Joint NGO recommendations on Baltic Sea fishing opportunities for 2021

1. Introduction

In October 2020, EU fisheries ministers will agree on fishing opportunities in the Baltic Sea for 2021. As the deadline to end overfishing by 2020 at the latest as legally prescribed by Article 2(2) of the Common Fisheries Policy (CFP)[1] has passed, all fishing limits must be based on sustainable exploitation rates.

Last year, ministers set 5 out of 10 Total Allowable Catches (TACs) in the Baltic Sea exceeding the best available scientific advice for 2020, thereby contravening the CFP deadline. The European Commission proposal included 4 out of 10 TACs exceeding scientific advice, and ministers further increased catch limits beyond levels proposed by the European Commission (e.g. Baltic sprat, western Baltic cod and herring), whilst also removing some positive Commission proposals for improved at-sea monitoring of Baltic cod bycatches[2].

Moreover, the European Ombudsman has made recommendations to improve the transparency of the Council when setting fishing opportunities. The Ombudsman confirmed a finding of maladministration in April 2020[3], expressing disappointment that Council decision-making contravened key democratic standards.

The results of the holistic assessment by the Baltic Marine Environment Protection Commission (Helsinki Commission, HELCOM) on the state of the Baltic Sea reflect that several action areas lag behind in implementation, despite the deadline for achieving Good Environmental Status (GES) of the marine environment by 2020 according to the Marine Strategy Framework Directive (MSFD) and by 2021 according to the Baltic Sea Action Plan (BSAP)[4]. The European Green Deal[5] commits the EU to tackling the impacts of climate change and protecting/restoring biodiversity, and to *"a green oath to 'do no harm'. "*[6] Specifically, the EU Biodiversity Strategy[7] commits to ecosystem-based management, a transition to more selective and less damaging fishing methods, and to set all fishing limits at or below Maximum Sustainable Yield (MSY) levels, in order to restore ocean health.

[1] REGULATION (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy.
[2] The Pew Charitable Trusts (2020). Analysis of Fisheries Council agreement on fishing opportunities in the Baltic Sea for 2020.
[3] https://www.ombudsman.europa.eu/en/decision/en/127388
[4] HELCOM (2018): State of the Baltic Sea – Second HELCOM holistic assessment 2011-2016. Baltic Sea Environment Proceedings 155.
[5] The European Green Deal Communication from the Commission to the European Parliament, The Council, the European Economic and Social Committee of the Regions. The European Green Deal.
[6] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU Biodiversity Strategy for 2030 - Bringing Nature Back into Our Lives.
[7] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU Biodiversity Strategy for 2030 - Bringing Nature Back into Our Lives.

The October AGRIFISH Council provides the Commission and fisheries ministers with a clear and attainable opportunity to deliver on their legal obligations to the CFP to end overfishing, and begin to realise the ambition of the Biodiversity Strategy, when setting Baltic TACs for 2021.

We recognise the challenges the industry faces during the current COVID-19 pandemic and hope the fiscal measures offered by the various countries are helping to alleviate hardship. While COVID-19 response measures may offer support in the short term, a sustainable marine environment supports livelihoods for years to come[8], and in the context of other environmental pressures in the Baltic Sea, we urge decision-makers to set TACs in line with scientific advice so as to build the stable platform industry will need, more than ever, to secure their long-term viability.

The following text outlines the joint NGO recommendations on Baltic Sea fishing opportunities for 2021 in the context of EU fisheries legislation, scientific advice on catch limits, the sharing of stocks with third countries and the current COVID-19 circumstances.

We urge the European Commission to propose, and fisheries ministers to agree on fishing opportunities in accordance with the following recommendations:

- **Set TACs not exceeding scientifically advised levels based on the MSY Approach for all stocks for which MSY-based reference points are available;**
- **Where MSY-based reference points are not available, to not exceed the Precautionary Approach catch limits advised by the International Council for the Exploration of the Sea (ICES);**
- **Set TACs not exceeding the F_{MSY} point value specified in the Baltic Sea Multi-Annual Plan (MAP), following the ICES MSY Advice Rule when spawning stock biomass (SSB) is below the MSY $B_{trigger}$ reference point;**
- **Set TACs at more precautionary levels and take additional spatial and temporal measures to accommodate stock-specific uncertainties (catch misreporting, discards, assessment bias etc.), interspecies stock dynamics (e.g. sprat-cod) and low recruitment trends of individual stocks, whilst also considering other pressures (pollution, eutrophication, climate change) on the Baltic ecosystem that are likely to affect the abundance of fish stock biomass;**
- **Take into account the lack of implementation of the Landing Obligation (LO) when setting TACs, and either require remote electronic monitoring (such as cameras) or onboard observers for all vessels above 12m and for medium-high risk vessels below 12m, or set TACs below ICES catch advice to ensure illegal, unreported discarding does not lead to actual catches exceeding ICES catch advice;**
- **Provide transparent calculations for TACs based on the ICES advice on fishing opportunities;**
- **Improve transparency by making publicly available any proposals subsequent to the official Commission proposal, including Commission non-papers, Council Working Party, and AGRIFISH Council documents and minutes.**

Finally, the European Parliament, as a co-legislator of the CFP basic regulation and of the Baltic Sea MAP, should be vigilant that no infringements of the rules for which it is responsible occur, and that the overarching objective of ending overfishing in the EU is fully achieved. We therefore recommend that members of the European Parliament ensure effective scrutiny of the TACs set by the Council, as well as any technical measures adopted when agreeing annual fishing opportunities.

[8] Joint NGOs briefing: SETTING THE RIGHT SAFETY NET:AFRAMEWORK FOR FISHERIES SUPPORT POLICIES IN RESPONSE TO COVID-19. May 2020.

