LFPO Pelagic Trawl Sprat (*Sprattus sprattus*)

MSC Certificate code: MSC-F-31308 (F-BV-0580)

Public Comment Draft Report

Conformity Assessment Body (CAB)	Bureau Veritas Certification Holding SAS
Assessment team	Hans Lassen, Carmen Morant, Gemma Quílez and Sarmite Zoltnere
Fishery client	LFPO Latvian Fisheries Producer Organisation / NZRO Nacionālās zvejniecības ražotāju organizācija
Assessment Type	Re-assessment
Date	September, 2022

1 Contents

2 Glossary

Concepts and terms:

B_{LIM}	Precautionary reference point. SSB below B_{lim} indicate increase risk of impairment of recruitment
B_{MSY}	Spawning biomass (equilibrium) when fishing at FMSY
B_{PA}	Precautionary reference point SSB below B_{PA} indicate that action should be taken to recover the stock
$B_{trigger}$	Biomass level below which fishing mortality should be reduced
BASS	Baltic Acoustic Spring Survey
BIAS	Baltic International Acoustic Survey
CAB	Conformity Assessment Body (in the case of this particular assessment the CAB is BV)
CBH	Central Baltic Herring Stock
CoC	Chain of Custody
CFP	European Common Fisheries Policy
CPUE	Cath per Unit of Effort
DCF	Data Collection Framework (EU program for documentation of fisheries activities and fishing fleets)
FCR	(MSC) Fisheries Certification Requirements
FCP	(MSC) Fisheries Certification Process
GoR	Gulf of Riga
EBC	Eastern Baltic Cod stock
ETP	Endangered, Threatened and Protected
f/v	Fishing vessel
F_{LIM}	Fishing mortality which should be avoided with high probability because it is associated with unknown population dynamics or stock collapse
F_{MSY}	Fishing mortality at MSY
F_{PA}	Fishing mortality to ensure that there is a high probability that F_{lim} will be avoided and that the spawning stock biomass will remain above the threshold B_{lim}
HCR	Harvest Control Rules
IPI	Inseparable or practicably inseparable (catches or stocks)
LZIKIS	Integrated Control Information for Latvian Fisheries Fisheries System
LTL	Low Trophic Level
MCS	Monitoring, Control and Surveillance
MPA	Marine Protected Area
MSY	Maximum Sustainable Yield
P1, P2, P3	MSC Principles 1, 2, 3 respectively
PRI	Point where Recruitment would be Impaired
SA	(MSC) Surveillance audit
t	Metric tons
TAC	Total Allowable Catch
UoA	Unit of Assessment
UoC	Unit of Certification
WBSSH	Western Baltic Spring Spawning Herring Stock

Organizations:

ASCOBANS	Agreement on the Conservation of Small Cetaceans in the Baltic, NorthEast Atlantic, Irish and North Seas
BIOR	Latvian Institute of Food Safety, Animal Health and Environment
BV	Bureau Veritas
CITES	Convention on International Trade of Endangered Species of Wild Fauna & Flora
DTU Aqua	Danish Technical University, Danish National Institute of Aquatic Resources
EU	European Union
EFCA	European Fisheries Control Agency
FAO	Food and Agriculture Organization of the United Nations
HELCOM	Helsinki Commission -Baltic Marine Environment Protection Commission-
IBSFC	International Baltic Sea Fishery Commission
ICES	International Council for the Exploration of the Sea
LFPO	Latvian Fishermen's Producers Organization (NZRO in Latvian)
MSC	Marine Stewardship Council
NZRO	Nacionālās zvejniecības ražotāju organizācija (LFPO in English)
SES	(Latvian) State Environmental Service
STECF	Scientific, Technical and Economic Committee for Fisheries
WWF	World Wildlife Fund

WGBAST	Baltic Salmon and Trout Assessment Working Group
WGBFAS	ICES Baltic Fisheries Assessment Working Group

3 Executive summary

This fishery was initially assessed against MSC Fisheries Certification Requirements version 2.0 and received the MSC-Fisheries certificate on May 22, 2017.

No conditions were set to this fishery during the initial assessment and no re-scoring took place during the first surveillance audit. At the second audit, several PIs were re-scored due to harmonisation process (see Appendix 5.4 of the 2nd Surveillance Report for further details on the process). The most significant change to initial scoring is due to including the cumulative impacts from all MSC UoAs on harbour porpoise population in the Baltic proper, which led to setting a new condition on PI 2.3.1. At the third audit no PI was re-scored nor was there any new condition set.

During the fourth audit, the Baltic Sprat status was reassessed based on changes in the perception of the sprat stock dynamics in relation to ecosystem needs and PI 1.1.1A (Baltic Sprat) was rescored. Also, PI 1.2.1 and PI 1.2.2 were rescored. Furthermore, the status of the Central Baltic herring had deteriorated and consequently PI 2.1.1 was rescored. The rescoring led to new conditions on PI 1.1.1A and PI 1.2.2.

The rescoring of PI 1.1.1A, PI 1.2.1 and PI 1.2.2 was the result of a harmonisation initiated by Global Trust Certification on behalf of the Poland herring and sprat midwater trawl and gill net fishery. The result was based on the 'Lowest score principle'. In addition, the condition on PI 2.3.1 (Harbour porpoise) was found to be 'on target' during the 4th surveillance.

Relevant reports are available at https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments.

The assessment team completed the ACDR using the information provided in the Client Document Checklist, all previous reports from the first certificate cycle, public documents elaborated by the competent authorities and research institutes, and related scientific literature. This information was contrasted and discussed with relevant stakeholders (BIOR, WWF, Ministry and the client) during the on-site visit that took place in Latvia between March 7 and 10 (see **section 9.2** for more details on the visit). New documents were also submitted during the visit. The team modified the ACDR accordingly after the visit to prepare the CPRDR.

Upon receipt of the client's and peer reviewers' comments, the team shall address all the issues raised, changing any part of the scoring, conditions and report as necessary, and incorporate peer reviewer comments and team responses to those comments and any appropriate changes in the CPRDR to create the Public Comment Draft Report (PCDR). The team shall also verify that the Client Action Plan/s prepared by the client for the condition/s set is in accordance with FCP 7.19.7 and 7.19.8. Besides, the team shall document and retain any comments made by the client on the CPRDR and the responses for the team.

The current report was prepared by Bureau Veritas Iberia. The assessment team for this fishery was comprised of Hans Lassen (P1 expert), Carmen Morant (P2 expert), Gemma Quílez (P3 expert who also acted as team leader) and Sarmite Zoltnere (local expert and traceability).

This Public Comment Draft Report (PCDR) provides to the client, peer reviewers and all other stakeholders with the opportunity to review the results of the reassessment of the LFPO Pelagic Trawl Sprat Fishery against the MSC-Fisheries Standard v2.01. The reassessment process will follow the MSC Fisheries Certification Process v2.2 and using the default assessment tree (Annex SA) of the MSC Fisheries Standard, v2.01.

Both the assessment team and Bureau Veritas agree that **the draft determination is that the LFPO Pelagic Trawl Sprat Fishery SHOULD NOT be re-certified by MSC**.

Main Strengths

The main strengths of the client's operations are listed below:

Principle 1

- The stock status for Baltic Sprat is good. There may be no need to score PI 1.1.2 (rebuilding), see weakness below.
- Ecosystem functioning is well researched and there are for the Baltic Proper well established food web models available.
- The harvest strategy is well established through the EU Multiannual Plan and through the EU-Russian agreement for Baltic Sprat and Central Baltic Herring, see also weaknesses below.
- There is a well-defined HCR available (Regulation (EU) 2016/1139, Regulation (EU) 2019/472), see weaknesses below.
- The fishery and the stock are well monitored through ERS, EU-DCF and stock assessments performed by ICES.

Principle 2

- The fishery is highly selective, with catches of herring and sprat accounting for more than 95% of total UoA catches
- No interactions with cetaceans have been reported from the monitoring program on incidental catches of cetaceans since 2006 (through the implementation of Regulation (EU) 2019/1241).
- No interactions between the UoA and sea lampreys were reported by the client, and BIOR only recorded this species in very few occasions. No other interactions with ETPs have been reported for the Latvian pelagic trawl fleet.
- Main primary species are highly likely to be above their point of recruitment impairment.
- The management strategy for primary species is in place, and there is an objective basis for confidence that it will work and that some evidence that it is being implemented successfully.
- Since pelagic trawls are designed to operate free of the sea bottom, the fishery has very low or marginal ecological impact on benthic habitats and is highly unlikely to reduce structure and function of VMEs.

Principle 3

- The EU MAP is applied for the Baltic fish stocks (Regulation (EU) 2016/1139, Regulation (EU) 2019/472).
- The fishery and the stocks are well monitored through ERS, EU-DCF and stock assessments performed by ICES.
- The fishery is managed under the EU Common Fisheries Policy and Latvian fisheries regulations. There are mechanisms in place to regularly evaluate all parts of the EU-CFP.
- The comprehensive MCS system implemented in Latvian fisheries is solid, there is evidence that sanctions are consistently applied, and fishers comply with the management system.
- The Latvian integral traceability system known as LZIKIS is in force since the June 1, 2018. The system clearly improved the possibilities for traceability of fish products from landing at a Latvian port until the product is consumed in Latvia or exported.

Main Weaknesses

The main weaknesses of the client's operations are detailed herein:

Principle 1

- There is an ongoing analysis of the ecosystem needs in the Baltic Proper and the contribution that sprat has to these needs. This affects the scoring of PI 1.1.1A (Ecosystem impairment by Key LTL species). The issue is

not resolved and waiting for input from ICES. But at this stage, Condition #2 is not progressing appropriately and therefore as it cannot be closed the fishery cannot be re-certified.

- There is an outstanding condition for better understanding the recovery plan embedded in the EU MAP and in particular the time scales involved with this plan. This is expected to be delivered in 2022 before the publication of the PCDR and the outcome will influence the scoring of PI 1.1.2.
- The EU MAP for the Baltic fish stocks (Regulation (EU) 2016/1139, Regulation (EU) 2019/472) are applied. However, Russia has not fully accepted the EU MAP or an alternative MAP for the Baltic Sprat and Central Baltic herring. This leads to disputes over the quota allocation in particular for the Central Baltic Herring.
- The assessments models could be improved to better provide confidence limits on the estimates or otherwise quantify the accuracy of the stock status.
- ICES has raised concerns in recent advice about species misreporting (herring/sprat) in the Central Baltic fisheries, while the SES expressed some concerns in relation to a regulatory gap which may facilitate species misreporting in the mid-water trawl fisheries targeting sprat and herring. However, LZIKIS system has improved the SES capacity to inspect processing plants and detect problems of misreporting certain species using the 10% margin of tolerance.

Principle 2

- As a result of the harmonisation meetings held with Lloyd's Register, the cumulative impacts from all MSC UoAs on harbour porpoise population led to set a condition on PI 2.3.1.
- According to HELCOM's "State of the Baltic Sea", many ecological indicators are not in a good status, including some that are relevant for the UoA (i.e., pelagic habitats or pelagic fish in the Gulf of Riga).

Principle 3

- ICES has raised concerns in recent advice about species misreporting (herring/sprat) in the Central Baltic fisheries. Even though the recent implementation of the LZIKIS system has improved the SES capacity to inspect processing plants and detect problems of underreporting certain species using the 10% margin of tolerance, the concerns expressed by the SES representative in this regard, together with the fact that, it cannot be considered that there is a strategy in place for managing all secondary species, led the assessment team to set a recommendation in this matter (see **Section 5.2.4**).

4 Report details

4.1 Authorship and peer review details

HANS LASSEN, external assessor and P1 expert for this assessment. Hans Lassen holds a cand. scient. (M.Sc.) from Copenhagen University and a HD (B.Sc.) from the Copenhagen School of Commerce. His background is in fish stock assessments, particularly in the application of computers and models. He is author and co-author of more than 30 papers in primary scientific journals and co-author of two FAO manuals in fisheries science.
He joined the Danish Institute of Fisheries and Marine Research (DIFRES) in 1971. Between 1988 and 1992 he worked in the Greenland Fisheries Research Institute as Deputy Director and Director and returned to DIFRES in 1992. Between 1998 and 2003 he was in charge of the Fisheries Group in the ICES Secretariat as Fisheries Adviser and served as secretary to the ICES Advisory Committee on Fishery Management. After 2004 he was head of the ICES Advisory Programme within the ICES Secretariat. He retired from the ICES secretariat in 2010 and has since worked on various projects within his expertise in advisory issues.
He has been a member and Chairman of numerous ICES committees and groups, has within the Northwest Atlantic Fisheries Organization chaired STACFIS and the Scientific Council, been a member of STECF (EC, DG Fish), scientific adviser to Danish delegations to fisheries negotiations and chaired an internal EC expert group to provide input to the EC Multi-annual Guidance Program, within the Nordic Council of Ministers he chaired its Working Group on Fisheries and worked with the FAO/DANIDA project (1982-1998) on teaching fish stock assessment. In 2006 he was awarded the prestigious Swedish prize "Kungsfenan" for contributions to communication between science and the fishing industry. At his retirement from ICES he was awarded a Special Service Award.

He has acted as team member (P1) on MSC certification teams for Westgreenland shrimp Barents Sea Demersal trawl fisheries (Greenland) and lumpfish (Greenland). He has served as reviewer of numerous MSC assessments.

Carmen Morant, P2 expert for this assessment, is a marine scientist who holds a MSc in Marine Science and a Msc in Environmental Science from the *University of Cadiz*, also a Postgraduate Degree in Environmental Management and Auditing in Marine Science and Technology from *Polytechnic University of Catalonia* (2008).
From 2011 to 2019 she worked as a freelance PAM and MMO on a wide range of projects from seismic and geographical surveys to offshore wind farms, or oil and gas prospects.
She worked for over 6 years as a Fisheries Observer with the BFT implementing ICCAT (European) regulations, not just on-board purse seiners but also in ports and BFT farms, analysis the bycatch of all different species. During these years, she collaborated during 2 years with TRAGSA for the Spanish General Marine Secretariat, carrying out regular surveys of fish stocks, monitoring number of individuals, size, weight, origin, tagging, and preparing reports and evidence for the European Fishing Commission.
Carmen worked for an NGO in California targeting fishing anglers in an awareness program. This experience was complemented with her work both in Mexico and Costa Rica, where she undertook some research for local NGOs in how the local fishing industry impacted the sea turtles or the impact of whale watchers on marine mammals.
Carmen joined the team in 2020 as P2 expert. Her qualifications meet the competence criteria defined in Annex PC for the Team-member with expertise in the impact of fisheries on aquatic ecosystems. She has not a conflict of interest for this fishery.

Gemma Quílez, PhD, P3 expert and Team Leader for this assessment, holds a Biology degree from Barcelona University (Spain), an MSc in Natural Resource Management from Leicester University (UK) and a PhD in Marine Biology from Newcastle upon Tyne University (UK).
She has around 20 years of experience working in Marine Biology, Marine Ecology, Marine Conservation Biology and Fisheries. In 1998, she did her MSc thesis on neritic and oceanic fish larvae from the Irish Sea. From 1999 to 2001 she worked at the ICM-CSIC (Marine Science Institute) of Barcelona (Spain) on trophic ecology of pelagic species larvae and participated in different oceanographic cruises on board the RV García del Cid. In 2004, while doing her PhD on Marine Invasive species, she was employed at the Fisheries Research Institute of Kavala, Greece, to conduct a study on trophic ecology of anchovy larvae. Also, during her PhD (2001-2006), she participated on several research cruises on board the RV Bernicia. Once she finished her PhD she went to work on marine invasive species for the Smithsonian Environmental Research Center (USA) until 2010.

From 2010 until 2016, she worked as fisheries policy officer for the Mediterranean Programme of WWF (World Wide Fund for Nature) in Barcelona, Spain. As such she worked on fisheries regional and international policy processes (e.g. GFCM, ICCAT, MedAC), mostly on Atlantic and Mediterranean bluefin tuna and at ICCAT, both at a scientific and policy level. She also participated in the creation and in the following functioning of the co-management committee of the Catalan sandeel fishery.

Since 2010 until present she has been working studying the biology, ecology and population dynamics of Atlantic and Mediterranean bluefin tuna and being deeply involved in the stock assessment of the species at ICCAT level.
In addition, from 2008 until 2018 she has been one of the two the Spanish representatives at two ICES working groups (WGBOSV - Working Group on Ballast and Other Ship Vectors, and WGITMO - Working Group on Introductions and Transfers of Marine Organisms).

Her experience (over 8 years) studying the biology, ecology and population dynamics of Atlantic bluefin tuna, deeply involved with ICCAT, as well as her previous work on trophic ecology of pelagic species larvae, proves her capacity to meet the qualification and competency criteria for PC3 (i) Fishing impacts on aquatic ecosystems. Her 6 years as WWF fisheries officer working on fisheries policy processes (mostly on Atlantic and Mediterranean bluefin tuna) and on the co-management of the Catalan sandeel, proves her capacity to meet the qualification and competency criteria for PC3 (ii) Fishery management and operations. She complies with the current Annex PC of the MSC Fisheries Certification Process v2.1. She does not have a conflict of interest with the fishery.

Sarmite Zoltnere, BV auditor and traceability assessor for this assessment. Since 2012 Lead Auditor of ISO 9001, 14001, 18001, ISCC, MSC COC, FSC COC; SA8000 in Bureau Veritas Latvia, SIA. She meets the competency criteria concerning current knowledge of the country and CoC Standard and CoC Certification Requirements, language and local context established in Annex PC.

Regarding the list of peer reviewers proposed by MSC, which can be found on the MSC website (https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments), they are the following:

- Andrew Brierley
- Chrissie Sieben
- Jonathan Broch Jacobsen
- Lisa Borges

4.2 Version details

Table 4.2 – Fisheries program documents versions

Document	Version number
MSC Fisheries Certification Process	Version 2.2, 25 September 2020 (25 March 2020)
MSC Fisheries Standard	Version 2.1, 1 31 August 2018 (28 February 2019)
MSC General Certification Requirements	Version 2.4.1, 7 May 2019 (28 September 2019)
MSC Reporting Template	Version 1.2, 25 March 2020

5 Unit(s) of Assessment and Unit(s) of Certification and results overview

5.1 Unit(s) of Assessment and Unit(s) of Certification

5.1.1 Unit(s) of Assessment

BV confirms that the fishery entering assessment meets the scope requirements (FCP v2.2 Section 7.4) for MSC fishery assessments (FCP v2.2 7.12.2.a).

- The target species is not an amphibian, reptile, bird or mammal.
- The fishery does not use poisons or explosives.
- The fishery is not conducted under a controversial unilateral exemption to an international agreement
- The fishery does not include an entity that has been successfully prosecuted for a forced or child labour violation in the last 2 years.
- The fishery does not include an entity that has been convicted for a shark finning violation in the last 2 years.
- The fishery has submitted a completed 'Certificate Holder Forced and Child Labour Policies, Practices and Measures Template' to BV.
- The fishery includes a mechanism for resolving disputes.
- The fishery is not an enhanced fishery.
- The fishery is not targeting an introduced species.

