosystem to eutrophication (Ferguson et al, 2020). On top of that, the resuspension of sediments counteracts sinking carbon (Cavan & Hill, 2020) and it is suggested to leave the carbon rich seabed intact as a means to combat climate change (Sala et al, 2021). Bottom trawling also has a major impact on the highly threatened Baltic cod, since the trawl damages the seabed (Puig et al, 2012) and destroys the cod habitats, and decreases diversity and abundance of benthic invertebrates, limits or changes food availability for fish and reduces the amount of fish (Hiddik et al, 2016). The resuspension of sediment also has a negative effect on cod larvae and eggs (Sköld et al, 2018). The only cod stock that is still healthy is the one in Øresund, an area which has had a ban on bottom trawling since the 1930s (Svedäng and Hornborg, 2017). A ban on bottom trawling has been suggested as a measure to aid cod recovery in the Baltic Sea (Bryhn et al, 2020). Comparing the relatively small amount of bottom trawling in the Baltic Sea with the major environmental and socio-economic consequences it brings through the aggravation of cod recovery by increased eutrophication and destruction of cod habitats, it is not defensible to allow the practice to continue under current conditions<sup>18</sup>.

---

<sup>18</sup> References:

Bryhn, A., Vitale, F., Königson, S., Ovegård, M., Lundström, K., Bergström, U., Valentinsson, D., Sköld, M., Dahlgren, E., Ek, C., Ljungberg, P., Bergek, S., Lunneryd, S.-G., & Wennhage, H. (2020). *Kunskapsunderlag om möjliga icke-torskfiskerelaterade åtgärder för att torskbestånd ska bevaras och återhämta sig i svenska vatten*. 77. <https://pub.epsilon.slu.se/17101/>

Cavan, E.L & Hill, S, L. (2020). Commercial fishery disturbance of the global open-ocean carbon sink. *BioRxiv. Preprint*. <https://doi.org/10.1101/2020.09.21.307462>

Ferguson, Angus J. P., Oakes, Joanne & Eyre, Bradley D. (2020). Bottom trawling reduces benthic denitrification and has the potential to influence the global nitrogen cycle. *Limnology and Oceanography Letters* 5, 2020, 237–245

Q20 Is further information/research needed to collect further evidence?

A representative of small scale fisheries comments that technical solutions need to be made to the fishing gear to protect, for example, reefs and rocky bottoms, such as by eliminating rock hopper trawls. Bottom trawling has done itself in because of its impact on the marine environment, its poor selectivity and its poor CO<sub>2</sub> balance. Therefore, a move away from this fishing technique is inevitable if the fishery is to survive economically.

One eNGO points out that managers need to close the Baltic Sea to bottom trawling until the cod stocks have recovered to healthy levels.

Q21 Should limiting bottom trawling take into account other activities that also affect the seabed?

One eNGO agrees that gravel extraction, dumping of dredging masses and other activities also need to be banned.

Q22 Should “core” and “peripheral” fishing ground areas be included in national maritime spatial plans?

One eNGO agrees, in order to meet the obligations under e.g the MSFD Descriptor 6. Recent analysis shows that most catches are taken in a relatively small area<sup>19</sup>.

---

Hiddink, J. G., Moranta, J., Balestrini, S., Sciberras, M., Cendrier, M., Bowyer, R., Kaiser, M. J., Sköld, M., Jonsson, P., Bastardie, F., & Hinz, H. (2016). Bottom trawling affects fish condition through changes in the ratio of prey availability to density of competitors. *The Journal of Applied Ecology*, 53(5), 1500–1510.

<https://doi.org/10.1111/1365-2664.12697>

Puig, P., Canals, M., Company, J. B., Martín, J., Amblas, D., Lastras, G., & Palanques, A. (2012). Ploughing the deep sea floor. *Nature*, 489(7415), 286–289. <https://doi.org/10.1038/nature11410>

Sala, E., Mayorga, J., Bradley, D., Cabral, R. B., Atwood, T. B., Auber, A., Cheung, W., Costello, C., Ferretti, F., Friedlander, A. M., Gaines, S. D., Garilao, C., Goodell, W., Halpern, B. S., Hinson, A., Kaschner, K., Kesner-Reyes, K., Leprieur, F., McGowan, J., Morgan, L. E., Mouillot, D., Palacios-Abrantes, J., Possingham, H. P., Rechberger, K. D., Worm, B. and Lubchenco, J. (2021) ‘Protecting the global ocean for biodiversity, food and climate’, *Nature*. Springer Science and Business Media LLC, 592(7854), pp. 397–402. doi: 10.1038/s41586-021-03371-z.