2. Summary of NGO recommendations on Baltic Sea TACs and additional measures for 2021

TAC by area-species	TAC set for 2020[9]	ICES advice basis	ICES stock catch advice for 2021 (tonnes)[10]	ICES advice adjusted for - Third Country shares - Stock & TAC area mixing	NGO recommendations on TACs and additional measures for 2021
Eastern Baltic cod (SDs 25-32)	2,000 t	Precautionary Approach	0	n/a[11]	**0 t*** - Increase monitoring and control on all vessels using active gears in all areas but prioritised in cod concentration areas, combining both REM and traditional controls. - Introduce additional measures to avoid and minimise cod bycatches in active demersal flatfish fisheries. - Continue with recreational measures agreed for 2020.[12] *Refer to Section 4 for more detail.
Western Baltic cod (SDs 22-24)	3,806 t	EU MAP (F_{MSY})	4,635 (excluding recreational catch)	n/a[13]	**≤2,960 t*** - Consider setting the TAC in the lower F_{MSY} range based (2,960 - 4,635 t^) on "*issues relevant for the advice*" (see ICES 2020)[14]. - Close SD 24 to cod fishing. - Continue the spawning closure for Western Baltic cod in SDs 22-23 (February & March). - Increase monitoring and control on all vessels using active gears in all areas but prioritised in cod concentration areas, combining both REM and traditional controls. - Continue with recreational measures agreed for 2020. *Refer to Section 4 for more detail.

[9] Green = Not exceeding ICES advice for 2020 and CFP requirements. Red = Exceeding ICES advice for 2020 and CFP requirements

[10] For Baltic and Gulf of Finland salmon we have interpreted ICES advice as the 'Commercial Landings' (the reported projected landings) of individual fish. This is the 'Total Commercial Sea Catch' with deductions for the unreported, misreported (i.e. IUU) and unwanted catch (i.e. seal damaged and discards), as estimated by ICES.

[11] Deduct 5% Russian share from the advice for eastern Baltic cod. Deduct catches of eastern Baltic cod in SD 24 (i.e. those caught in the western Baltic cod TAC area). Not applicable with zero catch advice.

[12] COUNCIL REGULATION (EU) 2019/1838 of 30 October 2019 fixing for 2020 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulation (EU) 2019/124 as regards certain fishing opportunities in other waters.

[13] Add the catches of eastern Baltic cod in SD 24 (i.e. those caught in the western Baltic cod TAC area). Not applicable with zero catch advice.

[14] ICES (2020). *Cod (Gadus morhua) in subdivisions 22–24, western Baltic stock (western Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.22-24. https://doi.org/10.17895/ices.advice.5942.* Annex 1.

TAC by area-species	TAC set for 2020[9]	ICES advice basis	ICES stock catch advice for 2021 (tonnes)[10]	ICES advice adjusted for - Third Country shares - Stock & TAC area mixing	NGO recommendations on TACs and additional measures for 2021
Baltic sprat (SDs 22-32)	210,147 t	EU MAP (F_{MSY})	247,952	Deduct 10.08%* Russian share.	**≤222,958 t** - Consider setting the TAC in the lower F_{MSY} range (163,265 - 222,958 t) based on "*issues relevant for the advice*" (see ICES 2020)[15]. - Introduce restrictions on the sprat fishery in SDs 25-26 in order to redistribute the fishery to SDs 27-29 & 32. - Increase control, enforcement, onboard monitoring and sampling of landings to ensure that the misreporting with herring does not continue.
Western Baltic herring (SDs 22-24)	3,150 t	MSY Approach	0	n/a	**0 t** - Additional area and/or time restrictions on the herring fishery in the North Sea and SDs 20-21, as a catch of WBSS in the North Sea will be inevitable[16].
Central Baltic herring (SDs 25-27, 28.2, 29 & 32)	153,384 t	EU MAP (F_{MSY})	111,852	Deduct 9.5%* Russian share. Add 514t for Gulf of Riga herring to be taken in SD 28.2 and deduct 4,189t for Central Baltic herring to be taken in the Gulf of Riga (28.1).	**≤97,551 t** - Consider setting the TAC in the lower F_{MSY} range (72,319 - 97,551 t) based on "*issues relevant for the advice*" (see ICES 2020)[17]. - Increase control, enforcement, onboard monitoring and sampling of landings to ensure that the misreporting with sprat does not continue.
Gulf of Riga herring (SD 28.1)	34,445 t	EU MAP (F_{MSY})	35,771	Deduct 514t for Gulf of Riga herring to be taken in SD 28.2 and add 4,189t for Central Baltic herring to be taken in the Gulf of Riga (28.1).	**≤39,446 t**
Gulf of Bothnia herring (SDs 30-31)	65,018 t	Precautionary Approach	65,018	n/a	**≤65,018 t**

[15] ICES (2020). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, spr.27.22-32. https://doi.org/10.17895/ices.advice.5879.*

[16] ICES (2020). Herring (*Clupea harengus*) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and western Baltic). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.20-24, https://doi.org/10.17895/ices.advice.5928*.

[17] ICES (2020). Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.25-2932. https://doi.org/10.17895/ices.advice.5828.*

TAC by area-species	TAC set for 2020[9]	ICES advice basis	ICES stock catch advice for 2021 (tonnes)[10]	ICES advice adjusted for - Third Country shares - Stock & TAC area mixing	NGO recommendations on TACs and additional measures for 2021
Baltic plaice (SDs 22-32)	6,894 t	***Plaice SDs 21-23:*** EU MAP (F_{MSY}) ***Plaice SDs 24-32:*** Precautionary Approach	5,176 3,297	Deduct estimated catches in SD 21. Apply the same method as detailed in the ICES advice[18]	**≤7,754 t** - Enhance catch monitoring and control on all vessels in the targeted flatfish fishery because of the high volumes of cod bycatches. - Consider a TAC lower than 7,754 t in the context of the need to recover eastern Baltic cod. - Consider a spatial closure in SDs 24 and 26 where eastern Baltic cod is most abundant in order to avoid unnecessary bycatch of the stock on which a zero TAC is recommended.[19] - Consider more selective fishing gears to avoid cod bycatch in the flatfish fisheries.[20,21]
Baltic salmon (SDs 22-31)	86,575	Precautionary Approach	96,600 (ICES reported projected landings)	Deduct 1.9% Russian share.	- Consider a more precautionary TAC of **75,831 individuals**, but in any case, not exceeding 94,765 individuals.* [22] *Refer to Section 4 for more detail.
Gulf of Finland salmon (SD 32)	9,703	Precautionary Approach	9,800 (ICES reported commercial landings)	Deduct 9.3% Russian share.	**≤8,889 individuals[22]**

Note: Assumed Russian shares are based on the 2009 TACs sharing agreement between EU and Russia.