Table 5.1.1 – Unit(s) of Assessment (UoA)

UoA	Description
Species	Sprat *(Sprattus sprattus*)
Stock	Sprat (*Sprattus sprattus*) in the Baltic Sea (ICES SD22-32)
Fishing gear type(s) and, if relevant, vessel type(s)	Single and twin pelagic trawl
Client group	Members of NZRO (Latvian fishing companies owning fishing vessels* and with sprat quota in Baltic Sea).
Other eligible fishers	No other eligible vessels
Geographical area	Central Baltic Sea excluding Gulf of Riga (ICES SD 25-29 and 32, excluding 28.1). In particular, the assessed fleet is restricted to the northern part of the SD 26 and most of the 28.2, and always within the Latvian EEZ.

*Every year the updated vessel list is published on the MSC website. See Section 9.2.4 for the currently updated list.

5.1.2 Unit(s) of Certification

Table 5.1.2 – Unit(s) of Certification (UoC)

UoC	Description
Species	Sprat *(Sprattus sprattus*)
Stock	Sprat (*Sprattus sprattus*) in the Baltic Sea (ICES SD22-32)
Fishing gear type(s) and, if relevant, vessel type(s)	Single and twin pelagic trawl
Client group	Members of NZRO (Latvian fishing companies owning fishing vessels* and with sprat quota in Baltic Sea).
Geographical area	Central Baltic Sea excluding Gulf of Riga (ICES SD 25-29 and 32, excluding 28.1). In particular, the assessed fleet is restricted to the northern part of the SD 26 and most of the 28.2, and always within the Latvian EEZ.

*Every year the updated vessel list is published on the MSC website. See Section 9.2.4 for the currently updated list.

5.1.3 Overview of the fishery

Fisheries Management in the Baltic Sea

Baltic fisheries are managed by EU Member States and the Russian Federation. The EU fisheries, including the Latvian sprat fishery, are regulated under the EU Common Fisheries Policy using a combined TAC and effort management system. In Latvia, the Competent Authority is the Fishery Department (Division of Fishing Management and Fish Resources), under the Ministry of Agriculture.

The Russian Federation regulates its fisheries within the Russian zone under the Russian Fisheries Law. The Parties cooperate on fisheries management under the EU-Russian fisheries agreement of 2009. There is also a Baltic Sea Advisory Council (BSAC) which brings together fisheries administrations, representatives from the fishing sector and other interest groups affected by the Common Fisheries Policy. The LFPO is member of the BSAC Executive Committee. The fisheries statistics is split in subdivisions as shown in **Figure 5.1.1**.

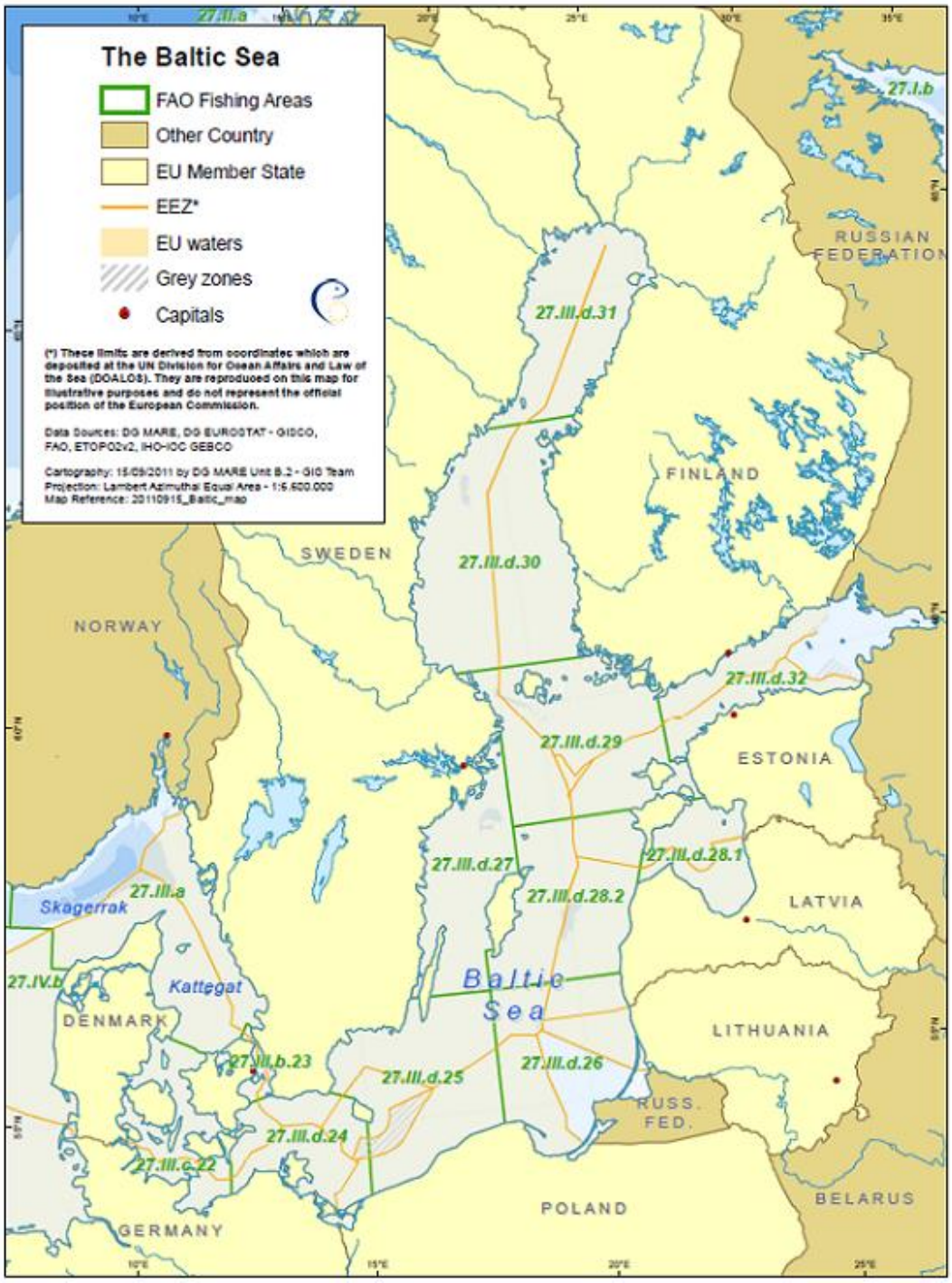


Figure 5.1.1. FAO Fishing Areas (green lines; areas are named 27.III.d.xx where the xx is the subdivision) and Economic Exclusive Zones (EEZ) of the Baltic countries (yellow borders). Source: http://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/baltic_fishing_zones.pdf

Latvian fisheries

The Latvian 'Fishing Law' distinguishes coastal and offshore fishing. Coastal fishing is in areas shallower than 20 m depth or inside 2 nm from the baseline, and offshore fishing outside those areas. The Latvian fishing fleet comprises around 55 registered offshore vessels (12–40 m) and 610 coastal vessels (<12 m) (ICES, 2021a). The offshore vessels target sprat in the Baltic main basin and herring in the Gulf of Riga using pelagic trawls, and cod and flounder in

subdivisions 25, 26 and 28 using demersal trawls. Since 2000, sprat and herring have accounted for 92% of the total annual landings. Most vessels in the coastal fleet are <5 m and target herring, round goby, flounder, smelt, salmon, sea trout, vimba bream, turbot, eel- pout, and cod using fykenets, trapnets, and gillnets. Recreational fisheries occur on all coasts and target flounder, cod, perch, and round goby. In comparison with 2015 (see PCR report available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments) there is a small decrease of both fleet segments due to vessel scraping. The main target species are cod, herring, sprat and flounder, all of them managed through annual quotas established by the EU and split at a national level, among coastal and offshore fishing. The Latvian quotas for sprat, herring, cod and salmon fisheries are further allocated by the Fisheries Department to the fishing companies.

Sprat Fishery

Even though the offshore sprat fishery in Latvia is a trawling fishery which operates in SD 25-26 and SD28.2 (**Figure 7.2.1**), the assessed fleet is restricted to the northern part of the SD 26 and most of the 28.2, and always within the Latvian EEZ. Sprat is fished with semi or pelagic trawls using a mesh size of 16 mm in accordance with the technical regulation (Regulation (EU) 2019/1241). The sprat trawlers range between 24 and 40 m length (see **Figure 5.1.2**).

Figure 5.1.2. Two of the f/v included in the UoA fleet. Glenrose f/v on the left image (38.63 m length and GT554mt) and Stella f/v on the right image (25.5 m length, GT112mt). Source: PCR report (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

The gear is a light trawl (semipelagic trawl) with large meshed (3-24 m mesh) in the mouth and with a fine meshed (~20 mm) codend. The gear is equipped with a footrope consisting of a chain with small plastic bobbins (see **Figure 5.1.3**).

During the site visit of the initial assessment the interviewed skipper informed the assessment team that the trawl is operated as far as possible free of the bottom and with 7-10 m off the bottom as a reasonable guess. The gear may occasionally touch the bottom during deployment, but this is best avoided because of the soft bottom that is dominating in the fishing area and the gear may stick to bottom. Also because of fuel consumption the trawl is kept in free water dragging the trawl on the bottom is costly. Furthermore, the trawl is operated free of the bottom because there are extensive anoxic areas where the fishery takes place (see **Figure 7.3.4** overlapped with **Figure 7.2.1**). Catches at the bottom are worthless. Fishing takes place at larger depths where the trawl can be kept free of the bottom.

Figure 5.1.3. Part of the foot rope used by Glenrose f/v for fishing sprat. Source: PCR report (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

The latest list with LFPO fishing companies and vessels targeting sprat and included in the UoA can be found published on 6th May 2022 at the MSC website (https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

Herring constitutes the main bycatch in the sprat fishery, with both sprat and herring in average accounting for around 97.75% of the total UoA catches in 2015-2021 (see **Tables 7.2.1** and **7.3.1**). The remaining species accounting for 2.25% of the catches are eelpout, cod, flounder, smelt and four-horned sculpin.

5.2 Assessment results overview

5.2.1 Determination, formal conclusion and agreement

The team agrees that none of the scoring issues assessed for the LFPO Pelagic Trawl Sprat Fishery fails to meet the SG60 level, and a weighted average score of 80 or more was achieved for each of the 3 MSC Principles. Scores allocated to the default performance indicators are summarized in **Section 7.1.**

However, as Condition #2 has not made an appropriate progress and cannot be closed within its deadline (see section 9.5.2b for further details), Bureau Veritas determines that the fishery should not be re-certified against the MSC Fisheries Standard.

5.2.2 Principle level scores

Table 5.2.2 - Principle level scores

Principle	UoA 1
Principle 1 – Target species	80,8
Principle 2 – Ecosystem impacts	87,3
Principle 3 – Management system	90,2

5.2.3 Summary of conditions

Table 5.2.3 – Summary of conditions

Condition number	Condition	Performance Indicator (PI)	Deadline	Exceptional circumstances?	Carried over from previous certificate?	Related to previous condition?
1	By 2023 it shall be demonstrated that the combined effects of the MSC UoAs on the population of Baltic proper harbour porpoise are known and highly likely to be within ASCOBANS limits for acceptable anthropogenic removal.	2.3.1	**Year 4 (2024)**	**Yes**	**Yes**	**No**
2	Within a year a rebuilding plan should be in place which will result in the stock being at or fluctuating around a level consistent with ecosystem needs:- a) Within a specified timeframe that is the shorter of 20 years or 2 generation times; and b) That there is evidence that the rebuilding strategy is rebuilding stocks or it is likely based on simulation modelling, exploitation rates or previous performance that the strategy will be able to rebuild the stock within the specified timeframe.	1.1.1A	**Year 1 (Oct 2022)**	**No**	**Yes**	**No**
3	Evidence shall be presented to demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the stock fluctuating around a target level consistent with ecosystem needs. This condition and its timelines have been harmonized with other overlapping Baltic Sea MSC fisheries.	1.2.2	**Year 7 (2028)**	**Yes**	**Yes**	**No**

5.2.4 Recommendations

A non-binding recommendation on reporting species composition of the catches has been issued to the fishery (see PI3.2.3 SIc).

i. Rationale

Article 13 of the Baltic Sea MAP establishes that: "*for catches which are landed unsorted the permitted margin of tolerance in estimates recorded in the fishing logbook of the quantities in kilograms of fish retained on board shall be 10 % of the total quantity retained on board*". This means that the margin of tolerance applies to all species together, while previously the Latvian authorities applied this margin to each of the species (more restrictive). Therefore, since Regulation 2016/1139 entered into force there are more chances that misreporting between species caught might take place. SES informed that initiatives are being taken to close this legal loophole.

ii. Recommendation

In subsequent surveillance audits the CAB will carefully monitor the infringements on misreporting between the species caught. The client should monitor infringements in this regard issued to the LFPO fleet and, if necessary, take actions to assure that no misreporting takes place.

6 Traceability and eligibility

6.1 Eligibility date

The existing MSC fishery certificate for this fishery expires on November 21, 2022.

In accordance with FCP 7.25.1, the date of certification for the second certificate cycle will be the 5th anniversary of the first certificate (i.e., November 21, 2022), regardless the PCR for this re-assessment will be published before that date.

The “eligibility date” is the date from which the CAB determines that product from the certified fishery will be eligible to enter the supply chain. For the second certificate cycle, the certificate date (November 21, 2022) is also set as the eligibility date.

6.2 Traceability within the fishery

In order to consider all potential traceability impacts, the CAB has verified traceability and identification systems. The measures taken by the client to account for risks within the traceability of the fishery – and therefore generating confidence in the use of this date for target eligibility – are detailed in the rest of this section.

6.2.1 Description of the tracking, tracing and segregation systems

Latvia is a Member State of the EU, and its fisheries are subject to the principles and practices of the CFP. The overall CFP requirements for Monitoring, Control and Surveillance (MCS) is the Council Regulation (EC) 1224/2009. Some of the measures included in the European regulation are:

- Obligation of the VMS.
- Accurate reporting: logbooks and sales notes (regularly inspected and cross-checked).
- Special rules for entry into or exit from specific areas.
- Use of Designated ports.
- Completion and submission of a landing declaration
- Prohibition of transiting and transhipping.
- Obligation that all fisheries products are first marketed or registered at an auction centre or to registered buyers or to producer organisations. In the case of the assessed fishery there is no auction, but the product is sold to registered buyers and sent to their registered grading sites listed in https://www.zm.gov.lv/zivsaimnieciba/statiskas-lapas/zvejnieciba/zm-registretie-zivju-pirmie-pirceji?nid=704#jump
- Verified landings data (including data on other retained species) are used for official monitoring of quota up-take and national statistics.
- Reporting prior to landing with limited tolerance.

The Latvian Fishery Integrated Control and Information System for traceability known as LZIKIS clearly improved the possibilities for traceability of fish products from landing at a Latvian port until the product is consumed in Latvia or exported. The traceability system adapted as Regulation No. 94 entered into force on 23 February 2018 Regarding the Control of Fish Landing and Inspection of Fish Marketing and Transport Facilities, Warehouses and Processing Premises defines registration of fish buyers and first-sale purchase. The Latvian Ministry of Agriculture operates the LZIKIS, which contains several databases and IT tools. The core IT databases available in LZIKIS used for control purposes are the quota uptake monitoring database, Electronic Reporting System (ERS - containing electronic logbook, electronic landing declaration data), electronic sales note, inspections (e.g., detected infringements) and VMS data, as well catch certificates for the fisheries products import and export (with EUROPEAN COMMUNITY CATCH CERTIFICATE).

Latvian fishermen submit electronic logbook and electronic landing declaration data to LZIKIS via ERS system. This is monitored via the cross-checking of the VMS and ERS data. The fisheries Monitoring Centre of the State Environmental Service (SES) supervises the vessels 24/7.

The LZIKIS is accessible by the SES, which can also make changes in the logbook data, e.g., in case of errors. Their modifications are visible and inspectors at the regional offices have correction rights.

Moreover, to improve cooperation the Customs officials of the State Revenue Service were granted access to LZIKIS, this allows to see and check import certificate validated by the SES. In addition, Food and Veterinary Services officials have access to LZIKIS to for the purpose of verifying information and data provided from fisheries products accompanying documents.

All first buyers of fishery products are registered by the Ministry of Agriculture in the LZIKIS database (see **Section 9.2.5**).

LZIKIS allows the competent Authorities to crosscheck the information at all steps, ensuring the traceability of fish products from landing at a Latvian port until the product is consumed in Latvia or exported. The system clearly improved the possibilities for traceability of fish products from landing at a Latvian port until the product is consumed in Latvia or exported. The State Environmental Service is responsible for monitoring and administration of LZIKIS and ERS.

The following explanation summarizes the process carried out by the fleet under assessment:

- Upon haulback, the codend is emptied directly to the vessel hold and is stored in the tubs. After every haul, the skipper estimates the species composition and weight and writes the estimated catch composition in the electronic logbook.
- The skipper registers the information of their fishing activity in the electronic logbook, including species, estimated catch (kg), ICES area, etc. The skipper informs regarding the catch of the vessel and the time of entering the place for fish landing, not less than two hours prior to the vessel entering a port. The information shall be sent even if the fishing vessel returns without a catch. Once the vessel arrives at port, it is inspected (if selected by the State Environmental Services) and the fish is offloaded and weighed, the skipper introduces the confirmed weights in the logbook and closes the fishing trip and sends the landing declaration.

After offloading, there are 2 options: i) LFPO is responsible of the transportation in trucks to the grading and processing facilities owned by the buyer; or, ii) the vessel offloads directly at ports with grading facilities which are hired by LFPO members (i.e., Ventspils). In this case there is no transportation. In any case grading falls under the responsibility of the LFPO members or under the supervision according to the first buyer legal requirements.

6.2.2 Risks assessment of the fishery traceability system

Table 6.2.1 provides a default list of traceability factors prepared by MSC that may lead to risks of non-certified fish being mixed with certified fish prior to entering CoC. The CAB analyses the risk associated to each factor for the assessed fishery and, if necessary, a description of the relevant mitigation measures or traceability systems in place is given.