Sköld, M., Nilsson, H., & Jonsson, P. (2018). *Bottentrålning - effekter på marina ekosystem och åtgärder för att minska bottenpåverkan*. 2018:7, 62. <https://pub.epsilon.slu.se/16077/>

Svedäng, H., & Hornborg, S. (2017). Historic changes in length distributions of three Baltic cod (*Gadus morhua*) stocks: Evidence of growth retardation. *Ecology and Evolution*, 7(16), 6089–6102. <https://doi.org/10.1002/ece3.3173>

<sup>19</sup> Sources: Commission Decision (EU) 2017/848 of 17 May 2017 laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

ICES Special Request Advice, EU ecoregions, Published 24 June 2021, ICES Advice 2021 – sr.2021.08 – <https://doi.org/10.17895/ices.advice.8191> 1

## **6 Protecting marine ecosystems - sensitive species**

This is sensitive species, not commercial species. It mentions that pelagic driftnetting has been banned. It refers to harbour porpoises. It mentions that innovation in gear and techniques plays a role.

There are 7 questions Q23 – Q29 inviting factual evidence or information on measures needed to prevent bycatch and to oblige fishermen to release them; need for extra measures to facilitate driftnet ban; should certain species get priority, should certain gears be addressed as priority; are there other innovative gears that can be used; do fishers encounter challenges when using innovative gears.

Q30 What to prioritise?

The BSAC gives its full weight to data collection, continued research and testing, awareness raising, use of available financial support towards the development of innovative gears and fishing methods to protect and avoid sensitive species. Full involvement of the fishing and recreational sector is essential to ensure full compliance with whatever is adopted. There is full awareness of the requirements with respect to requirements to protect cetacean populations and to avoid accidental catches. Provided the measures put in place have a rationale and do not hinder fishing operations, they have the full support of fishermen.

Q32 asks whether there should be a two-step approach to taking action and adopting measures. The development of mitigation measures to avoid bycatch of Baltic harbour porpoise could be an example. Acoustic deterrent devices are already being used on gillnetters. There is room for improvement in the use of electronic devices such as pingers and the porpoise-PAL. The BSAC underlines that any deterrent devices must be demonstrated not to attract seals and their effectiveness proven before considering their increased use.

The BSAC made recommendations on mitigation measures for harbour porpoise.<sup>20</sup> The BSAC supported the use of MPAs, until appropriate measures such as acoustic deterrent devices are able to achieve the same effect in order to meet both the objectives of nature conservation and fishing as a protective measure for harbour porpoise.

The voluntary agreement for the protection of harbour porpoises and diving sea ducks in the coastal waters of Schleswig-Holstein can serve as a good example. In general, it is necessary to move away from maximum demands and to look for workable compromises that can be accepted by all sides.

---

<sup>20</sup> <http://www.bsac.dk/BSAC-Resources/BSAC-Statements-and-recommendations/BSAC-recommendations-concerning-mitigation-measure>

## 7. Process and next steps

There are 8 questions.

This covers more general things on best practices, examples of things that have worked, what has worked in the regional groups and together with science etc.

The BSAC has good cooperation with BALTFISH, assisted by ICES and HELCOM. Can we make any suggestions for improvement? Have there been any social and economic benefits? There is increasing cooperation between fisheries and environmental authorities, and the updated Baltic Sea Action Plan includes an action to further promote this, together with HELCOM.

The scientific community appears to be quite strong in research and development, for example on innovative gears, and together with the fisheries sector new gears are developed and tested. This needs to be carried through the decision making in a swifter way.

One eNGO comments that the updated Action Plan could well specify the need to implement ecosystem based management and provide concrete steps to support regional structural changes and actions towards practical implementation of more coherent decision making. Funding to facilitate such integrated regional work should be considered.

The implementation of ecosystem based management can be strengthened through the already good cooperation between the BSAC, BALTFISH and HELCOM. The connections between fisheries and the more general environmental concerns should be highlighted, i.e. a management that considers fish as part of the ecosystem.

Another eNGO comments that the connections between the Baltic MAP and the MSFD could be further developed within this setting, since it is clearly stated in Article 3(3) that the MAP must contribute to GES - stressing the implementation of the ecosystem approach and the need to adhere to other environmental legislation, and especially Descriptor 3, aiming towards a goal where the populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock. A healthy Baltic Sea with functioning ecosystems will provide more fish to the benefit of all<sup>21</sup>.

---

<sup>21</sup> Sources: Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007

## **Regional cooperation**

There are 7 questions about 3<sup>rd</sup> countries, FPAs and RFMOs.

Most of these questions are not relevant for the BSAC. Q 44 refers to Regional Sea Conventions where HELCOM is pivotal, especially in collaboration with a Baltic third country. Recent adoption of the HELCOM Baltic Sea Action Plan, with its 200 actions, helps to focus minds and sharpen priorities for the Baltic. The BSAC strongly supports a more integrated management in the Baltic region. It proposed several actions to the updated BSAP. There is no lack of structures or actions to implement. The BSAC does not want to create new structures or plans, but to make use of what is there and to ensure that mandates are shared, rather than the split into fisheries and environment. Within the regional cooperation, it is important to show intra-regional differences: uniform rules cannot be established for the entire Baltic Sea.