[18] See Table 4 in ICES (2020). Plaice (*Pleuronectes platessa*) in subdivisions 21-23 (Kattegat, Belt Seas, and the Sound).

[19] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). ICES Scientific Reports. 1:76. 69 pp.

[20] ICES (2019). EU request for further information on the distribution and unavoidable bycatches of eastern Baltic cod. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, sr.2019.24*.

[21] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). *ICES Scientific Reports. 1:76. 69 pp.*

[22] There are high survivability exemptions from the EU Landing Obligation (LO) for salmon fisheries. The salmon TACs could be set slightly higher to adjust for "discards" of dead undersize fish which should now be landed and counted against quotas. However, there is uncertainty on the exact proportions of discarded fish that are assumed dead/alive by ICES and other scientific studies. Therefore, we do not include here an upward adjustment in TACs as is observed for other TACs subject to the LO.

3. The CFP's legal requirements for setting Baltic Sea TACs

The annual setting of fishing opportunities is one of the most important tools for achieving the MSY objective of the CFP. The Baltic Sea MAP also provides a further framework for the setting of certain Baltic Sea fishing opportunities in accordance with the objectives and targets as outlined in that plan and the objectives of the CFP. However, the sustainable exploitation rates should have been reached by 2020 and this was not the case for many Baltic Sea stocks[23].

i) The MSY objective

Article 2(2) of the CFP states that the Maximum Sustainable Yield exploitation rate shall be achieved for all stocks by 2020. Setting fishing limits below MSY exploitation rates (F_{MSY}) is crucial to allow fish stocks to recover above sustainable levels. For fish stocks in a very poor state, fishing mortality rates below the F_{MSY} point value can contribute to their restoration, but this alone is not enough. Effective control and monitoring together with additional measures based on the ecosystem-based approach to fisheries management such as spatial and temporal closures, taking into account predator-prey relationships, and transitioning to selective gears, are required.

ii) Application of the precautionary approach

The requirement to set TACs at or below MSY exploitation rates is inseparable from the precautionary approach. Article 2(2) of the CFP and Article 3(1) of the Baltic Sea MAP also requires a precautionary approach (per United Nations Fish Stocks Agreement) as a basic requirement for EU fisheries management. The current disturbed state of the Baltic Sea ecosystem is unprecedented, and climate driven changes are making things worse. It is more important than ever to act in a precautionary manner when setting TACs, in order to drastically minimise pressure on biodiversity, fish populations and habitats, restore marine foodweb functionality, and increase the capacity of the Baltic Sea ecosystem to mitigate and adapt to climate change. The CFP basic regulation has set the precautionary approach also in the context of the EU precautionary principle (Recital 10, referring to Article 191(2)(1) of the TFEU). The Commission and Ministers must therefore implement the CFP – and interpret scientific advice – in a precautionary manner, and aim to achieve a high degree of conservation.

iii) Appropriate implementation of the Baltic Sea MAP

The Baltic Sea MAP[24] in its Article 3 reiterates the CFP objective, set out in Article 2(2) of the basic regulation, to end overfishing by 2020 and to restore and maintain fish stocks above levels capable of producing MSY. This is prevented if fishing pressure is above MSY, so there is subsequently no justification for using the upper fishing mortality ranges. However, the MAP gives the legal basis to act with more precaution and set new measures, including moving a pelagic fishery and reducing catches to maximise food availability to the ecosystem, and considering the most vulnerable stock when setting TACs. Provisions in the Baltic MAP has been cited as justifications to allow overfishing of Baltic stocks in the past, despite this being at odds with the CFP and the EU's wider environmental commitments[25].

iv) Implementation of the Landing Obligation (LO)

The LO provides an opportunity to meet the public's demand for fishing to waste as little as possible and drive the transition to more ecologically sustainable, low-impact fishing. Article 15 of the basic regulation provides member states with a range of tools to successfully implement the LO, however it is understood that broadscale non-compliance with the LO is undermining the objectives of the CFP and of the MSFD, and jeopardising scientific data and assessments[26].

---

[23] The Pew Charitable Trusts (2020). Analysis of Fisheries Council agreement on fishing opportunities in the Baltic Sea for 2020.

[24] 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

[25] Fit for purpose? An assessment of the effectiveness of the Baltic Sea multi-annual plan (BSMAP). September 2019

[26] Scientific, Technical and Economic Committee for Fisheries (STECF) – 60th Plenary Meeting Report (PLEN-19-01). Publications Office of the European Union, Luxembourg, 2019, ISBN 978-92-76-02904-5, doi:10.2760/56785, JRC116423

4. Recommendations on Baltic Sea TACs and additional measures for 2021

Eastern Baltic cod in SDs 25-32

We recommend that the TAC for 2021 should be set at zero in subdivisions (SDs) 25-32 and zero in SD 24 based on the "*ICES advice on fishing opportunities*", which states that "*ICES advises that when the precautionary approach is applied, there should be zero catch in 2021. This advice applies to all catches from the stock in subdivisions 24-32.*"[27]

We also recommend that a rebuilding plan for eastern Baltic cod be developed, taking into account all threats on the stock, including eutrophication, pollution, climate change, habitat loss as well as the general state of the Baltic Sea ecosystem[28].

For 2020 the Council agreed to the Commission 'bycatch TAC' and the suspension of certain targeted fishing activities for eastern Baltic cod, as well as further recreational and spatial measures[29]. Nevertheless, catches of eastern Baltic cod in non-directed fisheries, combined with a lack of adequate at-sea catch monitoring to ensure effective control, enforcement and compliance of 'bycatch TACs' remain a serious concern. Previous NGO communications have recommended pre-requisites for the use of bycatch TACs[30]. These conditionalities have not been met in the case of eastern Baltic cod.

Importantly in the case of eastern Baltic cod, we note that Annex 1 of the ICES advice for 2020 states "*at the present low productivity the stock is estimated to remain below B_{lim} in the medium-term (2024), even at no fishing. Furthermore, fishing at any level will target the remaining few commercial sized (≥35 cm) cod; this will deteriorate the stock structure further, and reduce its reproductive potential.*"[31] This means that any bycatches of eastern Baltic cod are a detriment to the stock. We are concerned about the higher volumes of cod bycatch in the trawl (active demersal) fishery[32] as well as about the continued discarding practice[33].

To recover and safeguard Baltic fish stocks, including eastern Baltic cod, setting a TAC must be supported with additional conservation measures.