Table 6.2.1 – Traceability within the fishery

Factor	Description
Will the fishery use gears that are not part of the Unit of Certification (UoC)? If Yes, please describe: - If this may occur on the same trip, on the same vessels, or during the same season; - How any risks are mitigated.	In the Latvian sprat fishery, quota is only issued for trawlers. Furthermore, Latvian regulations do not allow the pelagic trawlers to alternate different types of fishing gears during fishing trips, and technical measures of the gear are well established. Therefore, **the CAB found no risk associated to this traceability factor.**
Will vessels in the UoC also fish outside the UoC geographic area? If Yes, please describe: - If this may occur on the same trip; - How any risks are mitigated.	The assessed fleet can also operate in the Gulf of Riga - GoR (ICES SD 28-1), and **there is a potential risk of assessed vessels fishing outside of the UoC geographical area in different trips**. However, the Latvian Cabinet Regulation No. 296 of 2 May, 2007 established the regulations on commercial fishing in

	territorial waters and economic zone waters which requires the fishing area to be recorded in different documents (logbook, landing declaration and sales note) on a mandatory basis, so it can be easily traced back. In addition, there is an online control by the Fisheries Monitoring Centre of the State Environmental Service and the monitoring data are available on the online system LZIKIS. Therefore, the CAB considers **there is no risk of mixing non-certified fish with certified fish prior to entering the CoC.**
Do the fishery client members ever handle certified and non-certified products during any of the activities covered by the fishery certificate? This refers to both at-sea activities and on-land activities. - Transport - Storage - Processing - Landing - Auction If Yes, please describe how any risks are mitigated.	**No at-sea processing** takes place in this fishery. All the sprat and herring are landed chilled as whole fish, and once the fish arrives at the processing plants not only grading by size but also sorting by species are performed (see **Section 6.4** for further details). **Therefore, there is no risk associated with this factor at sea**. When fish is offloaded it is stored in labelled (with vessel names, landing dates) tubs for its transportation to the grading and processing facilities owned by the buyers or to the grading facility owned by the LFPO. Transportation falls under the responsibility of the LFPO and is done in tubs. For each batch, a sales note is filled in by the LFPO and the buyer, as explained in **section 6.2.1**. **The vessel logbooks, landing declarations, sales notes and identified tubs provide the necessary information for tracking the fish back to the origin before processing and prior to entering the CoC.** **Most of the time** grading happens at the buyers' facilities and therefore **there is no processing on land before CoC**. However, the LFPO has a small grading facility at Ventspils harbour, and LFPO members have different grading facilities at: 1) "Muiža" Ugāles pagasts; Ventspils novads, LV-3615; Latvia 2) Vānes iela 21A, Liepāja, LV-3405, Latvia 3) Enkuru iela 6, Ventspils, LV-3601, Latvia 4) Saulkrastu novads, Saulkrastu pagasts, Zvejniekciems, Skultes iela 3, LV-2161 5) Ventspils, Sarkanmuižas dambis 23, LV-3601 In this case, grading happens after CoC and prior to sale to customer (i.e., prior to change of ownership). LFPO can grade catches from both fisheries, the currently assessed sprat fishery as well as its sister GoR herring and sprat fishery. However, they are both certified. Moreover, any batch of fish is traceable, containers with fish have a QR code with the date and place of catch. In addition, the ERS installed on Latvian fishing vessels ensures the input and automatic transmission of data related to fishing activities into LZIKIS. All information related to industrial fishing in the Baltic Sea is only available electronically. The LZIKIS system ensures the collection of information starting from inputs from ERS via the first buyer until the processing units.

	Therefore, there is **no risk of mixture with non-certified catch before subsequent CoC**.
Does transhipment occur within the fishery? If Yes, please describe: - If transhipment takes place at-sea, in port, or both; - If the transhipment vessel may handle product from outside the UoC; - How any risks are mitigated.	**Transhipment at sea is not allowed in Latvia**.
Are there any other risks of mixing or substitution between certified and non-certified fish? If Yes, please describe how any risks are mitigated.	The CAB **did not identify any other risk related to traceability** different to those stated above.

6.3 Eligibility to enter further chains of custody

Eligible landing points

Two habours: Ventspils receives about 80% of the UoA sprat landings, while the other 20% happens in Liepaja.

Only sprat caught by trawl by the vessels within the UoC (**Section 5.1**) shall be eligible to enter the chain of custody.

Grading facilities

Grading happens at the buyers' facilities (no processing on land before CoC) or at either the LFPO grading facility in Ventspils or at any of the member grading facilities listed in here (including inland locations, such as Ugales):

1) "Muiža" Ugāles pagasts; Ventspils novads, LV-3615; Latvia
2) Vānes iela 21A, Liepāja, LV-3405, Latvia
3) Enkuru iela 6, Ventspils, LV-3601, Latvia
4) Saulkrastu novads, Saulkrastu pagasts, Zvejniekciems, Skultes iela 3, LV-2161
5) Ventspils, Sarkanmuižas dambis 23, LV-3601.

CoC commences following offload and prior to grading at grading facilities owned or hired by NZRO members. None of the grading facilities used by NZRO members are covered by the MSC-Fisheries certificate, they all have their own MSC COC certificates.

Change of ownership

Change of ownership can happen in different situations:

- After offloading and before the fish enters the grading facilities.
- After transportation by truck (also before grading) (transport is included in the MSC Fishery certificate)
- After grading.
- After freezing and storage (the fish goes to the grading facilities before this and enters CoC)

In any case, the change of ownership will always happen at least before entering the grading facility, and, as explained above, CoC starts prior to grading.

6.4 Eligibility of Inseparable or Practicably Inseparable (IPI) stock(s) to enter further chains of custody

No IPI stocks have been identified.

Please, note that at the PCR stage of the first certification cycle (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments), it was decided that sprat and herring were IPI species based on the fact that both species look very similar and on the statement that "*there is no physical separation of both species (catches will only be graded and separated by size before processing, not ensuring a complete segregation by species)*". However, during the site visit of the first surveillance audit, the assessment team got confirmation by the client and managers that once the fish arrives at the processing plants not only grading by size but also sorting by species are performed, regardless the process is done mechanically or manually. The two species, therefore, are processed and commercialized separately since they are used in different products. There are no products used for human consumption where the two species can be found mixed. This was also confirmed by the local MSC COC auditor (see 1st Surveillance Audit for further details, available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments). Based on this, the assessment team concluded that the fish or fish products from the certified fishery are NOT considered IPI catches and are allowed to enter the MSC CoC with no restrictions.

7 Scoring

7.1 Summary of Performance Indicator level scores

Principle	Component	Performance Indicator (PI)		Score
One	Outcome	1.1.1	Stock status	NA
		1.1.1A	Key Low Trophic-Level	70
		1.1.2	Stock rebuilding	NA
	Management	1.2.1	Harvest strategy	85
		1.2.2	Harvest control rules & tools	75
		1.2.3	Information & monitoring	90
		1.2.4	Assessment of stock status	95
Two	Primary species	2.1.1	Outcome	90
		2.1.2	Management strategy	85
		2.1.3	Information/Monitoring	100
	Secondary species	2.2.1	Outcome	100
		2.2.2	Management strategy	85
		2.2.3	Information/Monitoring	95
	ETP species	2.3.1	Outcome	75
		2.3.2	Management strategy	80
		2.3.3	Information strategy	80
	Habitats	2.4.1	Outcome	95
		2.4.2	Management strategy	80
		2.4.3	Information	85
	Ecosystem	2.5.1	Outcome	90
		2.5.2	Management	85
		2.5.3	Information	85
Three	Governance and policy	3.1.1	Legal &/or customary framework	95
		3.1.2	Consultation, roles & responsibilities	85
		3.1.3	Long term objectives	80

	Fishery specific management system	3.2.1	Fishery specific objectives	**100**
		3.2.2	Decision making processes	**85**
		3.2.3	Compliance & enforcement	**100**
		3.2.4	Monitoring & management performance evaluation	**90**

7.2 Principle 1

7.2.1 Principle 1 background

The fleet that this report is concerned with is the Latvian sprat fishery whose vessel owners are members of NZRO/LPFO.

The target species is sprat (*Sprattus sprattus*) as assessed by ICES as 'Sprat in the Baltic Sea (Subdivisions 22-32)' (see WGBFAS report - ICES, 2021a). The general biology of the stock is described in Bureau Veritas (2017). The stock is fished by all 9 Baltic states (Denmark, Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland and Germany). Catch statistics for these 9 countries are summarised in Table 7.2.2

Table 7.2.2 Catch statistics for Sprat (tons) from ICES 22-32 for 2016-2020. Source: ICES, 2021a.

Year	Denmark	Estonia	Finland	Germany	Latvia	Lithuania	Poland	Russia	Sweden	Total
2016	19100	23700	16900	10900	28100	11600	59300	34600	42400	246500
2017	27100	25300	16100	13600	35700	12500	68400	38700	48300	285701
2018	24590	29341	16430	15213	37099	16250	79395	41374	49135	308827
2019	30888	29178	16136	14644	38914	16228	82398	40694	45062	314147
2020	26447	24270	12498	8929	28893	11164	72539	45716	41071	271531

The Latvian fleet comprises around 55 registered offshore vessels (12–40 m) and 610 coastal vessels (<12 m). The offshore vessels target sprat in the Baltic main basin and herring in the Gulf of Riga using pelagic trawls, and cod and flounder in subdivisions 25, 26 and 28 using demersal trawls. Since 2000, sprat and herring have accounted for 92% of the total annual landings. Most vessels in the coastal fleet are <5 m and target herring, round goby, flounder, smelt, salmon, sea trout, vimba bream, turbot, eel-pout, and cod using fykenets, trapnets, and gillnets. Recreational fisheries occur on all coasts and target flounder, cod, perch, and round goby. See WGBFAS report (ICES, 2021a) for further details.

The Latvian fishery for sprat (including the UoA) takes place in the open sea of the Baltic Sea (see **Figure 7.2.1**). The gear is a light trawl (semipelagic trawl) with large meshed (3-24 m mesh) in the mouth and with a fine meshed (~20 mm) codend. The gear is equipped with a footrope consisting of a chain with small plastic bobbins (see Bureau Veritas (2017) for further details). The trawl is operated as far as possible free of the bottom around 7-10 m off the bottom. There are two main reasons for this choice of operation:

1) fuel consumption the trawl is kept in free water, while dragging the trawl on the bottom is costly and
2), as there are extensive areas with bottom anoxic zones where the fishery takes place and catches from such areas are worthless because of the fish quality.

Catch statistics are found in **sections 7.2.6** and **7.2.7**.

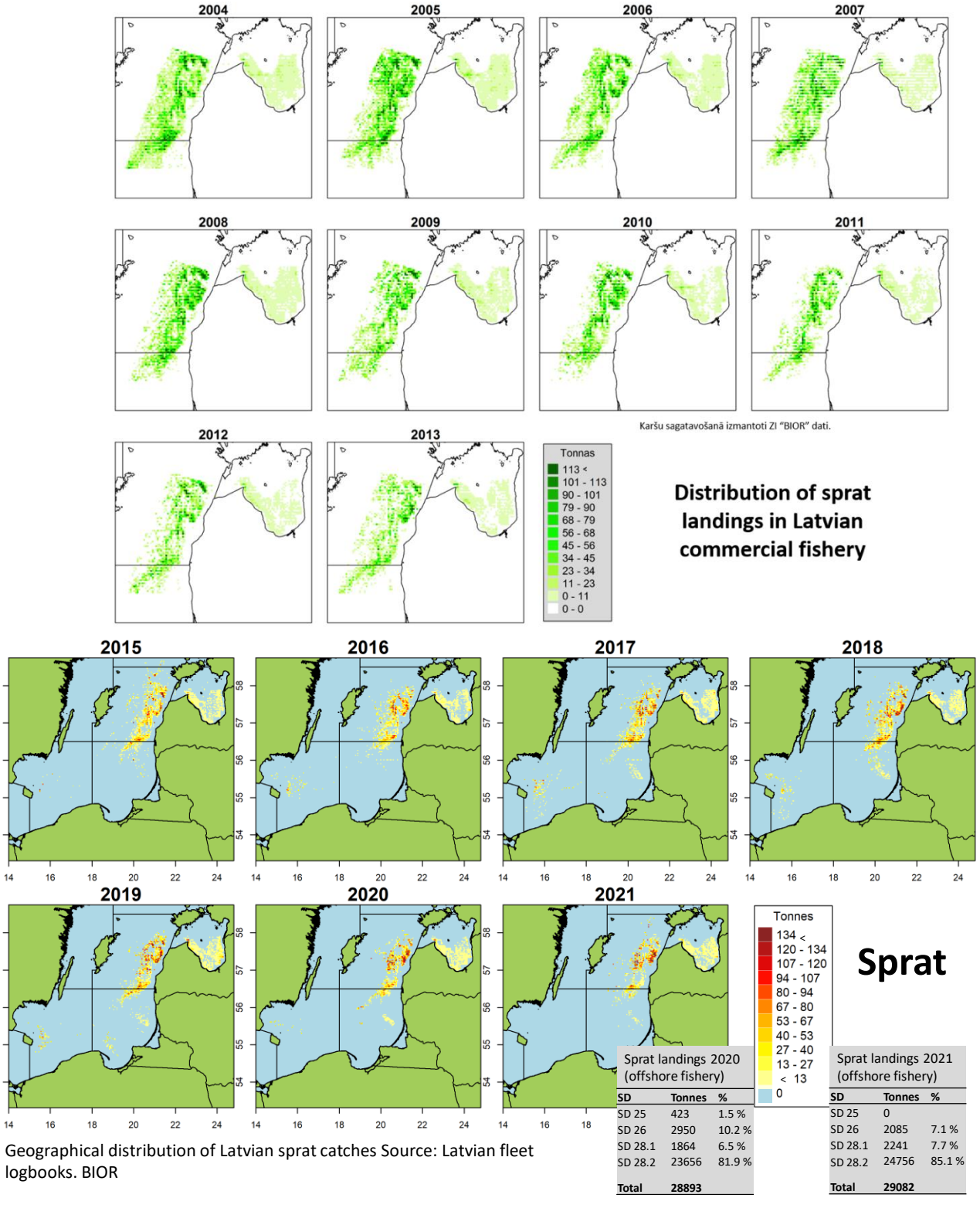


Figure 7.2.1 Geographical distribution of sprat catches according to data from logbooks of the whole Latvian fleet (including the UoA). Above figure from 2004 to 2013, lower figure from 2014 to 2021. Catches within the Gulf of Riga were caught as bycatch of the herring fishery. Source: BIOR.

7.2.2 Key Low Trophic Level Status

Baltic sprat are clupeids and as such candidate for classification as Key Low Trophic Level species (LTL) (MSC Fisheries Standard v2.01 Box SA 1). Its adult life cycle phase the stock holds a key role in the ecosystem. The pelagic fish community of the Baltic Sea is extremely species poor. It consists mainly of only three marine fish species: the Atlantic herring *Clupea harengus*, the European sprat *Sprattus sprattus* and the Atlantic cod *Gadus morhua* (ICES, 2021a).

The Baltic Sea ecosystems are not stable, there have been several regime shifts over the recent 50 years most recently in 1980-90s and climate change continues to influence the system. The relative importance of the pelagic and demersal fish compartments changes over time and any conclusion may change after yet another regime shift.

Sprat is among the species listed in Box SA1 and in its adult life cycle phase the stock holds a key role in the ecosystem, such that it meets at least two of the following sub-criteria:

i. A large proportion of the trophic connections in the ecosystem involve this stock, leading to significant predator dependency;
ii. A large volume of energy passing between lower and higher trophic levels passes through this stock;
iii. There are few other species at this trophic level through which energy can be transmitted from lower to higher trophic levels, such that a high proportion of the total energy passing between lower and higher trophic levels passes through this stock (i.e., the ecosystem is 'wasp-waisted').

Standard ecosystem models of the Central Baltic ecosystem (Casini, et al., 2011; Tomczak, et al., 2012; Bauer et al., 2018; 2019; ICES, 2013a; 2019a) indicate that the herring and sprat are holding positions in the ecosystem meeting criteria (i) and (ii) as cited above. Hence, Central Baltic herring and sprat are classified as Key LTL species and scoring of Sprat under PI 1.1.1A is applied.

7.2.3 Scientific based information related to P1

The spawning stock biomass of sprat was low in the first half of 1980s, when cod biomass was high. At the beginning of 1990s the stock started to increase rapidly and in 1996–1997 it reached the maximum observed SSB of 1.8 million t. The increase is due to the combination of strong recruitments and declining natural mortality (effect of quickly decreasing cod biomass). The increase in stock size was followed by large increase in catches (which reached record high level of over half million tons in 1997) and decline in weight at age by about 40%. High catches in following years and five in row below average year-classes (2009-2013) led to stock decline to below 1 million tons in 2007-2015. Stock biomass fluctuates; strong or above average year- classes (1994, 2003, 2008, 2014, 2019) are followed by 4-5 weaker ones. The y-c 2019-2020 are above average and stock is predicted to increase to about 1.2 million tons in 2023. Spawning stock biomass for over 30 years was higher than precautionary levels, while fishing mortality has been higher than present FMSY in most of years since late 1990s. During recent two decades the stock distribution has been changing with tendency to increase density in north-eastern Baltic, especially in autumn. ICES (2021a).

The current status of the Baltic sprat stock is based on ICES Baltic Sprat Advice (ICES, 2021b) (**Figure 7.2.2**). According to ICES, the spawning-stock biomass (SSB) is above MSY $B_{trigger}$. The increase of SSB in 2016–2017 is attributable to the strong year class of 2014. The 2015–2018 year classes are below or close to average, while the 2019 year class is above average. Fishing mortality (F) has remained above F_{MSY} since 2002, and is currently below F_{pa}, and below F_{lim}, and spawning-stock size is above MSY $B_{trigger}$, B_{pa}, and B_{lim}.

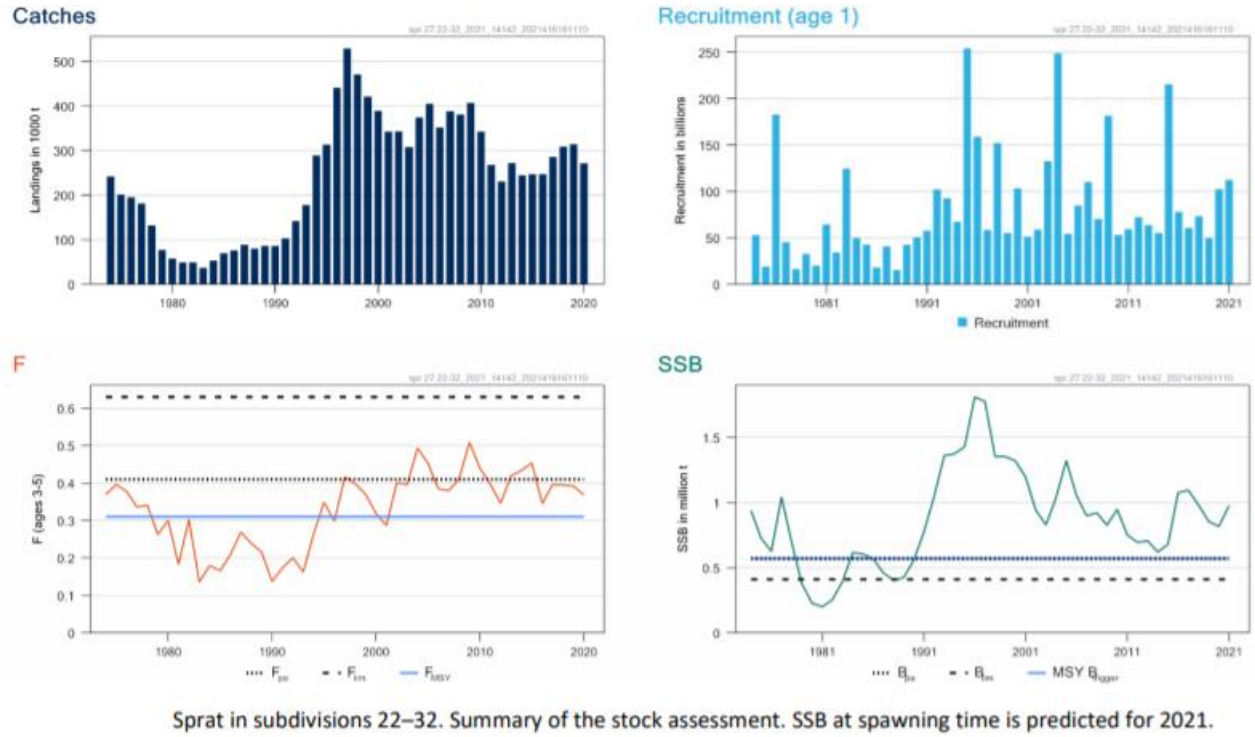


Figure 7.2.2 Baltic Sprat in ICES 22-32. Stock Status and trends. Source: ICES, 2021b.