If the Commission and Council decide to continue the measures agreed by the Council for eastern Baltic cod for 2020[34], then we would recommend the following additional measures for 2021:

- Increased monitoring and control on all vessels using active gears in all areas but prioritised in cod concentration areas, combining both REM and traditional controls;
- Ensure that any exemptions from the LO are subject to increased at-sea monitoring and control;
- Introduction of more selective fishing gears to avoid cod bycatch in the flatfish fishery (see ICES[35,36]);
- A spatial closure to cover the entire area in the Bornholm Basin and additionally a closure of demersal fisheries in the entire of SD 26[37], which would have limited implications for EU flatfish fisheries, while protecting a substantial part of the eastern Baltic cod stock[38].

---

[27] ICES (2020). Cod (*Gadus morhua*) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.24-32. https://doi.org/10.17895/ices.advice.5943*.

[28] HELCOM (2018): State of the Baltic Sea – Second HELCOM holistic assessment 2011-2016. *Baltic Sea Environment Proceedings 155*.

[29] COUNCIL REGULATION (EU) 2019/1838 of 30 October 2019 fixing for 2020 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulation (EU) 2019/124 as regards certain fishing opportunities in other waters.

[30] Joint NGO paper (2018). Recovering fish stocks and fully implementing the Landing Obligation. See pages 5-6.

[31] ICES (2020). Cod (*Gadus morhua*) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.24-32. https://doi.org/10.17895/ices.advice.5943. Annex 1.

[32] ICES (2019). EU request for further information on the distribution and unavoidable bycatches of eastern Baltic cod. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, sr.2019.24*.

[33] ICES (2020). BALTIC FISHERIES ASSESSMENT WORKING GROUP (WGBFAS). *ICES Scientific Reports. 2:45. 632 pp*. See page 54.

[34] COUNCIL REGULATION (EU) 2019/1838 of 30 October 2019 fixing for 2020 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulation (EU) 2019/124 as regards certain fishing opportunities in other waters.

[35] ICES (2019). EU request for further information on the distribution and unavoidable bycatches of eastern Baltic cod. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, sr.2019.24*.

[36] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). *ICES Scientific Reports. 1:76. 69 pp*.

[37] ICES (2018). Request by Poland to review the effectiveness of current conservation measures in place for the Baltic cod.

[38] ICES (2019). EU request for further information on the distribution and unavoidable bycatches of eastern Baltic cod. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, sr.2019.24*.

TAC setting needs to consider an ecosystem-based approach to fisheries management as required by the CFP. Prioritisation of the interspecies and foodweb considerations would contribute to the achievement of GES as required by MSFD.

In addition, we urge you to:

- Consider the implications for cod when setting the TAC for plaice and the time and area plaice is fished[39] (see recommendation below);
- Seriously consider setting the central Baltic herring and sprat TACs to prioritise the needs for cod as well as considering the temporal and spatial allocation of the fishing for sprat, in accordance with the ICES advice on fishing opportunities[40] (see recommendations below);
- Consider interactions between species (cod, herring, sprat) and their predator-prey dependence as well as other environmental factors. This can be done by using the ICES Baltic Sea Ecosystem Overview[41] in conjunction with ICES advice on fishing opportunities.

Western Baltic cod in SDs 22-24

We recommend that the TAC for 2021 should not exceed 2,960 tonnes ($F_{MSY\ lower}$) and in no circumstances should it exceed 4,635 tonnes (F_{MSY}), in line with the CFP and ICES headline advice. In addition, all cod fishing should be closed in SD 24 due to the unavoidable catch of eastern Baltic cod in SD 24, for which ICES has advised a zero catch in both 2020 and 2021. The TAC should be caught only in SDs 22-23, outside of the temporal fishery closure during the spawning time (February & March).

Our recommendation is based on the Baltic Sea MAP Article 5(1), which applies when the Spawning Stock Biomass (SSB) is below the MSY $B_{trigger}$ reference point to reduce fishing mortality to MSY F_{lower}[42]. We note that the SSB is highly uncertain and is currently estimated just below MSY $B_{trigger,}$ (but the margin of error indicates the stock may be below the lowest or above the highest reference point). We note that "*the assessment this year has downscaled the 2020 SSB estimate by 30%.*" (Section 2.3.8 - ICES WGBFAS)[43]. The previous year the biomass for this stock was downscaled by 45%[44], reflecting the high uncertainty regarding the size of the stock and therefore the appropriate TAC and level of fishing mortality.

Annex 1 of ICES advice highlights that the SSB *"is presently above B_{lim} and close to MSY $B_{trigger}$. […] Recruitment (R) has been low since 1999; […] The recruitment in 2018 and 2019 (age 1) are the lowest in the time series*." Furthermore, *"The increase of SSB in the forecast is mainly due to one strong year class (the 2016 year class) […] If no stronger year classes occur in the coming years this will lead to a rapid decline of the stock."*[45]

Moreover, the size of the strong year class from 2016 has been revised downward again this year. This year class accounted for 88% of fish caught in 2019 by weight[46]. Setting the TAC at MSY F_{lower} is recommended when the age and size distribution of the stock is so skewed and recruitment in the following and preceding years has been at record low levels.

ICES states in the "*EU Standing request catch scenarios for zero TAC stocks"* that if "*the commercial catch of western Baltic cod in 2021 is in line with the advised catch of 4,635 tonnes, it is expected that 1,532 tonnes of eastern Baltic cod will be harvested in SD 24 in 2021 (Table 1, Scenario b).*"[47] Therefore we also

[39] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). *ICES Scientific Reports. 1:76. 69 pp.*

[40] ICES (2020). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, spr.27.22-32. https://doi.org/10.17895/ices.advice.5879.*

[41] ICES (2019). Baltic Sea Ecoregion – Ecosystem overview. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, Section 4.1, https://doi.org/10.17895/ices.advice.5752.*

[42] ICES (2020). *Cod (Gadus morhua) in subdivisions 22–24, western Baltic stock (western Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.22-24. https://doi.org/10.17895/ices.advice.5942.* Annex 1.

[43] ICES (2020). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 2:45. 632 pp. See page 132.

[44] ICES (2019). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 1:20. 653 pp. See page 134.

[45] ICES (2020). *Cod (Gadus morhua) in subdivisions 22–24, western Baltic stock (western Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.22-24. https://doi.org/10.17895/ices.advice.5942.* Annex 1.

[46] ICES (2020). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 2:45. 632 pp. See page 128.

[47] ICES (2020). EU standing request on catch scenarios for zero TAC stocks 2020; the eastern Baltic cod (*Gadus morhua*) stock in subdivisions 24–32. *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, sr.2020.05a. https://doi.org/10.17895/ices.advice.6029*.

recommend that all cod fishing be closed in SD 24 due to the unavoidable catch of eastern Baltic cod in SD 24, for which ICES has advised a zero catch in both 2020 and 2021[48].

ICES highlights in the Annex section "*issues relevant for the advice"* that *"catches in subdivision 24 should be zero in order to comply with the zero catch advised for EB cod",* it also notes the potential negative effect on spawning if the total advised western Baltic cod commercial catch (effort) from SD 24 is displaced to SD 22-23[49]. As such, we recommend the continuation of the agreed temporal fishery closure in SDs 22-23 during the spawning time (February & March)[50].

Baltic Sea sprat in SDs 22-32

The TAC for 2021 should not exceed 222,958 tonnes (F_{MSY}). We recommend that the TAC should be set in the lower F range i.e. between $F_{MSY\ lower}$ (163,265 tonnes) and F_{MSY} (222,952 tonnes). The TAC of 222,958 tonnes is based on ICES advice of F_{MSY} (247,952 tonnes). The lower TAC of 163,265 tonnes is based on ICES $F_{MSY\ lower}$ figure (181,567 tonnes). For both we have deducted from the ICES advised figures an assumed Russian share of 10.08%[51].

This recommendation takes into consideration an ecosystem-based approach to fisheries management taking into account dynamics between the stocks of eastern Baltic cod and sprat as noted in the ICES advice[52]. In its Ecosystem Overview – Baltic Sea Ecoregion, ICES explain: *"Many species and habitats of the Baltic Sea are not in good condition, according to recent assessments. This affects foodweb functionality, reduces the resilience and resistance against further environmental changes, and diminishes prospects for socioeconomic benefits, including fishing opportunities."*[53] More precaution is needed while managing pelagic stocks in a disturbed Baltic Sea ecosystem, thus using the lower range of F_{MSY} is justified.

We further recommend restrictions on the sprat fishery in SDs 25-26 in order to redistribute the sprat fishery to the northern areas (SDs 27-29 & 32) to improve food availability for cod. This is in accordance with "*issues relevant for the advice*", where ICES state: "*The abundance of cod in subdivisions 25-26 is high compared to other areas in the Baltic, and the condition of these stocks is considered to be limited by food availability. Sprat and herring are important food items for cod (especially sprat). Both prey stocks have a broader distribution in the Baltic than cod (Figure 3). The relative proportion of sprat caught in the main cod distribution area has increased over the past decade, from 37% of the total catch in 2010 to 58% in 2019. This sprat fishery in the overlap area with cod is potentially decreasing the local sprat density in the main cod distribution area (subdivisions 25-26), which in turn may lead to increased food deprivation for cod (Casini et al., 2016). Thus, restrictions established for sprat fisheries in the main cod distribution area would result in the increased availability of clupeid prey, which could ultimately benefit the cod stock; however, several other factors also have an impact on the cod stock (ICES, 2019a). Redistribution of the fishery to the northern areas (subdivisions 27-29 and 32) may also reduce the density-dependent effect, i.e. increase the individual growth for the clupeids in the area."*[54]

In addition, we note that there is evidence that Baltic pelagic fisheries misreported official catches, with sprat catches regularly recorded as herring in 2019[55,56]. This means catches of sprat might be higher than those officially reported. When data is uncertain even more precaution is needed in fisheries management

---

[48] ICES (2020). Cod (*Gadus morhua*) in subdivisions 24–32, eastern Baltic stock (eastern Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.24-32. https://doi.org/10.17895/ices.advice.5943.*

[49] ICES (2020). *Cod (Gadus morhua) in subdivisions 22–24, western Baltic stock (western Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.22-24. https://doi.org/10.17895/ices.advice.5942.* Annex 1.

[50] COUNCIL REGULATION (EU) 2019/1838 of 30 October 2019 fixing for 2020 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulation (EU) 2019/124 as regards certain fishing opportunities in other waters.

[51] Based on the 2009 TACs sharing agreement between EU and Russia. However, we note that ICES estimate the Russian quota in 2020 as 46,500 tonnes – which was 18.1% of the TAC. Emphasising the need for better coherence between the EU and Russian quota.

[52] ICES (2020). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, spr.27.22-32. https://doi.org/10.17895/ices.advice.5879.*

[53] ICES (2019). Baltic Sea Ecoregion – Ecosystem overview. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, Section 4.1, https://doi.org/10.17895/ices.advice.5752.*

[54] ICES (2020). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, spr.27.22-32. https://doi.org/10.17895/ices.advice.5879.*

[55] https://www.fishsec.org/2019/09/17/pelagic-trawlers-report-false-catch-figures-and-undermine-sustainable-management/

[56] ICES (2020). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, spr.27.22-32. https://doi.org/10.17895/ices.advice.5879.* See page 3.

– following the precautionary approach as defined in the CFP. **We further suggest that a significant increase in control, enforcement, onboard monitoring and sampling of landings is required to ensure that misreporting ceases.**

Western Baltic Spring Spawning (WBSS) herring in SDs 22-24

We recommend that the TAC for 2021 should be zero. This is the third year in a row that ICES advices a zero TAC based on the MSY approach.

Furthermore, we recommend that the EU-Norway TAC setting procedure (EU-Norway, 2013) should not continue. This in line with the EU and Norway agreement (2019) to review TAC setting procedures for North Sea Autumn Spawning (NSAS) alongside WBSS[57] and acknowledges that the TAC-setting procedure should not be used "*if serious concerns exist about the status of one of the two stocks, which is the case given the severe over-exploitation of the WBSS stock.*"[58]

ICES assess that fishing pressure on the stock is above F_{MSY} and F_{pa}. The SSB is estimated to be below B_{lim} and has been below B_{lim} since 2007. Recruitment has been low since the mid-2000s and at a historic low for the last five years. All catch scenarios, including zero catch, result in SSB remaining below B_{lim} in the short-term (2022) and likely until 2023 (see ICES 2020 – Table 4)[59].