There is no B_{MSY} defined for the Baltic sprat stock, current SSB is above the default 1.4*MSY $B_{trigger}$ defined for MSC stocks (~800 kt) as a proxy MSY; SSB for 2020 is estimated at 817 kt (ICES, 2021b). The projected SSB for 2021 is around 1 mill tons.

Reference points are defined for the stock, see **Table 7.2.3**.

Table 7.2.3 Reference points for Baltic Sprat. Source: ICES, 2021b.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY Btrigger	570 000 t	Assumed at Bpa	ICES (2020a)
	FMSY	0.31	Stochastic simulations with Beverton–Holt stock–recruitment model	ICES (2020a)
Precautionary approach	Blim	410 000 t	Stock–recruitment relationship (average of biomasses which produce half of the maximal recruitment in the Beverton–Holt and Ricker models)	ICES (2020a)
	Fpa	0.41	FP05. The F that leads to SSB ≥ Blim with 95% probability	ICES (2021c)
	Bpa	570 000 t	Blim × exp (1.645 × σ), where σ = 0.2 ICES (2020c) Flim 0.63 Consistent with Blim ICES (2020c)	ICES (2020a)
	Flim	0.63	Consistent with Blim ICES (2020c)	ICES (2020a)
Management plan	MAP MSY Btrigger	570 000 t	MSY Btrigger	ICES (2020a)
	MAP Blim	410 000 t	Blim	ICES (2020a)
	MAP FMSY	0.31	FMSY	ICES (2020a)

	MAP target range Flower–FMSY	0.22–0.31	Consistent with the ranges that result in a no more than 5% reduction in long-term yield compared with MSY	ICES (2020a)
	MAP target range FMSY–Fupper	0.31–0.41	Consistent with the ranges that result in a no more than 5% reduction in long-term yield compared with MSY	ICES (2020a)

According to SA2.2.12 (Fisheries Standard v2.01) "When scoring PI 1.1.1A scoring issue (a), the point where serious ecosystem impacts could occur shall be interpreted as being substantially higher than the point at which recruitment is impaired (PRI), as determined for the target species in a single species context. a) Such point may be analytically determined from ecosystem models but shall not be less than 20% of the spawning stock level that would be expected in the absence of fishing."

The MSC has provided an interpretation of ICES reference points ("Scoring stock status against Bmsy for ICES stocks (FCR v2.0 - Annex SA PI 1.1.1) – Available at: https://mscportal.force.com/interpret/s/article/Scoring-stock-status-against-Bmsy-for-ICES-stocks-PI-1-1-1-1527262010506)". This interpretation states that the ICES reference point Blim can be treated as the PRI. The interpretation also states that in relation to scoring issue (a): stock status with respect to the point of recruitment impairment (PRI), to meet the 80 scoring guidepost, "*in the absence of an explicit probability distribution of stock size, CABs should normally assess this situation as met when the stock is estimated above 1/2 of the distance between Blim and Bpa*".

7.2.4 Harvest strategy and Harvest Control Rule

The Baltic sprat stock is shared between the EU and Russia. Stock management is based on the EU Multiannual Plan (Regulation (EU) 2016/1139, Regulation (EU) 2019/472) and Russia management. The two parties coordinate their management efforts through the EU-Russian Agreement (2009).

The EU has a multiannual plan (MAP) in place for stocks in the Baltic Sea, which includes sprat (Regulation (EU) 2016/1139, Regulation (EU) 2019/472) and this plan is considered precautionary by ICES. The ICES advice for this stock (see table below), is based on the F_{MSY} ranges used in the management plan, However, Russia, whose catch is around 13.5% of the total landings from this stock, does not have a management plan for this stock. Based on ICES (2021a) the EU+Russia TACs for 2018 -2019 were slightly (around 1%) above the catch recommended by ICES for this stock, while the TAC in 2020 was above the recommended range, this was reversed in 2021:

Year	EU MAP target F ranges (t)	EU+Russia TAC (t)	Total catch (ICES, 2021b)
2018	219,152–301,722	304,900	308,827
2019	225,752–311,523	313,100	314,147
2020	169,965–233,704	256,700	271,531
2021	181,567–316,833	268,458	
2022	214,000–373,210	251,943 (EU) + Russia 50-60,000	

The harvest control rule in the EU MAP is based on the ICES advice and the reference points as defined in the scientific advice are imported directly into the MAP thereby assuring that the MAP accommodates the fairly rapid changes in the Baltic ecosystem's productivity (Regulation (EU) 2019/472).

7.2.5 Monitoring and Stock Assessment

The stock assessment is based on an Age-based analytical assessment, XSA (ICES, 2021a) that uses catches in the model and in the forecast. Furthermore, the input to the model is estimated of natural mortality of sprat depending on cod stock.

In 2013, the sprat assessment was benchmarked at WKBALT (ICES, 2013a) and the present assessment of sprat has been conducted following the procedure agreed during the benchmark. The major change at benchmark workshop was the change of predation mortality from estimates provided by MSVPA to estimates obtained with the SMS model; the SMS model was updated, and new estimates of M have been available (ICES, 2019a). The effects of these estimates on sprat assessment and BRPs were investigated through the Inter-benchmark Process on Baltic Sprat (*Sprattus sprattus*) and Herring (*Clupea harengus*) (ICES, 2020b).

The data input to the stock assessment includes: commercial catches; two acoustic surveys (BASS A7041, BIAS A1588); natural mortalities from multispecies model (SMS) until 2018, 2019=2018 (ICES, 2019a), 2020 from regression with eastern Baltic cod biomass of individuals ≥ 20 cm, and fixed maturity ogive based on data from surveys.

7.2.6 Catch profiles

Table 7.2.4 Catch composition for Latvian Sprat fishery in the Baltic Open Sea 2015-2020. Source: BIOR and Client.

Common name	Scientific name	2015	2016	2017	2018	2019	2020	2021
Sprat	*Sprattus sprattus*	19,684.90	17,008.58	21,845.74	21,000.60	25,241.18	24,241.16	24,393.10
Herring	*Clupea harengus*	2,754.20	4,374.79	4,641.61	6,009.20	5,929.90	10,367.00	11,345.83
Cod	*Gadus morhua*	3.1	633.34	711.88	286.6	69.033	2.4	2.2
Flounder	*Platichthys flesus*	2	658.28	669.27	493.7	181.113	91.7	105.6
Eelpout	*Zoarces viviparus*	7.5	3.83	2.08	0	0	0	0
Smelt	*Osmerus eperlanus*	0.5	1.3	0	0	1.886	206.5	150.0
Four-horned sculpin	*Myoxocephalus quadricornis*	0	5.3	4.53	0	0	3.3	2.1
Total UoC annual catch		***22,452.2***	***22,685.4***	***27,875.1***	***27,790.1***	***31,423.1***	***34,912.1***	***35,998.8***

7.2.7 Total Allowable Catch (TAC) and catch data

	Year	Baltic Sprat
TAC (UoA)	**2022**	**251,943 t**
UoA share of TAC (Latvia)	**2022**	**34,855 t***
UoA share of total TAC (Units of Certification - UoC)	**2022**	**27 274**
Total green weight catch by UoC	**2021 (most recent)**	**20 674**
Total green weight catch by UoC	**2020 (second most recent)**	22,991 MT[1]

[1] Exceeds TAC (1 Jan 2020) because of quota swops during 2020.

7.2.8 Principle 1 Performance Indicator scores and rationales

PI 1.1.1 – Stock status

Not scored as Sprat is classified as Key LTL species, see **PI 1.1.1A** and explanation in **Section 7.2.2**.

PI 1.1.1A – Stock Status - Key Low Trophic-Level

PI 1.1.1A		The stock is at a level which has a low probability of serious ecosystem impacts		
Scoring Issue		SG 60	SG 80	SG 100
a	Stock status relative to ecosystem impairment			
	Guide post	It is **likely** that the stock is above the point where serious ecosystem impacts could occur.	It is **highly likely** that the stock is above the point where serious ecosystem impacts could occur.	There is a **high degree of certainty** that the stock is above the point where serious ecosystem impacts could occur.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

There is a high degree of certainty that the stock is above the point where serious ecosystem impacts could occur.

Baltic sprat is considered a key low trophic level (key LTL) species for the purposes of an MSC assessment (see MSC Fisheries Standard Box SA1), and it is demonstrated that in its adult life cycle phase the stock holds a key role in the ecosystem.

The pelagic fish community of the Baltic Sea is extremely species-poor. It consists mainly of only three marine fish species: the Atlantic herring *Clupea harengus*, the European sprat *Sprattus sprattus* and the Atlantic cod *Gadus morhua*.

ICES IBPBASH (ICES, 2020b) evaluated the appropriateness of the use of the natural mortality estimates derived from the most recent (2019) multispecies SMS keyrun for the Baltic in the stock assessments. Updated cod diet composition better reflects current cod preferences and food availability in the main cod distribution area (ICES, 2019a; Neuenfeldt, 2020). Future M values should be predicted using a model which includes cod spawning stock biomass. Both MSY and PA reference points were revisited. ICES IBPBASH (ICES, 2020b) do not change the stock perception, but fishing mortality reference points have been changed.

The MSC Fisheries Standard states that with regard to this scoring issue:-

SA2.2.12 "*When scoring PI 1.1.1A scoring issue (a), the point where serious ecosystem impacts could occur shall be interpreted as being substantially higher than the point at which recruitment is impaired (PRI), as determined for the target species in a single species context.*

a. Such point may be analytically determined from ecosystem models, but in any case shall not be less than 20% of the spawning stock level that would be expected in the absence of fishing."

The MSC has provided an interpretation of ICES reference points ("Scoring stock status against Bmsy for ICES stocks (FCR v2.0 - Annex SA PI 1.1.1) – Available at: https://mscportal.force.com/interpret/s/article/Scoring-stock-status-

against-Bmsy-for-ICES-stocks-PI-1-1-1-1527262010506)". This interpretation states that the ICES reference point Blim can be treated as the PRI. The interpretation also states that in relation to scoring issue (a): stock status with respect to the point of recruitment impairment (PRI), to meet the 80 scoring guidepost, "*in the absence of an explicit probability distribution of stock size, CABs should normally assess this situation as met when the stock is estimated above 1/2 of the distance between Blim and Bpa*".

The assessment team has approached the scoring of this SI in the context of SA2.2.12 and the interpretation summarized above.

With regard to the status of the stock relative to the stock level that would be expected in the absence of fishing (B0), ICES IBPBASH (ICES, 2020b) estimations and information provided in the report, specifically the SSB vs fishing mortality curve, an estimate of SSB in the absence of fishing cannot be reliably estimated by extrapolation and a value of B0 is not available to assess SA2.2.12a against.

The technical basis for Blim for Baltic sprat is "*the average of biomass which produce half of the maximal recruitment in the BH and Ricker SR model*" and takes into account cod predation (ICES, 2020c) so by definition is above PRI. Bpa is the value of the estimated SSB, which ensures that the true SSB has less than 5% probability of being below Blim (ICES, 2017 - Technical guidelines), which is interpreted equivalent to the MSC *"high degree of certainty" of the stock being above the point where serious ecosystem impacts could occur (PRI).*

The most recent ICES advice (ICES, 2021b) indicates that Baltic sprat SSB2020 = 817,000t which is 2 times higher than the PRI (Blim) and 1.4 of MSY Btrigger (= Bpa). SSB2021 is predicted at 977,000t. Hence the stock is substantially higher than the point at which recruitment is impaired (PRI) meeting the requirement in SA2.2.12.

Based on the above, there is a high degree of certainty that the stock is above the point where serious ecosystem impacts could occur. Consequently, **SG60, SG80 and SG100 are all met.**

	Stock status in relation to ecosystem needs			
b	Guide post		The stock is at or fluctuating around a level consistent with ecosystem needs.	There is a **high degree of certainty** that the stock has been fluctuating around a level consistent with ecosystem needs or has been above this level over recent years.
	Met?		**No**	**No**
Rationale				

The stock is not at or fluctuating around a level consistent with ecosystem needs.

The MSC Fisheries Standard states that:-

"SA2.2.13 When scoring PI 1.1.1A scoring issue (b), the expectations for key LTL species shall be as given below:

a. The default biomass target level consistent with ecosystem needs shall be 75% of the spawning stock level that would be expected in the absence of fishing.

b. A higher or lower target level, down to a minimum allowed 40% of the spawning stock level that would be expected in the absence of fishing, may still achieve an 80 level score if it can be demonstrated, through the use of credible ecosystem models or robust empirical data for the UoA/ecosystem being assessed, that the level adopted:

i) Does not impact the abundance levels of more than 15% of the other species and trophic groups by more than 40% (compared to their state in the absence of fishing on the target LTL species); and

ii) Does not reduce the abundance level of any other species or trophic group by more than 70%."

And also:

"SA2.2.15 Where proxy indicators and reference points are used to score key LTL species at PI 1.1.1A, the team shall justify their use as reasonable proxies of stock biomass for the points where serious ecosystem impacts could occur and the level consistent with ecosystem needs.

a. Where fishing mortality rate is used to score stock status, the default fishing mortality required to maintain a stock fluctuating around the level consistent with ecosystem needs shall take the value of 0.5M or 0.5 FMSY, where FMSY has been determined in a single species context.

b. Proxy fishing mortalities required to maintain the stock above the point where serious ecosystem impacts could occur shall be lower than assumed to be able to keep the population above the point where recruitment would be impaired.

c. Departures from these default levels may be justified if it can be demonstrated that SA2.2.13.b is met."

With regard to SA2.2.13, it is concluded in SIa above that there is no reliable estimate of B0 currently available, so the SI cannot be scored using this approach.

With regard to SA2.2.15a-c, the F reference points revised by ICES IBPBASH (ICES, 2020b) and given in the most recent ICES Advice (ICES, 2021b) are Flim = 0.63, Fpa=0.45 and FMSY=0.31 (see Table 5 of ICES 2021b). Current fishing mortality for Baltic sprat F2019= 0.39 and F2020=0.37 (ICES, 2021b), are higher than FMSY and therefore do not fulfil SA2.2.15a.

The Generation Time (GT) for Baltic sprat stock calculated according to GT= 1/M+Am50 where Am50 is the age at 50% maturity is as follows:

GT= 1/M bar 2-7 (M2019= 0,276) + 2 = 5.62 years = 6y (data from ICES, 2021c).

Fishing mortality has also been above 0.5*FMSY for more than 6 years recently and for much of the past 2 generation time (2*6 years) (see **Figure 7.2.2**).

Consequently, there is no evidence that the Baltic sprat stock is at or fluctuating around a level consistent with ecosystem needs. **SG80 is not met.**

This scoring was harmonized with the four other Baltic sprat fisheries (Denmark, Estonia, Germany, Sweden Baltic herring and sprat; Finland Baltic herring and sprat; Poland herring and sprat; NZRO Gulf of Riga herring and sprat) during the 4th Surveillance audit. As PI 1.1.1A scored less than 80, PI 1.1.2 would normally be scored (in line with SA2.3.1 of the MSC Fisheries Standard). However, as the other fisheries are all already certified, the CABs are required to respond in accordance with SA2.3.2 of the MSC Fisheries Standard and the corresponding MSC Interpretation here: https://mscportal.force.com/interpret/s/article/Scoring-the-rebuilding-Performance-Indicator-during-the-certification-cycle. In accordance with this interpretation, it was determined that in the absence of rebuilding timeframes it was not appropriate to score PI 1.1.2 at present, **and that a condition should be raised for PI1.1.1A which requires that a rebuilding plan is in place within a year**. This outcome was discussed and agreed with all of the CABs responsible for MSC-certified fisheries for this stock. It required a variation against a number of the requirements of the MSC FCP v2.2 which was granted by the MSC. In line with the accepted variation request a condition was identified against this PI (see 4th Surveillance audit report, available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

The harmonisation (see **section 9.8**), which impacts five fisheries, concluded to set the deadline for closing the condition as 12 months after the fishery which was last to introduce this rescoring at the surveillance audit, i.e., in April 2023. Thus, this extension of the time line would imply, as the LFPO certification expires on 21 November 2022, that the condition should be rolled over into the next certification period.

A variation request (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments) asked for an extension of the deadline to **1 August 2023** and thereby roll-over the condition into the next certification period based on two elements:
- ICES could not provide the necessary input for a rescoring before June 2023, input to the MSC process is presumably the output from the planned ICES benchmark of the Baltic herring and sprat stock assessments
- The CABs involved would then, based on the experience with the previous harmonisation process, need time to rescore PI 1.1.1A

The dates for the harmonised fisheries are summarised below:

Fishery	Condition raised	Certificate expires
LPFO Baltic Sprat	15/10/2021	21/11/2022
NZRO (LPFO) GoR Herring	15/10/2021	22/07/2025
Poland Baltic Herring and Sprat (Sprat component)	08/10/2021	07/10/2026
Finland Baltic Herring and Sprat	21/04/2022	24/12/2023
DK, Est, Ger, Swe (DDES) Baltic Herring and Sprat	21/04/2022	31/12/2025

The LFPO variation request was declined (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments) and this implies that through the harmonisation process the Finland and DDES fisheries will not be given 12 months for corrective actions.

MSC's answer to the VR is:

> *• MSC Critical Guidance on "Harmonisation of condition timelines" (FCP v2.2) indicates that, when considering harmonisation of conditions and condition time frames, "Timelines assigned to meet conditions should be precautionary such that the earliest date for closing a particular condition in 1 (or more) of the overlapping fisheries should apply to all overlapping fisheries.*
> *• Even if the fisheries were to harmonize their condition time frames to the latest date (i.e. April 2023) or, because of the foreseeable delay of the ICES advice report, even to extend that deadline beyond that date into August 2023, there is still no guarantee that the ICES report will be available by that date (since the delay is a consequence of the Russian invasion of Ukraine), thus making that deadline extension ineffectual. In addition, since the condition that triggered this VR is dependent on stock assessment results, the Team could use the latest available ICES advice.*

References

ICES, 2019a.
ICES, 2020b.
ICES, 2020c.
ICES, 2021b.
ICES, 2021c.
Neuenfeldt, 2020.

Stock status relative to reference points

	Type of reference point	Value of reference point	Current stock status relative to reference point
Reference point used in scoring stock relative to ecosystem impairment (SIa)	Blim + (Bpa.Blim)/3 Bpa Blim	475 kt Bpa: 570 kt Blim 410 kt	SSB_{2020} = 817,000 t SSB_{2020}/490 000 = 1.67
Reference point used in scoring stock relative to ecosystem needs (SIb)	F_{MSY} 0.5*F_{MSY}	0.31 0.155	$F_{2011-2020}$ = 0,40 F_{2020}= 0.37 $F_{2011-2020}$/ (0.5*F_{MSY}) = 2.4

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**60-79**
Information gap indicator	**More information sought**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**70**
Condition number (if relevant)	**2**

PI 1.1.2 – Stock rebuilding

As explained in **Section 9.5.2**, scoring has been postponed to 2023 until PI 1.1.1A is settled.