According to Article 5 of the Baltic Sea MAP, further remedial measures including the suspension of fishing activity shall be taken to ensure rapid return of the stock concerned to levels above the level capable of producing MSY, when scientific advice indicates that the spawning stock biomass is below B_{lim}, which is the case for WBSS.

We note in "*issues relevant for the advice*" ICES state: "*The stock is caught across three different management units and recovery will be impaired if catches of this stock are not minimized in all units. Without additional area and/or time restriction on the herring fishery in the North Sea in 2020, a catch of WBSS in the North Sea will be inevitable (it is estimated that 21% of the 2020 total catches from the stock are taken in Division 4.a). For the other two areas, catch shares in 2020 are estimated to be 59% for subdivisions 20–21 and 20% for subdivisions 22-24*."[60] **We therefore recommend in accordance ICES advice that additional area and/or time restrictions on the herring fishery are considered in the North Sea and in SDs 20-21**.

We also note that ICES has recommended that a rebuilding plan for this stock be developed[61].

Central Baltic Sea (excluding Gulf of Riga) herring in SDs 25-29 & 32

The TAC for 2021 should not exceed 97,551 tonnes (F_{MSY}). We recommend that the TAC should be set in the lower F range i.e. between $F_{MSY\ lower}$ (72,319 tonnes) and F_{MSY} (97,551 tonnes). The TAC of 97,551 tonnes is based on ICES advice of F_{MSY} (111,852 tonnes). The lower TAC of 72,319 tonnes is based on ICES MSY F_{lower} figure 83,971 tonnes). From both ICES figures we have deducted an assumed 9.5% Russian share[62], and then added 514 tonnes for Gulf of Riga herring taken in SD 28.2 and deducted 4,189 tonnes for Central Baltic herring taken in Gulf of Riga (28.1).

This recommendation takes into consideration an ecosystem-based approach to fisheries management, taking into account dynamics between the stocks of eastern Baltic cod and herring[63]. Additionally, the ICES advice indicates that the central Baltic herring biomass is expected to decline in the coming years.

---

[57] Agreed record of fisheries consultations between Norway and the European Union for 2020.

[58] ICES (2020). HAWG Report 2020 - Section 3 - Herring in Division3a and Subdivisions 22-24. See page 18.

[59] ICES (2020). Herring (*Clupea harengus*) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and western Baltic). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.20-24, https://doi.org/10.17895/ices.advice.5928*.

[60] ICES (2020). Herring (*Clupea harengus*) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and western Baltic). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.20-24, https://doi.org/10.17895/ices.advice.5928*.

[61] ICES (2020). Herring (*Clupea harengus*) in subdivisions 20–24, spring spawners (Skagerrak, Kattegat, and western Baltic). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.20-24, https://doi.org/10.17895/ices.advice.5928*.

[62] Based on the 2009 TACs sharing agreement between EU and Russia. However, we note that ICES estimate the Russian quota in 2020 as 29,100 tonnes – which was 15.6% of the TAC. Emphasising the need for better coherence between the EU and Russian quota.

[63] ICES (2020). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, spr.27.22-32. https://doi.org/10.17895/ices.advice.5879.*

ICES information on stock developments over time reads as follows: "*SBB shows a decreasing trend since 2014 and is just below MSY $B_{trigger}$ in 2020. Fishing mortality has shown an increasing trend since 2014 and has been above F_{MSY} since 2015 and above F_{pa} in 2019. The high recruitment in 2015 was followed by four years of below average or average recruitment.*" In addition, ICES state in "*issues relevant for the advice*" that *"It is expected that the large 2014 year class will still be the main contributor to the yields in 2020, but the size of the year class is uncertain and estimates have been revised downwards considerably since 2016. The stock status in the coming years will depend on the further development of the incoming stronger year class of 2019. It is predicted that the 2019 year class may contribute to a greater extent to the yield in 2021, and also to the SSB in 2021 and 2022."*[64] It would be prudent for decision-makers to attempt to conserve the 2014 year class and limit the chances of significant downwards variations in fishing opportunities in future years.

As explained in our recommendations on sprat in SDs 22-32, more precaution is needed while managing pelagic stocks in a disturbed Baltic Sea ecosystem, and when the data on catches is uncertain (i.e. due to the misreporting of sprat as herring). Using the lower range of F_{MSY} is therefore appropriate.

Gulf of Riga herring in SD 28.1

We recommend that the TAC for 2021 should not exceed 39,446 tonnes. This is based on the ICES advice of F_{MSY} (35,771 tonnes), from which we deduct 514 tonnes for Gulf of Riga herring taken in SD 28.2 and add 4,189 tonnes for Central Baltic herring taken in Gulf of Riga (28.1).

Annex 1 of ICES advice for 2020 highlights in section "*issues relevant for the advice*" that "*in the short term this stock is not expected to increase to biomasses above the* highest *observed in the time-series in 2014. Mean weights in the stock have also been stable in recent years, suggesting little evidence for declining growth due to intra-species interactions. The stock has stabilized far above the $B_{trigger}$ and density dependency within this stock has not been observed. Therefore, ICES does not consider that the evidence is sufficient to justify an application of the upper F_{MSY} range based on the condition "to avoid serious harm to a stock caused by intra- or inter-species stock dynamics", set out in the MAP."*[65]

Gulf of Bothnia herring in SDs 30-31

We recommend that the TAC for 2021 should not exceed 65,018 tonnes. This is the ICES Precautionary Approach advice.

We note that ICES downgraded the stock assessment to category 5[66]. We would like to highlight that ICES advice based on data-limited Precautionary Approach framework is the best available scientific advice for data-limited stocks and as such should be followed by decision-makers. We encourage member states in the region to enhance data collection and processing to improve future assessments.

Baltic Sea plaice in SDs 22-32

We recommend that the TAC for 2021 should not exceed 7,754 tonnes. This is based on the ICES F_{MSY} catch scenario for plaice in SDs 21-23[67] and ICES Precautionary Approach advice for plaice in SDs 24-32 (see ICES 2020 – Table 3)[68].