PI 1.1.2		Where the stock is reduced, there is evidence of stock rebuilding within a specified timeframe		
Scoring Issue		SG 60	SG 80	SG 100
a	Rebuilding timeframes			
	Guide post	A rebuilding timeframe is specified for the stock that is the **shorter of 20 years or 2 times its generation time**. For cases where 2 generations is less than 5 years, the rebuilding timeframe is up to 5 years.		The shortest practicable rebuilding timeframe is specified which does not exceed **one generation time** for the stock.
	Met?	**Yes / No**		**Yes / No**
Rationale				

The CAB shall insert sufficient rationale to support the team's conclusion for each Scoring Guidepost (SG).

b	Rebuilding evaluation			
	Guide post	Monitoring is in place to determine whether the rebuilding strategies are effective in rebuilding the stock within the specified timeframe.	There is **evidence** that the rebuilding strategies are rebuilding stocks, **or it is likely** based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the **specified timeframe**.	There is **strong evidence** that the rebuilding strategies are rebuilding stocks, **or it is highly likely** based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the **specified timeframe**.
	Met?	**Yes / No**	**Yes / No**	**Yes / No**
Rationale				

The CAB shall insert sufficient rationale to support the team's conclusion for each Scoring Guidepost (SG).

References

The CAB shall list any references here, including hyperlinks to publicly-available documents.

Draft scoring range	**<60 / 60-79 / ≥80**
Information gap indicator	**More information sought.**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**NA**
Condition number (if relevant)	

PI 1.2.1 – Harvest strategy

PI 1.2.1		There is a robust and precautionary harvest strategy in place		
Scoring Issue		SG 60	SG 80	SG 100
a	Harvest strategy design			
	Guide post	The harvest strategy is **expected** to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy **work together** towards achieving stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and is **designed** to achieve stock management objectives reflected in PI 1.1.1 SG80.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.

The harvest strategy for this fishery is the Multi-annual Plan for Management of Baltic Sea fish stocks (MAP) which was implemented in 2016 (Regulation (EU) 2016/1139) and subsequently amended on 4th July 2018 by Regulation (EU) 2018/976 and on 19th Mach 2019 by Regulation (EU) 2019/472. Following these amendments, the targets and reference points are no longer fixed but are those advised by ICES – which aligns the advice and the MAP. There is also a binding agreement in place between the EU and Russia since 2009 (Council Regulation (EC) No 439/2009 and EU-Russian Agreement. 2009) regarding fisheries management in the Baltic Sea, regulating aspects of setting quotas, scientific cooperation and monitoring between the Parties.

The targets set out in the MAP are based on scientific, technical and economic advice and contain objectives, quantifiable targets, conservation reference points and safeguards which work together towards achieving stock management objectives.

With regard to the SG60 requirements, the alignment of the reference points in the MAP with ICES advice ensures that the current harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1A SG60. **SG60 is met.**

SG80 requires that the harvest strategy is responsive to the state of the stock and that its elements work together towards the SG80 requirements of PI1.1.1A.

The overall objectives of the harvest strategy (set out in Article 3 of the MAP) are to aim to ensure that exploitation levels restore and maintain exploited populations above levels that can produce MSY, and sets out targets for this. These targets have recently been amended to align these reference points with those presented in the most recent ICES advice (Article 4 of the MAP).

In terms of responding to the state of the stock, the harvest strategy aims to maintain fishing mortality in an appropriate range and contains a trigger in Article 4a (the conservation reference point) below which fishing mortality must be reduced. This point (MSY Btrigger) is also determined by ICES, and as recent advice has shown the value of this reference point is adjusted in accordance with any changes to the stock assessment.

The MAP takes account of the multi species context of the Baltic sprat fisheries by using a multi-species model to determine the predation impact of the cod stock on herring and sprat. The model outputs are used to determine the natural mortality of each species, and hence the F reference points used to manage the fishery under Article 4 of the MAP. Thus, the reference points for the Baltic sprat stock take account of the role of this stock as a prey item for cod (see PI1.1.1A SIa).

These features of the MAP mean that the elements of Harvest Strategy are both responsive to the state of the stock and also work together towards achieving stock management objectives reflected in PI 1.1.1A SG80. **SG80 is met.**

SG100 requires that in addition to being responsive to the state of the stock, the harvest strategy is "…***designed*** *to achieve stock management objectives reflected in PI 1.1.1 SG80*" (in the case of this key LTL stock, the PI1.1.1A SG80 requirements that the stock is above the point where serious ecosystem impacts could occur and is fluctuating around a level consistent with ecosystem needs).

There is no evidence, that the harvest strategy is designed to achieve stock management objectives reflected in PI 1.1.1A SG80 because species interaction and trade-offs are not included in the MAP and in particular not in the HCR (which is not expected to keep the stock fluctuating around a target level consistent with ecosystem needs - see PI 1.1.1A b) and PI 1.2.2 a)). With regard to scientific advice and managing the Baltic sprat stock according to PI1.1.1A SG80, it is not currently clear to what extent the biomass trigger points and F target levels in the HCRs are compatible with the "key LTL" status of this stock.

Also, as stated by ICES (2019b) in their review of the implementation of the MAP, "F-ranges should not be seen as a tool to incorporate the ecosystem impacts of fisheries. In dynamic ecosystems, even regular updates of (single stock MSY) references points may not provide the optimum approach to an ecosystem management." ICES further state that the "Effects of environmental factors on ecosystem productivity and of the fisheries on the environment are both changing over time. Different ecosystem components may be affected differently. Adaptative management approaches, linked to metrics from fish stock and ecosystem assessments are required. In this context, thresholds of impacts, which are currently lacking, would also need to be determined." On this basis it cannot be said that the harvest strategy is designed to achieve stock management objectives reflected in PI 1.1.1A SG80. **SG100 is not met.**

Management in 2021 and 2022 has reacted based on the assessment.

Year	EU MAP target F ranges (t)	EU+Russia TAC (t)	Total catch (ICES, 2021b)
2018	219,152–301,722	304,900	308,827
2019	225,752–311,523	313,100	314,147
2020	169,965–233,704	256,700	271,531
2021	181,567–316,833	268,458	
2022	214,000–373,210	251,943 (EU) + Russia 50-60,000	

The harvest control rule in the EU MAP is based on the ICES advice and the reference points as defined in the scientific advice are imported directly into the MAP thereby assuring that the MAP accommodates the fairly rapid changes in the Baltic ecosystem's productivity (Regulation (EU) 2019/472).

	Harvest strategy evaluation			
b	Guide post	The harvest strategy is **likely** to work based on prior experience or plausible argument.	The harvest strategy may not have been fully **tested** but evidence exists that it is achieving its objectives.	The performance of the harvest strategy has been **fully evaluated** and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The harvest strategy laid down in the EU CFP is based on standard 'best practice' approach to fisheries management with sustainable exploitation objectives. The specific approach to management is embedded in the EU Multiannual Plan

which has been effective since 2017. The harvest strategy for Baltic sprat status has been effective for more than a decade and the stock remains at a high level. The plan has been tested theoretically and the general framework is within the EU CFP and therefore is expected to achieve the objectives of CFP, **SG60 is met**.

The strategy has been not been fully tested requiring a long time series, but with stock status at a high level, there is evidence that the strategy is achieving the sprat objectives. **SG 80 is met**.

There is as presented in the narrative text, discussion on which model is more appropriate for the Baltic ecosystem. The strategy has not been fully and conclusively tested, therefore, **SG 100 is not met**.

c	Harvest strategy monitoring			
	Guide post	Monitoring is in place that is expected to determine whether the harvest strategy is working.		
	Met?	**Yes**		
Rationale				

There is extensive monitoring of the fishery (logbooks, VMS, landing control, sampling of the catches). This applies both to the Russian as well as the EU fisheries. The status of the sprat stock is monitored by two annual acoustic abundance surveys. **SG 60 is met**.

d	Harvest strategy review			
	Guide post			The harvest strategy is periodically reviewed and improved as necessary.
	Met?			**Yes**
Rationale				

The current regime is discussed at annual meetings between Russia and EU. The technical regulation within the CFP is reviewed at irregular intervals. The CFP itself is reviewed every 10 years; the latest in 2013 with implementation of the revised Basic regulation for 2014. The Multiannual Plan for Baltic fisheries is to be reviewed every 3-5 years, the latest by 21 July 2019 (Article 15). Following this provision, the first report on the implementation of the Multiannual Plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks was published in 2020 (EC, 2020). The BALTFISH forum (an organization of Baltic State governments – see **Section 7.4.1.2** for details) reviews the harvest strategy at irregular intervals. **SG100 is met**.

e	Shark finning			
	Guide post	It is **likely** that shark finning is not taking place.	It is **highly likely** that shark finning is not taking place.	There is a **high degree of certainty** that shark finning is not taking place.
	Met?	**NA**	**NA**	**NA**
Rationale				

Sprat is not a shark.

f	Review of alternative measures

	Guide post	There has been a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock.	There is a **regular** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock and they are implemented as appropriate.	There is a **biennial** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock, and they are implemented, as appropriate.
	Met?	**Yes**	**Yes**	**No**

Rationale

The fishery has no direct discards and very limited slippage during haulback. The EU, whose Baltic countries are significant participants in the sprat fishery, introduced a discard ban (Regulation EU 1396/2014, revised as a landing obligation Regulation (EU) 2015/812) in the Baltic, however this did not affect the sprat fishery significantly as there are no discards. There is no incentive to discard sprat (regardless of the ban) and no mortality of unwanted catch as the landings are sorted and fish not processed in the primary production are reduced to fish meal and fish oil.

All landings are used either for direct human consumption or used in the fish oil/meal market. Regulation 2187/2005 requires a minimum mesh size for the sprat trawl fishery set at 16 mm and no minimum landing size for sprat. Sprat passing through 16 mm are not desired, yet if caught there is a legal market for them. There are valuable markets for both human food and meal/oil, such that there are requirements that the fish must go to the human market first (quality dependent). Thus, there is no unwanted catch and scoring might not be required. Until the team can double check this during the site visit, a provisional score has been provided below.

There was a review for discarding (unwanted catch), resulting in the discard ban, **SG60 is met**.

The landing obligation is incorporated into Multi Annual Plans (https://ec.europa.eu/fisheries/cfp/fishing_rules/discards_en). The multiannual plans are reviewed every 3 years, therefore, **SG80 is met**.

However, as there is no biennial review, **SG100 is not met**.

References

Commission Delegated Regulation (EU) No 1396/2014.
Council Regulation (EC) No 2187/2005.
Council Regulation (EC) No 439/2009.
EC, 2020.
EU-Russian Agreement. 2009.
ICES. 2019b.
ICES. 2021b.
Regulation (EU) 2015/812.
Regulation (EU) 2016/1139.
Regulation (EU) 2018/976.
Regulation (EU) 2019/472.

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**

Condition number (if relevant)	**NA**

PI 1.2.2 – Harvest control rules and tools

PI 1.2.2		There are well defined and effective harvest control rules (HCRs) in place		
Scoring Issue		SG 60	SG 80	SG 100
a	HCRs design and application			
	Guide post	**Generally understood** HCRs are in place **or available** that are **expected** to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	**Well defined** HCRs are **in place** that **ensure** that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock **fluctuating around** a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock **fluctuating at or above** a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, **most** of the time.
	Met?	**Yes**	**No**	**No**
Rationale				

Generally understood HCRs are in place or available that are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.

The basic harvest control rule applied to compute the sprat catch advice is the ICES MSY rule which is implemented in the EU MAP. The HCR reduces the exploitation rate when the stock biomass is below Btrigger and while it is above Blim (considered equivalent to PRI, see PI1.1.1A SIa for justification) and is expected to keep the stock fluctuating around a target level consistent with MSY. Generally understood HCRs are in place or available that are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached, **SG60 is met.**

The HCR defined in the EU MAP is based on the target fishing mortality ranges set out by ICES IBPBASH (ICES 2020b) and is compatible with an MSY approach to fishing leading to no less than 95% of MSY. The HCR is precautionary in the sense that the probability of SSB falling below Blim in any year in long-term simulations with fixed F within the ranges specified in the MAP is ≤5%. As noted in P1.1.1A, the predation pressure on the stock and stock structure is taken into account in the assessment, and in the estimation of reference points by variable natural mortality that reflects the forage nature of the stock. Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the stock fluctuating around a target level consistent with (or above) MSY. Although the HCRs are expected to reduce exploitation as the PRI is approached, they do not fully take account of the ecological role of the stock. The HCR is based on a single species approach (although multi-species aspects are included in the assessment) which does not consider the stock's role in the food-web as a resource for higher trophic level organisms. Considering the key LTL role of Baltic sprat in the ecosystem, there is no evidence that the HCRs are expected to keep the stock at a level consistent with ecosystem needs. Therefore, **SG80 is not met.**

b	HCRs robustness to uncertainty			
	Guide post		The HCRs are likely to be robust to the main uncertainties.	The HCRs take account of a **wide** range of uncertainties including the ecological role of the stock, and there is **evidence** that the HCRs are robust to the main uncertainties.
	Met?		**Yes**	**No**

Rationale

The HCRs are likely to be robust to the main uncertainties.

The main uncertainty in the assessment relate to variation in recruitment where the incoming yearclass strength used in the TAC advice is based on a geometric average consideration. Another issue is the mix of herring and sprat in the catches where the species split is based on sampling. For the Client fleet and the rest of the EU vessels, the data collection framework (DCF) provides for an appropriate program and the estimates are reliable. There is uncertainty in the survey estimates. This estimation variance is on the same scale as is common for acoustic surveys. The assessment of the status of the sprat stock includes an account of the natural mortality based on the cod predation. The low target fishing mortality that is laid down in the HCR make the rule robust to uncertainties.

The ICES approach to formulating its advice through committee work is robust to known uncertainties as these are incorporated in the precautionary advice. **SG80 is met.**

There is outstanding work (ongoing) in improving the HCR to become fully ecosystem oriented and until this work is implemented with ecosystem-oriented reference points the **SG100 is not met**.

	HCRs evaluation			
c	Guide post	There is **some evidence** that tools used **or available** to implement HCRs are appropriate and effective in controlling exploitation.	**Available evidence indicates** that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	**Evidence clearly shows** that the tools in use are effective in achieving the exploitation levels required under the HCRs.
	Met?	**Yes**	**Yes**	**No**

Rationale

Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.

Please note that this Scoring Issue was updated and harmonized with the overlapping fisheries (see **section 7.4, Table 7-4** of the 4th Surveillance audit report, available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

This scoring issue considers whether the HCRs are appropriate and effective in achieving the exploitation levels required under the HCRs. The scoring guidepost is not evaluating the performance of the HCRs in relation to achieving the exploitation levels required under PI 1.1.1A SIb (i.e., "around a level consistent with ecosystem needs"). As the HCRs within the Baltic Sea MAP do not set exploitation levels in relation to ecosystem needs (as noted in SIa – and hence the condition on SIa), but within fishing mortality ranges based on F_{MSY}, this scoring guidepost is assessed against the ranges identified for the stock.

The focus of this scoring issue is on evaluating the effectiveness of the HCR using **current** fishing mortality as is made clear in the Standard and the Guidance to it:

SA2.5.6 of the MSC Fisheries Standard v2.01, states that in scoring issue (c), "'*for "evidence' teams shall include consideration of the current levels of exploitation in the UoA, such as measured by the fishing mortality rate or harvest rate, where available*".

The Guidance to Scoring Issue (c) – Evaluating the effectiveness of HCRs (SA2.5.6 – SA2.5.7), further notes that:

"*Section SA2.5.6 requires that teams examine the current exploitation levels in the fishery, as part of the evidence that the HCRs are working. Evidence that current F is equal to or less than FMSY should usually be taken as evidence that the HCR is effective. Current F levels greater than FMSY may also sometimes be accepted in cases where stock*

biomass is currently higher than BMSY or where stock assessment information is comprehensive, and it is appropriate to treat FMSY is a target reference point (see Box GSA3)."

The critical guidance that follows the above paragraph repeats this reference to current fishing mortality:

"*Teams should be confident in these cases that any such higher levels of F are not likely to lead to overcapacity in the fishery or to create a situation where B is likely to fall below a level at which it is regarded as 'fluctuating around BMSY'. Lower levels of F should be expected when biomass is reduced, consistent with the scoring of the rebuilding PI. In any case, teams should justify how the current levels of fishing mortality are consistent with maintaining the stock fluctuating around a target level consistent with (or above) BMSY.*"

The assessment team understands 'current' here to be the latest fishing mortality information available to the decision-makers. In this case we have considered the information available to the decision-makers in determining the Baltic sprat TAC in 2021 and the TAC for 2022.

The TAC is the main tool available in the fishery to implement the HCRs which are defined in the Baltic Sea MAP. Trends in biomass and fishing mortality are estimated by the stock assessment process and are then used as input values to implement the HCR and determine the TAC.

Table 5. Baltic sprat: basis of TAC, ICES advice, catches and biomass.

Year	TAC basis	Management target: F_{MSY} range. Values based on ICES advice			F_{bar} (years 2-5)	MSY $B_{trigger}$	SSB	Reference
		F_{lower}	F_{MSY}	F_{upper}				
2020	EU MAP	0.22	0.31	0.41	F_{2019} = 0.38	57000	931000	ICES, 2020c
2021	EU MAP	0.22	0.31	0.41	F_{2020} = 0.37	57000	817000	ICES, 2021b
2022	EU MAP	0.22	0.31	0.41	F_{2021} = 0.32	57000		

The management target defined in the MAP (Article 4 paragraph 1) is an F_{MSY} range rather than a point value (see Scoring Issue (a) for further detail). As can be seen in the table above, current fishing mortality is within the upper part of the management target range. As provided for in Article 4 paragraph 5 of the MAP, fishing opportunities for a stock may be fixed in accordance with the upper range of F_{MSY} provided that the stock is above MSY $B_{trigger}$ and one of the following conditions is met:

a) *"if, on the basis of scientific advice or evidence, it is necessary for the achievement of the objectives laid down in Article 3 in the case of mixed fisheries;*
b) *if, on the basis of scientific advice or evidence, it is necessary to avoid serious harm to a stock caused by intra- or inter-species stock dynamics; or*
c) *in order to limit variations in fishing opportunities between consecutive years to not more than 20 %."*

The stock is above MSY $B_{trigger}$, and there is evidence from the decision-making process that one of the conditions has been met:

The Commission proposal COM(2021) 491 (EC, 2021) for next years' TAC states, in section 5, that, "*The proposed TACs for herring in the Gulf of Riga, herring in the Gulf of Bothnia and sprat correspond to the MSY fishing mortality range as referred to in Article 4(3) of the MAP. The biomass of sprat is healthy but the fishing pressure remains too high. Moreover, ICES advises to consider multispecies interactions as sprat is an important forage species for cod. Furthermore, sprat is caught in a mixed fishery with herring whose TAC has to be significantly decreased for the second year in a row under the rules of the MAP. The Commission therefore proposes not to increase the sprat TAC but to roll it over*." This meets the requirement of Article 4(5)(b).

Therefore, for all the above-mentioned, **SG60 and SG80 are met**.

As there is not a high degree of certainty that the stock meets ecosystem needs/fluctuating around MSY levels there is also not a high degree of certainty that the tools applied are effective in meeting these goals. **SG100 is not met.**

References

EC, 2021.
ICES, 2020b.
ICES, 2020c.
ICES, 2021b.

Draft scoring range	**60-79**
Information gap indicator	**Information sufficient to score PI.** *Condition 2 is rolled over from the previous certification period as this condition is up to 2028.*

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**75**
Condition number (if relevant)	**3**

PI 1.2.3 – Information and monitoring

PI 1.2.3		Relevant information is collected to support the harvest strategy		
Scoring Issue		SG 60	SG 80	SG 100
a	Range of information			
	Guide post	**Some** relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	**Sufficient** relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.	A **comprehensive range** of information (on stock structure, stock productivity, fleet composition, stock abundance, UoA removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

The stock assessment is supported by data from the fishery (species composition and age compositions) and by results of two annual acoustic abundance surveys. There is good understanding of the biology, population dynamics and reproduction strategy for sprat. The fleet is well documented. The natural mortalities for sprat from 2012 onwards were based on the regression of M against the SSB of eastern Baltic cod while earlier estimates were based on SMS multispecies model run; these are now uncertain because of the uncertainties in the cod assessment. SMS results (ICES, 2013a) are used to infer the natural mortality estimates relevant for stocks in the open sea and the estimates were updated (ICES, 2019e). There is a comprehensive range of information on stock structure, stock productivity, fleet composition, stock abundance, removals and other information such as environmental information are available. There are multispecies based evaluations available. Hence **SG60, SG80 and SG100 are met**.

b	Monitoring			
	Guide post	Stock abundance and UoA removals are monitored and **at least one indicator** is available and monitored with sufficient frequency to support the harvest control rule.	Stock abundance and UoA removals are **regularly monitored at a level of accuracy and coverage consistent with the harvest control rule**, and **one or more indicators** are available and monitored with sufficient frequency to support the harvest control rule.	**All information** required by the harvest control rule is monitored with high frequency and a high degree of certainty, and there is a good understanding of inherent **uncertainties** in the information [data] and the robustness of assessment and management to this uncertainty.
	Met?	**Yes**	**Yes**	**No**
Rationale				

All information required by the HCR is presented: abundance, SSB, and fishing mortality. All fisheries targeting sprat in the Baltic Sea are well monitored both through fishery dependent data as well as fishery independent data. There are data from two annual acoustic surveys and data from the commercial fishery (logbooks, VMS, landing statistics, sampling of the landings). Removal is recorded continuously. There is sampling of the catches and data are annually

presented to ICES. The total distribution area is covered. Furthermore, there is good understanding of the quality of the assessment and its inherent uncertainties. The robustness of the assessment is investigated at ICES benchmarks (ICES, 2013a) where the assessment is critically reviewed and alternative formulations are investigated. F. ex. the applicability of the SAM model to the sprat assessment is run in parallel with the XSA approach since 2016 (ICES, 2021a). **SG 60 and SG 80 are met.**

In all countries around the Baltic Sea fish catch statistics are based on log-book data. In some countries, such as Denmark and Poland, these data are supplemented by data collected in regional Marine Offices. In Denmark, Sweden, Finland, and to a lesser degree in Poland, much of the sprat catch is taken in industrial fisheries where large by-catches of other fish species (mostly herring) may occur. The species composition of these catches is not accurately known and can create errors in annual sprat catch statistics. The landings and sampling activity for 2020 WGBFAS (ICES, 2021a) show that generally in 2020 the sampling activity by ICES subdivision exceeded much the levels indicated in the EC Regulation No. 1639/2001, i.e., at least 1 sample per 2000 tons of catch, 100 length measurements and 50 age readings per sample. On average, number of samples, a number of length measurements, and a number of age readings was 4-5 times higher than indicated in the EU directive.

ICES sprat advice (ICES, 2021b) notes there are issues with the catch composition; the biggest problem for sprat data is likely to be the separation of catches between sprat and herring in the industrial fishery, although that problem was more severe in the past than it is now. The overall indicator of data quality was evaluated as potential bias but nowhere was a confirmed bias identified. Countries with major proportions of sprat landings used for industrial purposes are Sweden, Poland and Denmark, and in case of herring. The official landing figures of both sprat and herring are corrected by Sweden, Poland and Denmark, taking into account, for example, composition of catches from the samples (ICES, 2013a). A worse-case scenario using the permitted margin of tolerance of 10% in the logbooks of the quantities by species onboard (EC 1224/2009) revealed that total sprat landings may be underestimated by 5% and that total herring landings may be underestimated by 4% (ICES, 2013a). The marked part of the sprat catches is taken in a mixed sprat-herring fishery, and the species composition of these catches is imprecise in some fishing areas / periods although the Latvian sprat fishery is probably not among those fisheries where the problem is most abundant, because this fishery is closely sampled on landing-by-landing basis and because there the species are sorted in the production. **SG100 is not met.**

	Comprehensiveness of information			
c	Guide post		There is good information on all other fishery removals from the stock.	
	Met?		**Yes**	

Rationale

Fisheries on Baltic sprat are conducted by EU countries and by Russia. The fisheries are well documented through fisheries statistics (landings), logbooks (effort) and VMS (geographical area of fishing). The fisheries are sampled at comparable levels and the data are available to ICES. **SG80 is met**.

References

Commission Regulation (EC) No 1639/2001
Council Regulation (EC) No 1224/2009
ICES, 2013a
ICES, 2019e
ICES, 2021a
ICES, 2021b

Draft scoring range	**≥80**
Information gap indicator	**More information sought** *Information on the possible misreportings of herring/sprat in the catches (mainly industrial fisheries) should be sought*

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**90**
Condition number (if relevant)	**NA**

PI 1.2.4 – Assessment of stock status

PI 1.2.4		There is an adequate assessment of the stock status		
Scoring Issue		SG 60	SG 80	SG 100
a	Appropriateness of assessment to stock under consideration			
	Guide post		The assessment is appropriate for the stock and for the harvest control rule.	The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA.
	Met?		**Yes**	**Yes**
Rationale				

The assessment is reviewed at irregular intervals approximately every 5 years at ICES benchmarks. At these benchmarks the robustness of a range of assessment approaches is investigated and a method of 'best practice' is adopted (ICES, 2013a; 2020b). The assessment approach delivering the key inputs to the agreed EU MAP, i.e., Stock status measured as recruitment, SSB and F, is appropriate for the stock and the harvest control rule. **SG80 is met**.

Baltic Sprat is a prey species (key LTL species) with cod as a major predator. The influence is modelled through the natural mortality which takes account of the predations. The sprat recruitment is in general driven by environment changes and the changes in productivity are accounted for in the projections on which the TAC is based. ICES benchmarked the assessment in 2013 (ICES, 2013a) and found that the assessment takes into account the major features of herring and sprat including the effects of the cod predation. **SG100 is met**.

b	Assessment approach			
	Guide post	The assessment estimates stock status relative to generic reference points appropriate to the species category.	The assessment estimates stock status relative to reference points that are appropriate to the stock and can be estimated.	
	Met?	**Yes**	**Yes**	
Rationale				

The status of the stock is evaluated relative to appropriate and available reference points (see Scoring Issue a, and PI 1.1.1 above). Thus, **SG60 and SG 80 are met**.

c	Uncertainty in the assessment			
	Guide post	The assessment **identifies major sources** of uncertainty.	The assessment **takes uncertainty into account**.	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a **probabilistic** way.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The major sources of uncertainty include the environmental variability and the lack of ability to estimate recruitment at age 0. These are identified in the current approaches to the assessments (ICES, 2013a). **SG 60 is met**. The current approach (XSA) has been standard practice for more than a decade and the settings within this model have been under constant review in WGBFAS to assure that the model formulation meets quality requirements. This assessment allows ICES to provide advice which is a central piece of information for the HCR. The evaluation of the assessment takes these uncertainties into account through ICES ACOM system. **SG80 is met**. However, the assessments are not formulated probabilistic (based on XSA) and **SG100 is not met**.

	Evaluation of assessment			
d	Guide post			The assessment has been tested and shown to be robust. Alternative hypotheses and assessment approaches have been rigorously explored.
	Met?			**Yes**

Rationale

The stock assessment is part of the ICES programme for benchmarking. The most recent benchmark is ICES (2013a, 2020b). At these benchmarks alternative hypotheses and assessment approaches are rigorously explored. This benchmark focused on the possible application of a multispecies model for the advisory assessments; see ICES advice 2013 section 4.6.1. Also, within WGBFAS there is work ongoing that provides input to these benchmarks, e.g., the use of the SAM model is run in parallel to the XSA approach (ICES, 2021a) for sprat. At the benchmark the robustness of the various models are investigated and in particular if the models provided unbiased estimates, e.g. through investigation of retrospective patterns. The benchmark process investigates alternative approaches.
Species misreporting of herring has occurred in the past and there are indications of sprat being misreported as herring. This has not been quantified and recent benchmarks does not suggests that the sprat assessment is seriously flawed. **SG100 is met**.

	Peer review of assessment			
e	Guide post		The assessment of stock status is subject to peer review.	The assessment has been **internally and externally** peer reviewed.
	Met?		**Yes**	**Yes**

Rationale

The assessment is internally peer reviewed within ICES through WGBFAS and ACOM and there are external reviewers involved in the benchmark process (ICES, 2013a; 2020b). **SG80 is met**. WGBFAS includes scientists from all Baltic states also scientists that are not directly involved with the sprat assessment. ACOM involves scientists from all ICES member states and through the system of Advice drafting groups (ADG) there are external scientist involved in the evaluation of the assessment. The chair of an ADG is normally the chair or a vice chair of ACOM not involved with the assessment. The benchmark process involves external experts. Hence, **SG100 is met**.

References

ICES, 2013a.
ICES, 2020b.
ICES, 2021a.

Draft scoring range	**≥80**
Information gap indicator	**More information sought** *Information on the possible misreporting's of herring/sprat in the catches (mainly industrial fisheries) should be sought*

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**95**
Condition number (if relevant)	**NA**

7.3 Principle 2

7.3.1 Baltic Sea: context

Oceanographic features

The Baltic Sea is the second largest brackish water body in the world after the Black Sea, covering an area of 415,200 km^2 with a catchment area four times as large. The Baltic Sea consists of a number of subsystems (see **Figure**). The Kattegat (outside the Baltic Sea), the Danish Straits, the Arkona Basin, the Bornholm Basin, the Gotland Sea, the Gulf of Riga, the Gulf of Bothnia and the Gulf of Finland. The Gulf of Bothnia can be further divided into the Bothnian Sea and Bothnian Bay. The Archipelago Sea and the Åland Sea can also be distinguished as part of the Gulf of Bothnia. The Arkona Basin, Bornholm Basin and the Gotland Sea are together often known as the Baltic Proper.

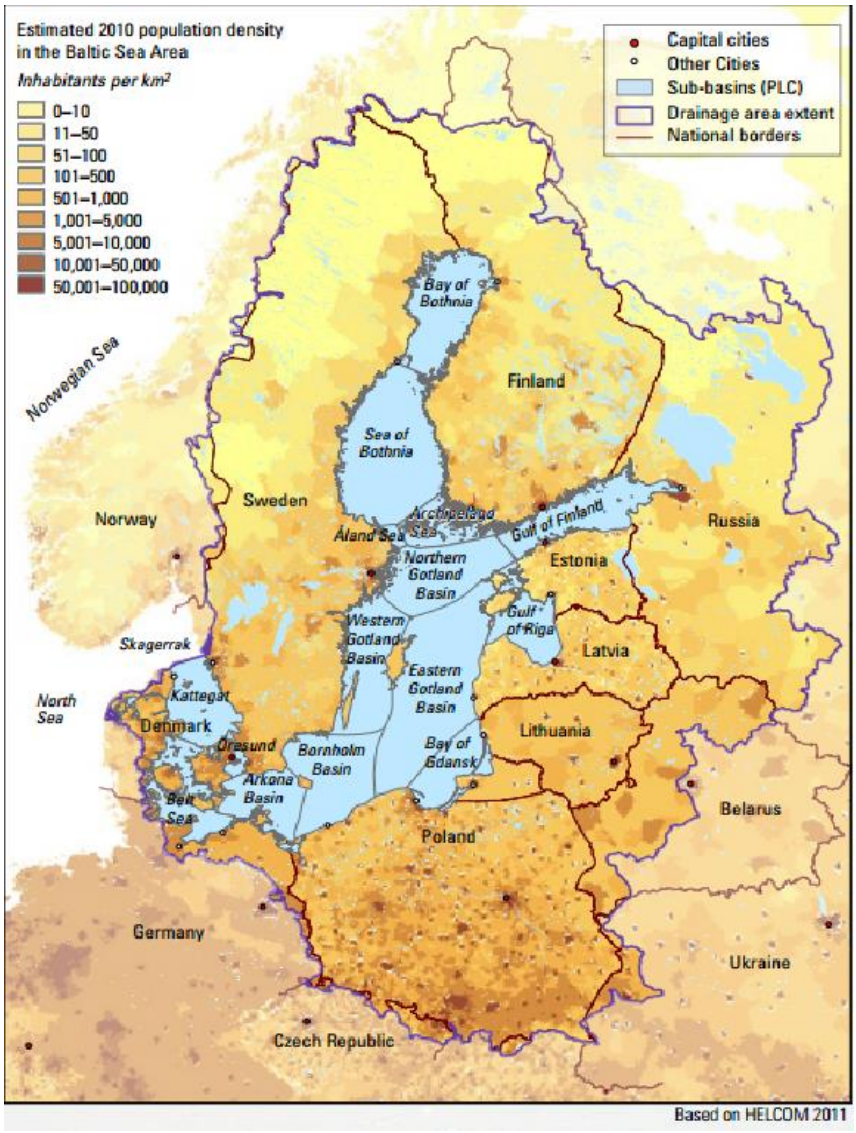


Figure 7.3.1. The Baltic Sea Ecosystem and its subsystems. Source: Furman et al., 2014.

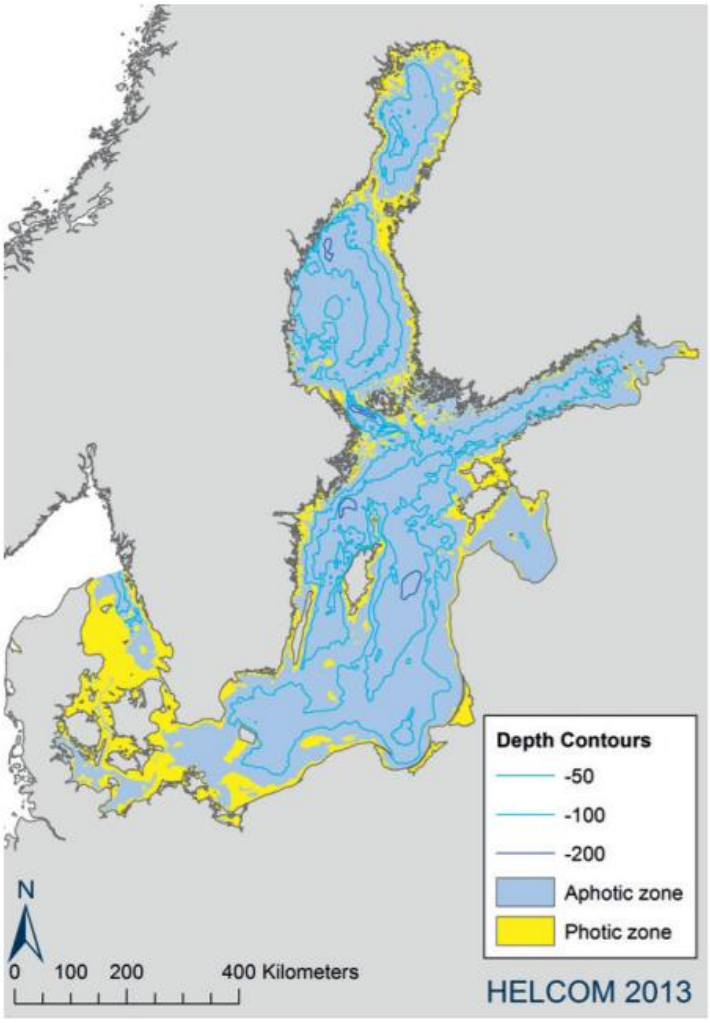
The glacial and post-glacial periods have formed the Baltic Sea into its present shape, with numerous large inlets, bays, lagoons and archipelagos located along the coastline. Changing salinity conditions, with both marine and freshwater phases, have fluctuated over the past 10,000 years. The life of today's Baltic Sea is less than 4,000 years old. Moreover,

the Baltic Sea is an extremely dynamic system. During the past one hundred years, it has undergone decadal variations in salinity, oxygen and temperature. This, and other factors, makes it a unique environment.

Hydrographical conditions of the Baltic Sea

Danish straits and the Kattegat form a transition area to the North Sea. The water exchange through the Danish Straits depends on barometric situation between the Kattegat and the western and central part of the Baltic. By consequence, inflow of saline water is mainly caused by persistent westerly winds but also by a deep-water current generated by the horizontal salinity gradient between the North Sea and the Baltic Sea. The Sea is however nontidal.

The Baltic Sea is characterized by large areas that are less than 25m deep, interspersed by a number of deeper basins, with a maximum depth of 459m at the Ladsort Deep (see ¡Error! No se encuentra el origen de la referencia.). At an average depth of 52m, is a very shallow sea. The seabed is shaped into 7 sub-basins separated by shallow sills. Each sub-basin is characterized by a different depth, volume and water exchange, resulting in specific chemical and physical properties.



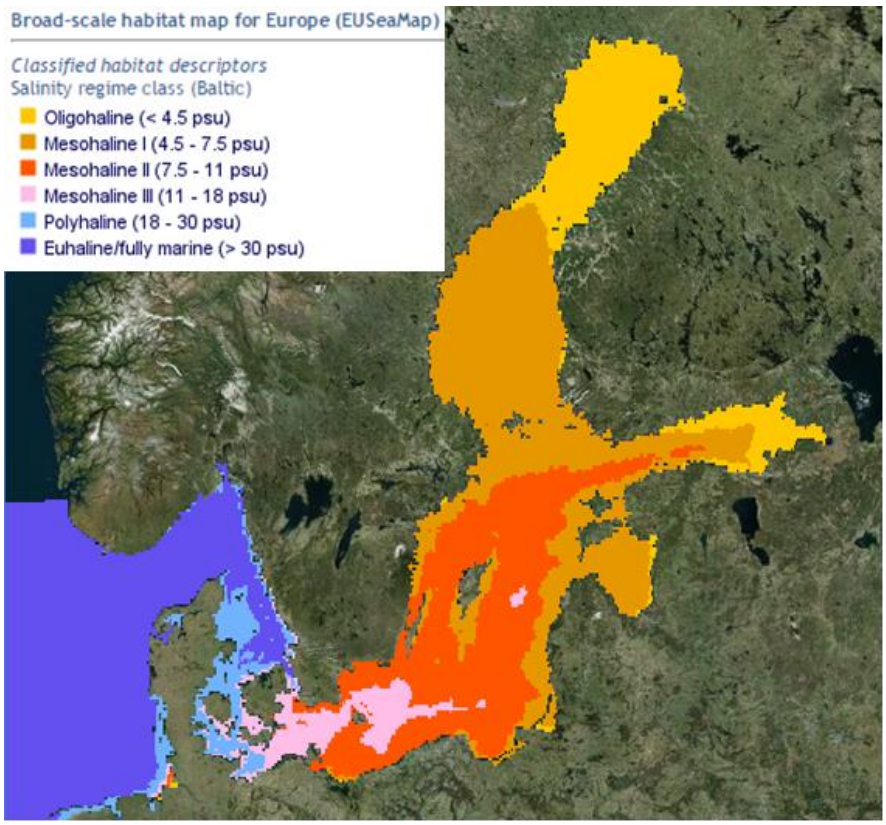
¡Error! No se encuentra el origen de la referencia. Bathymetric map of the Baltic Sea. Source: HELCOM, 2013a.