We note the likelihood of significant bycatch of eastern Baltic cod when catching plaice in SDs 24-26[69]. The setting of the plaice TAC needs to be carefully considered in the context of conservation measures and a rebuilding plan for eastern Baltic cod. We note that 5,712 tonnes were landed in 2019, just over

[64] ICES (2020). Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.25-2932. https://doi.org/10.17895/ices.advice.5828*.

[65] ICES (2020). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.28. https://doi.org/10.17895/ices.advice.5877.* Annex 1.

[66] ICES (2020). Herring (*Clupea harengus*) in subdivisions 30 and 31 (Gulf of Bothnia). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.3031. https://doi.org/10.17895/ices.advice.5902.*

[67] ICES (2020). Plaice (*Pleuronectes platessa*) in subdivisions 21–23 (Kattegat, Belt Seas, and the Sound). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, ple.27.21-23. https://doi.org/10.17895/ices.advice.5870.*

[68] ICES (2020). Plaice (Pleuronectes platessa) in subdivisions 24–32 (Baltic Sea, excluding the Sound and Belt Seas). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, ple.27.24-32. https://doi.org/10.17895/ices.advice.5871.*

[69] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). ICES Scientific Reports. 1:76. 69 pp.

56%[70] of a 10,122 tonnes TAC. Setting a TAC that far exceeds landings creates a situation where fishing effort is not constrained and poses an unnecessary risk to the recovery of eastern Baltic cod caught alongside plaice and flounder.

The ICES report states "*cod and flounder overlap in the entire distribution area of the eastern Baltic cod stock; plaice and eastern Baltic cod overlap in subdivisions 24-25. Therefore, there are no areas or months where flatfish fisheries with non-selective gears could be conducted in subdivisions 24-26 without a risk of bycatch of cod. Only a small fraction of EU flatfish landings were taken in subdivision 26 in later years (6% of flounder landings in 2018). Therefore, a potential closure of subdivision 26 for demersal fisheries would have limited implications for EU flatfish fisheries, while protecting a substantial part of the eastern Baltic cod stock.* [71]"

In order to avoid unnecessary bycatch of eastern Baltic cod, where ICES advise zero catches, we recommend that the Commission and Council consider a TAC lower than 7,754 tonnes for plaice, more selective fishing gears to avoid cod bycatch in the flatfish fisheries (see ICES[72,73]) and spatial closures of SDs 24 and 26.

Furthermore, we recommend that the Commission request the ICES Working Group on Mixed Fisheries Advice (WGMIXFISH) to prioritise the mixed demersal fishery in the Baltic Sea, where the cod stocks, plaice and flounder stocks overlap. This will ensure the best available science in relation to setting mixed fisheries catch limits can be utilised. In this context, the Commission and Council should ensure that the most vulnerable stocks are not overfished when proposing and setting TACs in mixed fisheries.

Baltic Sea (excluding the Gulf of Finland) salmon in SDs 22-31

We note that the ICES advice is for commercial landings of 94,765 salmon. We calculate this based on the "*reported projected landings*" of 96,600 salmon, minus an assumed Russian share of 1.9%[74].

However, we recommend that the TAC for 2021 should be set at a more precautionary level than the ICES advice and suggest that the Commission and Council consider a TAC of 75,831 salmon. This is based on Scenario 3 of the ICES advice "*catch scenarios*" section. Where ICES calculate "*reported projected landings*" of 77,300 salmon (see ICES 2020 – Table 2[75]) based on a 20% decrease in catch from ICES advice (Scenario 1), and minus an assumed Russian share of 1.9%.

A more precautionary TAC should be considered for the following reasons:

- ICES advice states that *"management of salmon fisheries should be based on the status of individual river stocks. Fisheries on mixed stocks that encompass weak wild stocks present particular threats, and should be kept as close to zero as possible"*[76]. The recent ICES review of the draft multiannual plan for Baltic salmon concluded that the approach previously used deviates from the objective of achieving MSY for several of the river stocks.
- ICES notes that "*maintaining a noticeable mixed-stock sea fishery with the current fishing patterns, then it must be accepted that some rivers will be below the level where they are capable of producing MSY, and some rivers may even go extinct*."[77,78] This is not an acceptable policy

[70] ICES (2020). Plaice (Pleuronectes platessa) in subdivisions 24–32 (Baltic Sea, excluding the Sound and Belt Seas). *In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, ple.27.24-32. https://doi.org/10.17895/ices.advice.5871.*

[71] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). *ICES Scientific Reports. 1:76. 69 pp.*

[72] ICES (2019). EU request for further information on the distribution and unavoidable bycatches of eastern Baltic cod. *In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, sr.2019.24*.

[73] ICES (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). *ICES Scientific Reports. 1:76. 69 pp.*

[74] Based on the 2009 TACs sharing agreement between EU and Russia.

[75] ICES (2020). Salmon (*Salmo salar*) in subdivisions 22–31 (Baltic Sea, excluding the Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.22–31, https://doi.org/10.17895/ices.advice.5900.*

[76] ICES (2020). Salmon (*Salmo salar*) in subdivisions 22–31 (Baltic Sea, excluding the Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.22–31, https://doi.org/10.17895/ices.advice.5900.*

[77] ICES (2020). EU request on evaluation of a draft multiannual plan for the Baltic salmon stock and the fisheries exploiting the stock. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, sr.2020.02, https://doi.org/10.17895/ices.advice.6008.

[78] ICES (2020). Salmon (*Salmo salar*) in subdivisions 22–31 (Baltic Sea, excluding the Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.22–31, https://doi.org/10.17895/ices.advice.5900.*

outcome. Progress must be made to transition to more sustainable salmon management. In the short-term this can be initiated through the setting of more precautionary TACs for salmon.

- ICES notes *"that if the goal is to obtain MSY for all river stocks, the mixed-stock sea fisheries (both commercial and recreational) will have to be kept either at very low levels or closed while optimizing the river fisheries*."[79] This means there needs to be urgent management discussions on how to achieve the CFP objectives for salmon across all fisheries.
- ICES notes "*there is considerable uncertainty about the amount of salmon discarded, and even greater uncertainty about the proportion that survives when discarded. Seal-damaged salmon are all dead, but there is also uncertainty about the amount of seal-damaged salmon."* [80] This needs to be considered when setting the TAC.
- ICES notes: "*misreported catch, as a proportion of the total estimated catch, decreased to almost non-existent (1%) from previous year (32%). […] The decrease is a consequence of new regulations which ban sea trout fishing beyond a 4-mile baseline in the Baltic Sea offshore area."*[81] We are concerned about the effectiveness of the measure and more precaution is needed on TAC setting until there is published evidence that these measures are effective and suitably controlled.