Salinity levels

The Kattegat, Danish Straits and the westernmost part of the Baltic are meeting points for the high saline water masses from the North Sea (35‰) and the brackish water masses from the Baltic (average of 6-8 ‰ at the surface). As a consequence, there is a salinity range from the western and southern parts to the sea's semi-enclosed bays situated at the most northern and eastern parts of the Baltic Sea, which has major freshwater inflows, such as the Bothnian Bay (ICES SD31), the Gulf of Finland (ICES SD 32) and the Gulf of Riga (ICES SD 28.2), as shown in ¡Error! No se encuentra el origen de la referencia..

A stratification into three different water masses occurs along most of the Baltic Sea:

- Brackish surface layer
- Intermediate layer with low salinity: layer 10-20m thick that can be found at depths that varies from 50-60m at the Bornholm Deep to 80m at the Gothland Deep further north.
- A saline bottom layer: the salinity of this layer varies as we move towards the east and north: 18‰ at the Bornholm Deep, 14‰ at the Gdansk Deep and 11‰ Gothland Deep, but it may decrease in periods with no inflow.



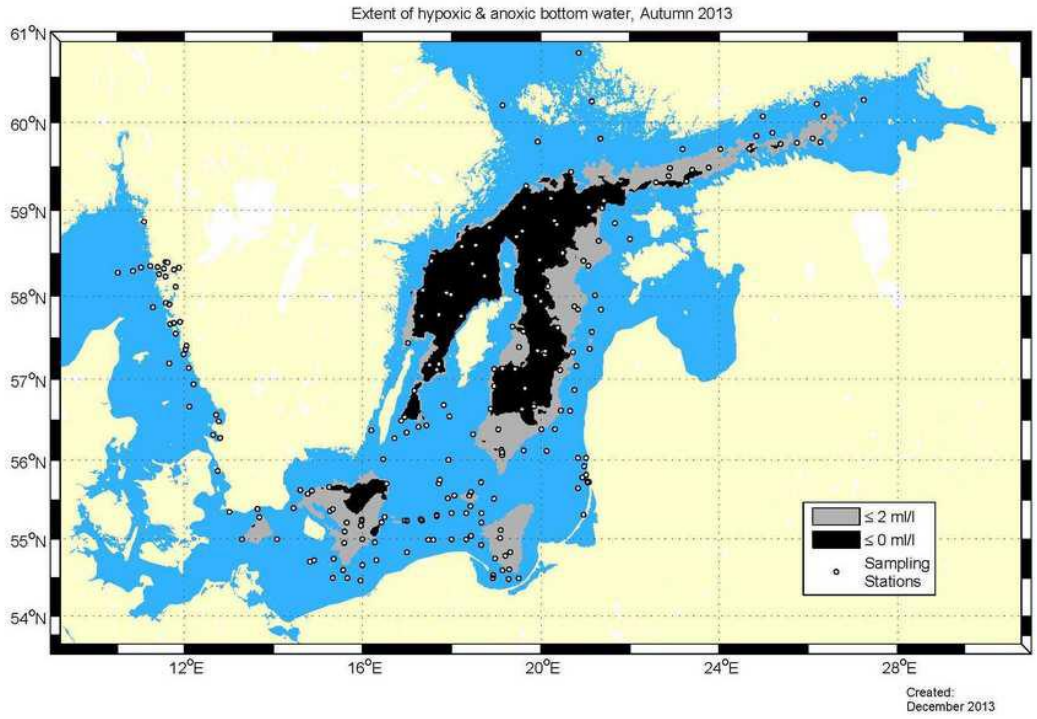
¡Error! No se encuentra el origen de la referencia.. Salinity regime in the Baltic Sea. Source: http://www.emodnet-seabedhabitats.eu

As a consequence, there is a permanent stratification of the water column, and this forms a barrier between the less saline surface and more saline bottom, called a halocline. These barriers have a significant effect on seabed life since they prevent the mixing of oxygen rich surface waters with bottom waters, creating hypoxia and anoxia in the Baltic's deeper areas (see ¡Error! No se encuentra el origen de la referencia.).

Sporadic inflows of high saline water occur very irregularly and in the decades several years may pass in between them, as explained in below.

Oxygen

As mentioned above, a halocline below a surface layer supplied with oxygen by thermal convection forms an effective barrier to convection. By consequence, oxygen rate of waters below halocline is dependent on inflow trough the Danish Straits. Indeed, the only mechanism by which the central Baltic deep water is renewed is the intrusion of saline oxygenated water from the North Sea.



¡Error! No se encuentra el origen de la referencia.. Extent of hypoxic & anoxic bottom water Autumn 2013. Source: http://www.smhi.se/en/theme/oxygen-in-the-sea-1.11274

As a result, persistent consumption of oxygen due to sedimentation of organic matter provokes extended but varying oxygen deficiency in the deeps depending on the frequencies of inflows. Oxygen depletion sometimes leads to development of hypoxic regions (see ¡Error! No se encuentra el origen de la referencia.), characterized by the formation of hydrogen sulfide.

Baltic inflows

Meteorological and oceanographic conditions both play a role in the occurrence of major Baltic inflows of saltwater from the North Sea. Variations in river runoff to the Baltic also have an impact in the inflow activity. The major Baltic inflow events are known and recorded since the late 1800s (see **Figure**), and until the 1980s the major inflows were relatively frequent.

The longest periods without an inflow event before the late 1970s lasted only for three to four years (1927/1930, 1955/1960); after 1970, it was the ten-year period from 1983 until 1993, and only a few major inflows have occurred since then.

Besides increasing salinity and oxygen content, inflows force nutrients from the bottom to the photic zone, stimulating primary production. Therefore, the lower frequency and intensity of the Baltic inflows' episodes may lead to lower primary production in the Baltic Sea.

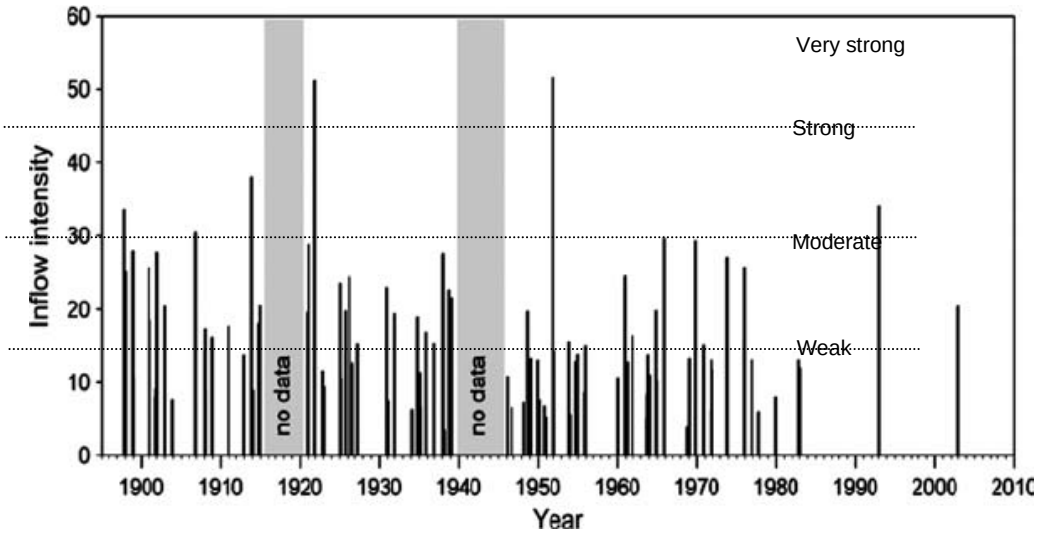


Figure 7.3.5. Major saltwater inflows during the 20th century. Source: Matthäus, 2006.

Habitats

There is good information regarding the habitat characteristics of many areas of the European seas, through several international projects and integrated efforts (BALANCE, EUSeaMap, EMODnet, MESH project, HELCOM) that focused on identifying vulnerable habitat types, and that can provide predicted habitats maps for many areas including the Baltic Sea (see **Figure**).

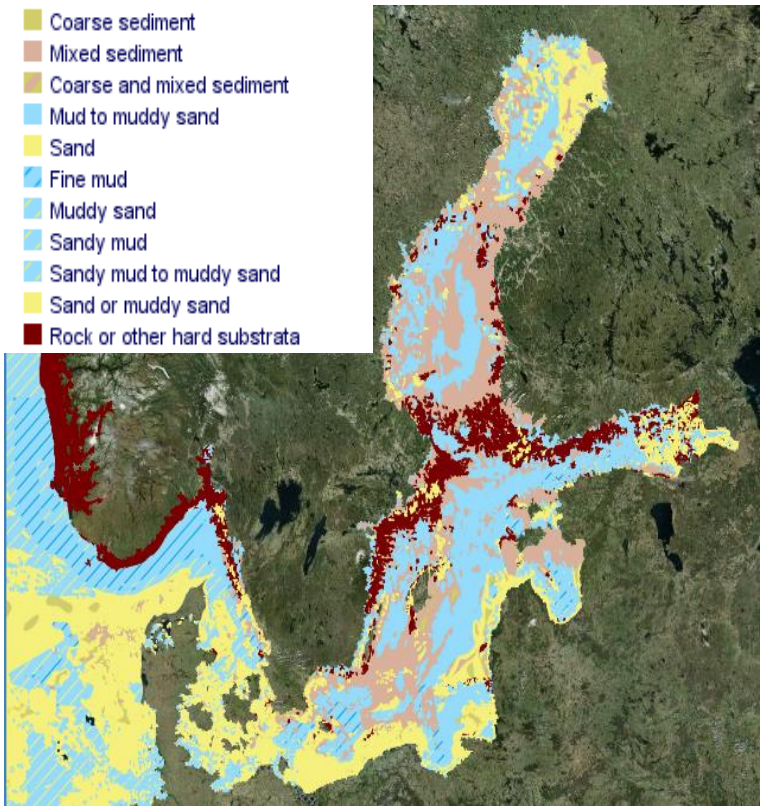


Figure 7.3.6. Baltic Sea substrate types based on Broad-scale habitat map for Europe (EUSeaMap). Source: http://www.emodnet-seabedhabitats.eu

The coastal and offshore zone of the Baltic Sea is mostly comprised of three types of plant and animal habitats: hard and soft bottom and the pelagic community (i.e., open water). Conditions for life in these habitats are shaped by many physical, chemical, and geological factors.

Hard bottom communities close to the coast, mainly composed of rocky substratum, are the most species-rich habitats in the Baltic Sea. They are mainly found in the Northern and North-Eastern Baltic (Bothnia, Swedish coast and Gulf of Finland). Typically, they are comprised of an upper zone of macroalgae inhabited by a rich fauna.

Soft bottoms are the most dominant bottom type, consisting of muddy and sandy sediment. Covering most of the Baltic Sea seafloor, soft bottoms are vulnerable to the mechanical stress of wind and wave action.

The pelagic community, that is species living in the open water, contains relatively few species, but forms habitat for the main fish species of the Baltic Sea. The primary producers are different phytoplankton species, which provide food for zooplankton such as copepods (e.g., *Acartia sp, Pseudocalanus sp, Temora sp*), cladocerans and rotifers. These zooplankton in turn provide food for marine invertebrates and fish species, such as herring and sprat, which in turn are important food sources for larger predatory fish, seabirds and seals.

Biodiversity

Marine species, including cod, invaded the Baltic Sea some 8,000 years ago after the opening of the connection to the North Sea. Biodiversity is relatively low as few marine and freshwater species have adapted to the brackish water conditions. Therefore, biomass is dominated by a small number of species adapted to low salinity and low oxygen conditions.

In general, Baltic Sea biodiversity have been argued to follow the salinity gradient, as it is the main environmental factor defining structural and functional characteristics of aquatic biota (**Figure**). In the Baltic, biodiversity has been shown to increase towards the south, with a 20–40 times higher biomass of both fauna and flora in the Baltic Proper compared to that of the Bothnian Bay. However, recent research challenges the viewpoint of the Baltic Sea as an ocean with low biodiversity, showing that not only does the Sea hosts some 6,000 species, but furthermore that phytoplankton and zooplankton in the Baltic exhibit an unexpected high diversity (>4,000 taxa), not least in the Gulf of Finland where over 1,500 of the 1,700 known Baltic species of phytoplankton are found. The diversity of bottom dwelling animals and algae are still comparably low, but pelagic species diversity is strikingly high.

In the hardbottom communities, certain species are of particular importance because they make up forming structures that serve as habitats for many other species. Such key species in the Baltic Sea include brown algae bladder wrack (*Fucus vesiculosus*), red algae black carrageen (*Furcellaria lumbricalis*), eelgrass (*Zostera marina*), and blue mussels (*Mytilus trossulus* and in the Kattegat *M. edulis*). The importance of these species is further highlighted by the Baltic Sea Action Plan (HELCOM, 2007), which states that HELCOM countries will preserve the favorable conservation status of these species and communities. More specifically, that by 2020 “the spatial distribution, abundance, and quality of the characteristic habitat-forming species, specific for each Baltic Sea sub-region, extends close to its natural range”.

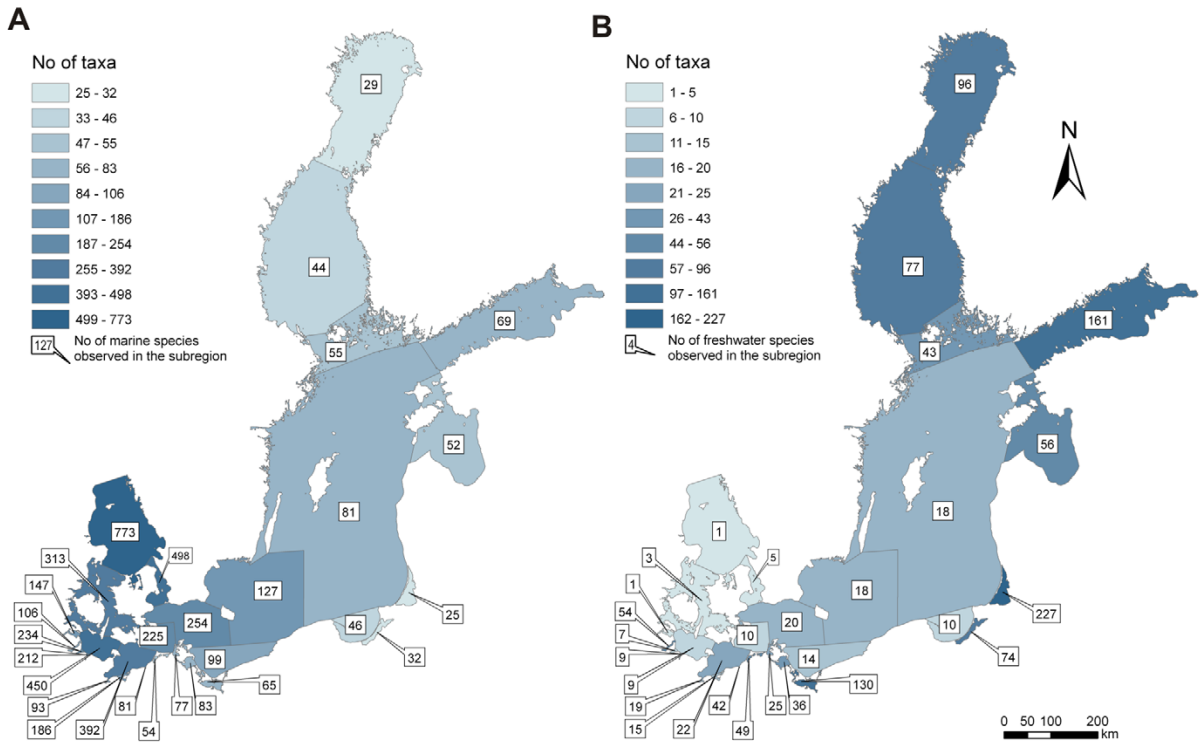


Figure 7.3.7. Sub-regional distribution of (A) marine and (B) freshwater taxa in the Baltic Sea: case of macro zoobenthos. Source: Ojaveer, et al., 2010.

Food web and ecosystem resilience

Only a handful of species dominate the ecosystem in biomass and abundance, this fact means that food webs in the Baltic Sea show relatively few ecological interactions compared to most other marine ecosystems found worldwide.

When only a few species are maintaining many functions of an ecosystem, as is the case in the Baltic Sea, the system is characterized with low resilience, referring to the capacity of an ecosystem to respond to a perturbation or disturbance and ability to recover after these events (HELCOM, 2009).

The simple Baltic Sea food webs are thus more vulnerable to environmental changes. Changes at one end of the chain, such as through the effects of hazardous substances or overfishing affecting top predators, may easily spread through the entire chain (so called cascading effects) and may have unpredictable effects on the other components of the food web and ecosystem. Therefore, the maintenance of species diversity is critical to the long-term functioning of the whole ecosystem.

The models of the Baltic food web predict that top predators at the fourth trophic level, including mammals, large fish and cormorants, control the abundance of small fish species at the third trophic level such as perch, sprat, herring and cyprinid fish (HELCOM, 2010a). The Baltic Sea upper trophic food web is dominated by cod and two competing planktivorous fish species, herring and sprat. There are strong linkages between the abundance of predator (cod) and its preys (herring and sprat) as discussed in further detail in **Section 7.3.2**.

Regime shifts in the Baltic ecosystem

The Baltic Sea is a complex ecosystem with a multitude of physical, chemical and biological interactions functioning on various temporal and spatial scales. The Baltic Sea is under severe stress as a result of the combination of a large human population in the catchment area, the environmental effects of anthropogenic activities and its special geographical, climatological and oceanographical characteristics. The environmental state is thus influenced by both natural and anthropogenic factors.

Summer blooms of cyanobacteria are a natural phenomenon of the Baltic Sea, and have been recorded as early as 1885, but as the average biomass production has increased by a factor of 2,5, so has the various impacts on the ecosystem. In the 1950s the effects of eutrophication became clearly evident both close to the large cities, but also in offshore areas with blooms and a decrease in summer water transparency. As eutrophication has both ecological and social consequences, it is one of the major environmental problems in the Baltic Sea. It has resulted in a deterioration of the ecosystem, with effects including increase in filamentous algae, withdrawal of perennial fucoid algae, increased frequency of toxic algal blooms and changes in fish population (see **Figure**). High fishing pressure by cod in combination with climate change, eutrophication and the lack of salt- and oxygen-rich water inflows from the North Sea reduced the water volume suitable for cod reproduction, led to large-scale changes in the fish community; decreases in the biomass of cod (a high trophic level, commercially high valued and favored fish), which was replaced by a low trophic level and commercially low valued fish (sprat).