Gulf of Finland salmon in SD 32

We recommend that the 2021 TAC should not exceed 8,889 salmon. This is based on ICES advice for the "*reported commercial landings*" of 9,800 salmon, minus an assumed Russian share of 9.3%. We emphasise that fishery should target only on reared finclipped salmon in order to keep fisheries-related mortality on wild salmon as low as possible, in accordance with ICES advice on fishing opportunities for 2021[82].

Contacts

Andrew Clayton	**The Pew Charitable Trusts**	aclayton@pewtrusts.org
Cathrine Pedersen Schirmer	**Danish Society for Nature Conservation**	Cathrine@dn.dk
Nils Höglund	**Coalition Clean Baltic**	nils.hoglund@ccb.se
Tapani Veistola	**Finnish Association for Nature Conservation**	tapani.veistola@sll.fi
Christian Tsangarides	**Fisheries Secretariat**	christian.tsangarides@fishsec.org
Javier López	**Oceana**	jlopez@oceana.org
Rebecca Hubbard	**Our Fish**	bec@our.fish
Andrea Ripol	**Seas At Risk**	aripol@seas-at-risk.org
Ottilia Thoreson	**WWF Baltic Ecoregion Programme**	ottilia.thoreson@wwf.se

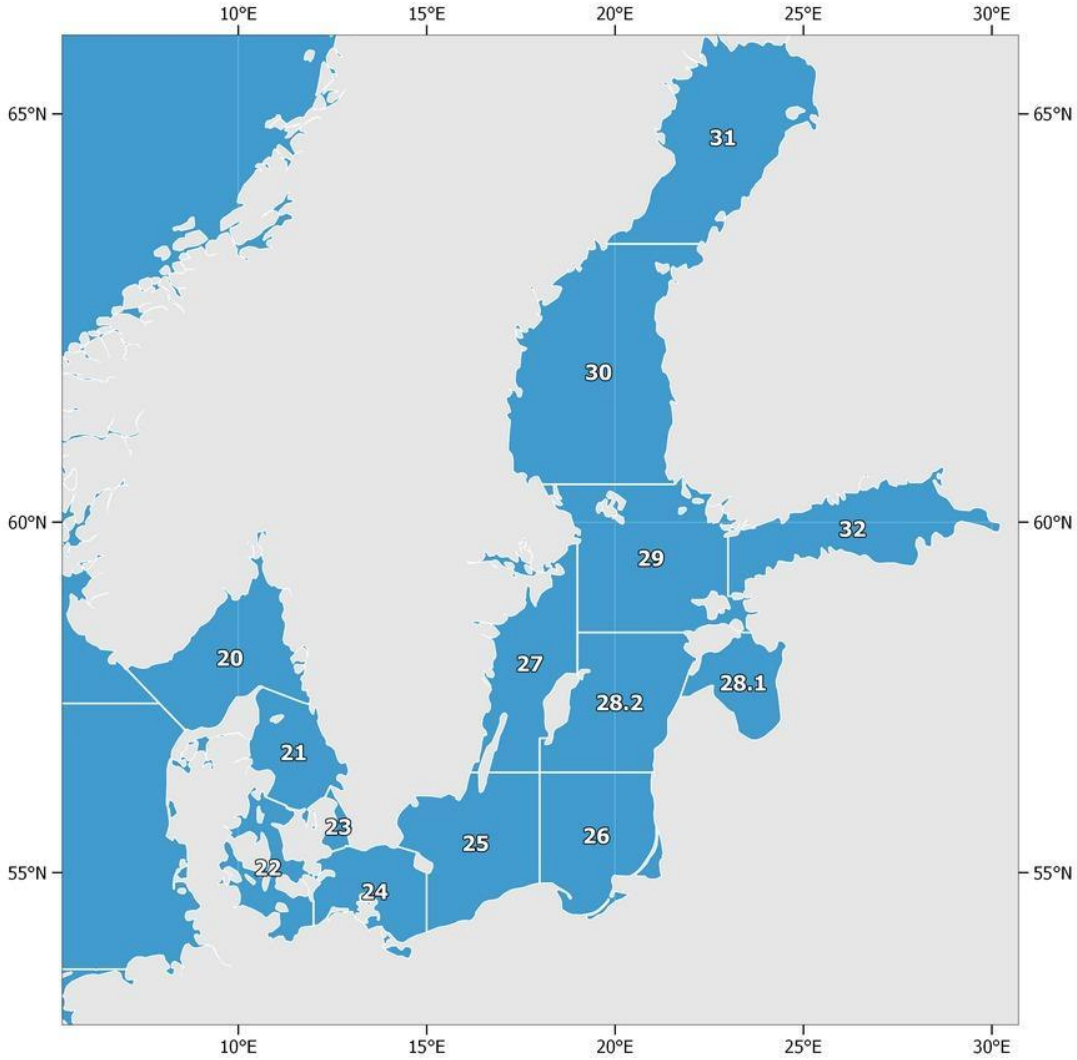
[79] ICES (2020). Salmon (*Salmo salar*) in subdivisions 22–31 (Baltic Sea, excluding the Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.22–31, https://doi.org/10.17895/ices.advice.5900.*

[80] ICES (2020). Salmon (*Salmo salar*) in subdivisions 22–31 (Baltic Sea, excluding the Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.22–31, https://doi.org/10.17895/ices.advice.5900.*

[81] ICES (2020). Salmon (*Salmo salar*) in subdivisions 22–31 (Baltic Sea, excluding the Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.22–31, https://doi.org/10.17895/ices.advice.5900.*

[82] ICES (2020). Salmon (*Salmo salar*) in Subdivision 32 (Gulf of Finland). *In Report of the ICES Advisory Committee, 2020, ICES Advice 2020, sal.27.32. https://doi.org/10.17895/ices.advice.5974.*

Annex - Map of Baltic subdivisions (SDs)



Map of the Baltic Sea showing the subdivisions of the Belt, the Sound, and the Baltic for the reporting of catch statistics.
Source: http://www.fao.org/fishery/area/Area27/en