The impact of trawl fisheries in the Central Baltic (25-29+32) have been investigated in detail and it has been shown that fishing influenced the regime shifts that has been documented (Casini, et al., 2011; Tomczak, et al., 2012). However, the regime shift between a cod dominated system and a pelagic dominated system also are partly caused by environmental changes, i.e. saltwater influx from the Northeast Atlantic and freshwater inflow from the rivers to the Baltic Proper (Ojaveer & Kalejs, 2010; Ojaveer & Kalejs, 2012; Adolf & Lilover, 2012).

Summarizing, the largest environmental problems are eutrophication caused by increasing nutrient loads, overfishing, hazardous substances, risk of chemical and/or oil spills, marine litter, and invasive species (BalticSTERN, 2013). These environmental problems, together with current and future climate changes are jeopardizing the Baltic Sea's ability to provide ecosystem goods and services

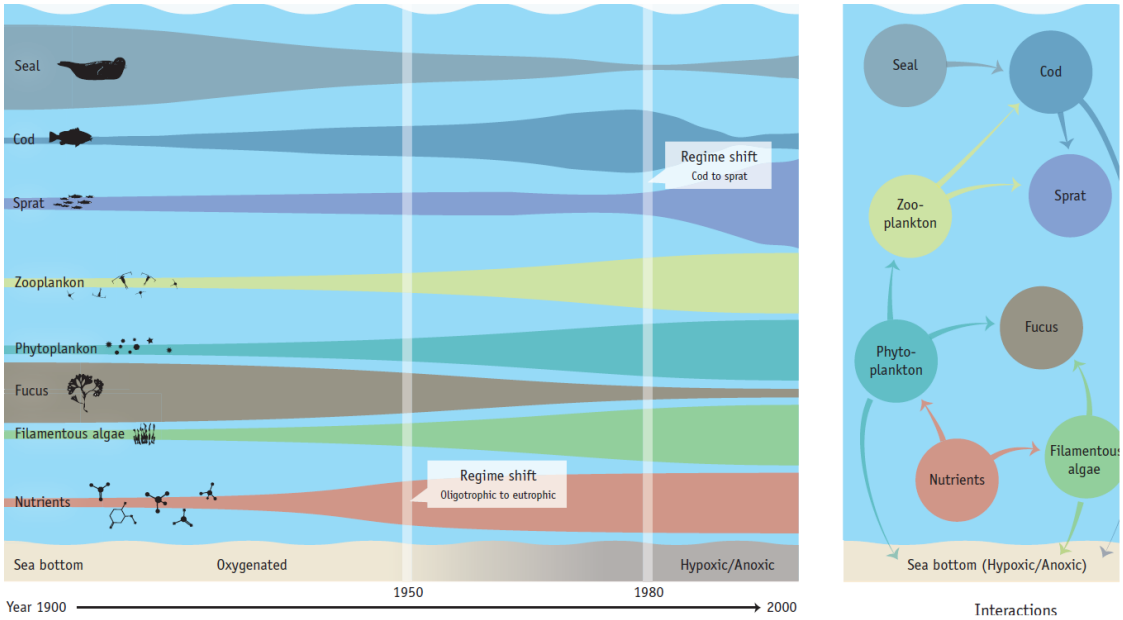


Figure 7.3.8. Changes in the Baltic Sea ecosystem during the 20th Century. The illustration shows changes in major ecological compartments and their interactions, as well as regime shifts in the ecosystem. Source: BalticSTERN, 2013 (Illustration by J. Lokrantz/Azote).

The HELCOM action plan (Minna, 2012) and the holistic assessment of the status of the ecosystem (HELCOM, 2010a) demonstrates that there is a strategy in place for improving the state of the ecosystem and data available such that a qualified overview can be produced based on available data.

The reduction in cod condition and the possible link to changes in the sprat stock is discussed in section 3.3.4. WGBFAS (2016) concludes that the direct drivers for the reduction are abiotic factors and changes in the zooplankton compartment.

Marine Protected Areas

The Natura 2000 network is based on the Birds Directive adopted in 1979 (and amended in 2009; Directive 2009/147/EC) and the Habitats Directive adopted in 1992 (Directive 92/43/EEC). These directives provide legal protection to the sites. By 2013, 64% of Natura 2000 sites in the Baltic Sea had also been designated as HELCOM MPAs (former BSPAs) (see **Figure**). Overlapping HELCOM MPAs and Natura 2000 sites can be of different shape and size depending on the protection targets. HELCOM MPAs are restricted to the coastal zone and marine area, while Natura 2000 areas may also cover inland areas. The Natura 2000 network protects natural habitats and species deemed important at EU level, whereas the HELCOM MPAs network aims to protect marine and coastal habitats and species specific for the Baltic Sea.

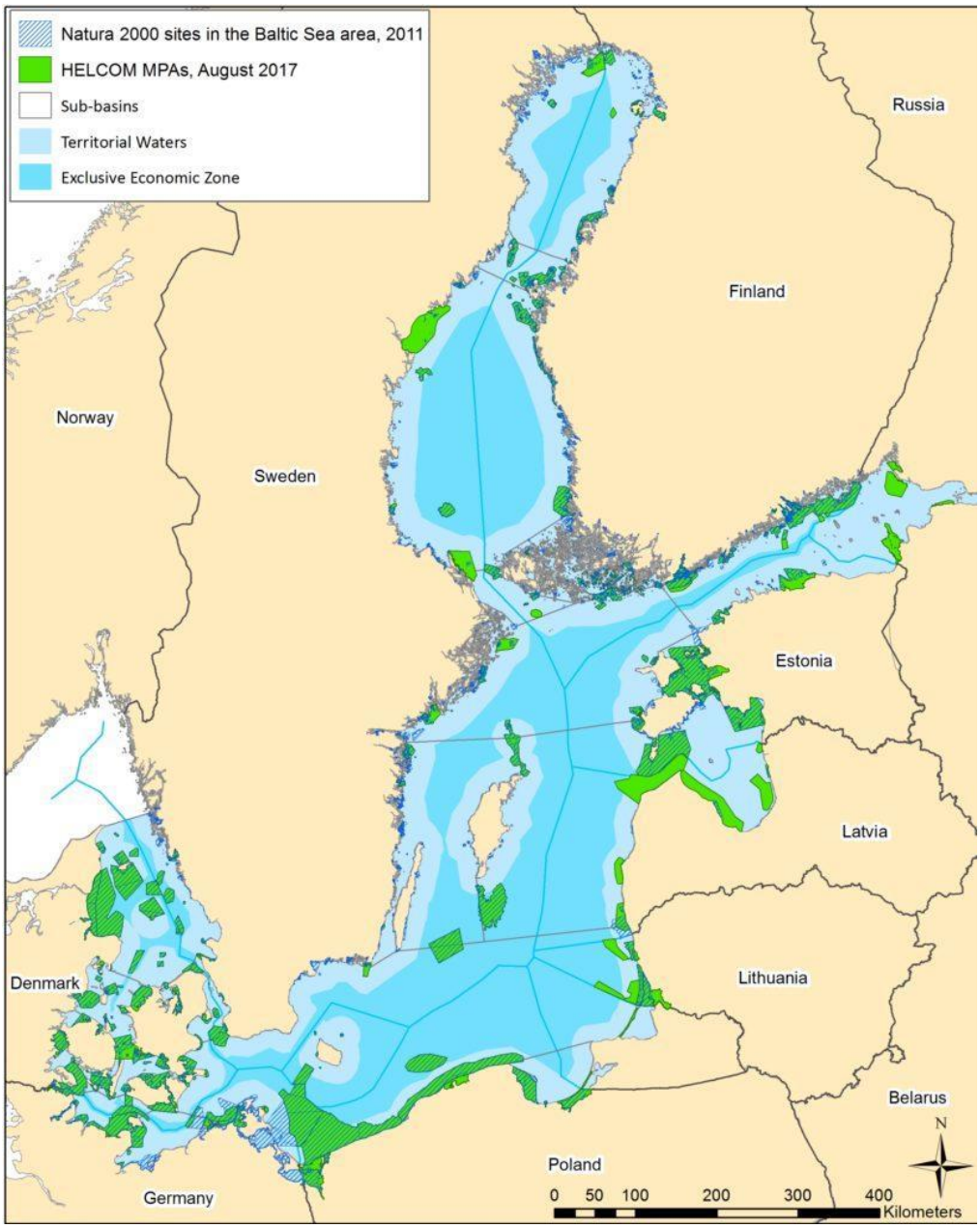


Figure 7.3.9. MPAs in the Baltic. HELCOM MPA data is from August 2017 and Natura 2000 data is from December 2011.

HELCOM (Baltic Marine Environment Protection Commission - Helsinki Commission) is the governing body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, known as the Helsinki Convention. HELCOM was established about four decades ago to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation. The Contracting Parties are Denmark, Estonia, the European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.

HELCOM's vision for the future is a healthy Baltic Sea environment with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable economic and social activities. In order to accomplish it, HELCOM is not only an environmental policy maker body but also provides information about the state of and trends in the marine environment, develops recommendations, and supervises and coordinates the implementation of policies and strategies.

Between HELCOM MPAs and Natura 2000 sites there is an ecologically coherent network of MPAs protecting 12% of the Baltic Sea. The 10% target of the UN CBD for the whole Baltic was attained already in 2010. The HELCOM 2010 Ministerial Meeting set a 10% target for each sub-basin, when scientifically justified. This target has now also been reached in all other sub-basins except the Baltic Proper and the Gulf of Bothnia. In the Baltic Proper 8.7% of the total area was covered by BSPAs and in the Gulf of Bothnia 4.8%. In 2013, 33% of the Latvian territorial waters and only 1% of its Exclusive Economic Zone were protected, amounting a total of 7,361km^2 (15% of the total Latvian maritime area).

7.3.2 Sprat fishery: ecosystemic considerations

After reviewing general aspects regarding the Baltic Sea, below it can be found some ecosystemic considerations in relation to the sprat fishery developed by the UoA.

Midtrawl gear interaction with the sea bottom

In the fishing grounds where the UoA operates the most predominant substrates are mud to muddy sand, sand and mixed sediment (see **Figure**).

Midtrawl gear used for sprat fishery is designed to not touch the sea bottom but to ‘fly’ 8-10 m above it. Any contact with the sea bottom would jeopardize the integrity of the gear. The vertical opening of the gear varies in relation to the size of the gear (which in turn depends on the size of the vessel) but on average is about 24m. Therefore, sprat fishing is conducted in the water column, interacting with the pelagic community described above.

Biological interactions and environmental effects

Cod, herring and sprat constitute about 95% of the total landings in the Baltic Sea (ICES, 2019c), but in addition to providing the basis for capture fisheries they are also important component of the Baltic ecosystem and there are also strong biological interactions between them. Cod predate on sprat and herring meaning that the size of the cod stock affects the size of the herring and sprat stocks and vice versa. Therefore, the highest yield which sprat stock can sustain in the long term depends on natural mortality, which is linked to the abundance of cod. In turn, herring and sprat fishery within the cod distribution area will potentially decrease the local prey density, which may lead to food deprivation. This seems to be happening in SD 25-26 as fishing pressure increased on sprat since 2010, leading ICES to recommend the development of a spatial management plan for the clupeid stocks in the SD 25-26 in order to improve cod condition.

On the other hand, sprat recruitment is strongly linked to temperature as Baltic sprat is located at the northern limit of the species’ geographic distribution. Low temperatures can therefore be expected to be detrimental to production and survival in the Baltic Sea, and higher temperatures might support increased recruitment. This linkage implies that the occurrence of, for example, two successive hard winters, could have severe consequences for the sprat stock.

The unusual climate situation during the 1990s (marked by higher average temperatures) resulted in a change in the circulation pattern and thus a change in the drift pattern of sprat larvae, where retention vs. dispersion in the Baltic deep

basins have a strong influence on the recruitment success of sprat. This strong recruitment coupled with low cod predation contributed to the high sprat SSB in the mid-1990s and 2000s. See **Section 7.2.2** for more details on the implications of the sprat as a key low trophic level species.

In view of the strong influence that biological interactions and environmental effects have on the Baltic stocks of cod, herring and sprat, EU considered appropriate to recently establish a multi-species fisheries plan taking into account the dynamics between these three species (Regulation EU 2016/1139, EU 2019/472), in line with the ecosystem-based approach.

7.3.3 UoA catch composition: species assignment to MSC P2 categories

The species assessed under P2 are those species in the catch that are not covered under P1. The assessment team considered each P2 species within only one of the primary species, secondary species or ETP species components, according to MSC Fisheries Standard v2.01 SA3.1.3-3.1.5 and SA3.4.4-3.4.5.

7.3.3.1 Sources of information

Before categorising P2 species, it is important to indicate the different sources of information used by the team to assess the species impacted by the fishery:

a) Data provided by the client.

During the initial assessment the client provided detailed information on the catch composition of the assessed vessels for 2015. This information was updated with data from 2016-2018 in the second surveillance audit, with data from 2019 during the third audit, and with data from 2020 during the fourth surveillance audit (see **Tables 4-3** and **5-3**, available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments). Sprat and herring are the dominant species in this fishery, accounting for more than 97% of the total catches in weight during the studied period. The remaining share is comprised mainly by flounder and cod, while eelpout, smelt and four-horned sculpin constitute a negligible part of the catch. These data are in accordance with the initial assessment, with the only exception of the four-horned sculpin, which was not assessed. A total of 9.83 tons of four-horned sculpin were caught by the UoC in 2016 (5.3t) and 2017 (4.53t). During the last two years assessed, 2020 and 2021, 0,01% of the annual catch of the certified fleet was four-horned sculpin.

Data for 2021 catches was provided during the site visit that took place for this re-assessment.

Table 7.3.1 Species contribution to the annual total catches of the certified fleet. Source: NZRO.

Year	sprat	herring	cod	flounder	eelpout	smelt	four-horned sculpin
2015	87.67%	12.27%	0.01%	0.01%	0.03%	0.00%	0.00%
2016	74.98%	19.28%	2.79%	2.90%	0.02%	0.01%	0.02%
2017	78.37%	16.65%	2.55%	2.40%	0.01%	0.00%	0.02%
2018	75.57%	21.62%	1.03%	1.78%	0.00%	0.00%	0.00%
2019	80.33%	18.87%	0.22%	0.58%	0.00%	0.01%	0.00%
2020	77.14%	22.05%	0.01%	0.24%	0.00%	0.55%	0.01%
2021	80.40%	19,07%	0,01%	0,26%	0,00%	0,25%	0,01%

b) Data provided by BIOR (observers onboard the assessed fleet)

During the initial assessment, and within the EU DCF programme, BIOR provided the assessment team with data collected between 2013 and 2016 by scientists on board the fishing vessels targeting sprat in ICES SD 26 and 28.2. This series of data was updated with data from 2016-2018 during the second surveillance audit, with data from 2019 during the third audit, and with data from 2020 during the fourth surveillance (**Table 7.3.2**). In all years, sprat and herring have comprised nearly 100% of the total catches in weight, since only a few individuals from a handful of additional species have been identified. These data are in accordance with the initial assessment, with the only exception of the greater sandeel, which was not assessed in the initial assessment. However, only 2 individuals and only in one year (2018) were identified in BIOR's samplings. The assessment team was provided with the 2021 data during the site visit of this re-assessment and the following table was updated accordingly.

Table 7.3.2 Catch composition from a total of 136 samplings on board fishing vessels targeting sprat in ICES SD 26, 28.2 between 2013 and 2021. Source: BIOR.

Year	**No samplings**	**Total Catch** (kg)	**Sprat** (%)	**Herring** (%)	**Cod** (N ind)	**Flounder** (N Ind)	**Eelpout** (N ind)	**Smelt** (N ind)	**Lumpfish** (N ind)	**Lamprey** (N ind)	**Great sandeel** (N ind)
2013-2015	82	648,550	88,81%	11,19%	-	-	-	-	2	2	-
2016	15	110,400	90,66%	9,34%	18	32	-	-	-	-	-
2017	19	217,200	53,57%	46,43%	6	5	-	2	-	-	-
2018	12	102,750	86,79%	13,21%	3	6	3	-	-	-	2
2019	7	100,235	80,75%	19,25%	4	19	-	-	-	-	-
2020	1	15,000	77%	23%	-	-	-	-	-	-	-
2021	1	3,070	3%	97%	1	-	-	-	-	-	-

The number of biological samples in 2020 and 2021 is lower than in previous years, they only come from one trip. The low activity in these two years is because of the COVID-19 pandemic. Data provided by BIOR for 2021, differed quite a lot in the catch percentages of sprat and herring. BIOR confirmed during the site visit that the data obtained on board fishing vessels comes from an observer program that covers the Latvian pelagic fleet in general, therefore there can be cases when herring dominates in the catches over sprat.

7.3.3.2 Sources of information

According to the different sources of information presented above, the assessment team elaborated the most complete list of all species susceptible to interact with the UoC, and they were classified into primary (main/minor), secondary (main/minor) and ETP species according to MSC requirements.

The difference between 'Primary' and 'Secondary' species lies on whether management is based on biological reference points (primary) or not (secondary). Since the eastern Baltic cod and the Baltic herring are the only stocks listed in **Table 7.3.3** with reference point-based management, these are the only species caught by the UoA to be assigned as 'Primary'.

Table 7.3.3. List of all P2 species with recorded interactions with the assessed fleet classified according to MSC Fisheries Standard SA3.1.3-3.1.5 and SA3.4.4.-3.4.5. Sources of information (see **section 7.3.3.1** used to select each of the species is presented. Data deficient column was assessed against FCP7.7.6.

Stock	Scientific name	P2 component	P2 subcomp	ETP regulation	Sources of information	Data deficient
Teleosts						
Herring	*Clupea harengus*	Primary	Main	N/A	(a) & (b)	N
Eastern Baltic Cod Stock	*Gadus morhua*	Primary	Minor	N/A	(a) & (b)	N
Flounder 26, 28 (Eastern Gotland and Gulf of Gdansk)	*Platichthys flesus*	Secondary	Minor	N/A	(a) & (b)	Yes
Smelt	*Osmerus eperlanus*	Secondary	Minor	N/A	(a) & (b)	Yes
Fourhorn sculpin	*Myoxocephalus quadricornis*	Secondary	Minor	N/A	(a)	Yes
Eelpout	*Zoarces viviparus*	Secondary	Minor	N/A	(a) & (b)	Yes
Great Sandeel	*Hyperoplus lanceolatus*	Secondary	Minor	N/A	(b)	Yes
Lumpfish/Lumpsucker	*Cyclopterus lumpus*	Secondary	Minor	N/A	(b)	Yes
Sea lamprey	*Petromyzon marinus*	ETP	N/A	Habitats Directive Annex II	(b)	NO
Marine mammals						
No recorded interactions with the assessed fleet or in the Latvian pelagic trawl fleet targeting herring in the Baltic sea						
Seabirds						
No recorded interactions with the assessed fleet or in the Latvian pelagic trawl fleet targeting herring in the Baltic sea						

Baltic herring catches annual contribution to the total UoA catches is above 5% in all the years assessed for both the client and BIOR data. Therefore, the Baltic herring stock is assessed as a ´Main Primary' species (MSC Fisheries Standard v2.01 SA3.4.2).

Cod catches by the assessed fleet are very rare and limited (maximum percentage of 2.9% of cod of the total catch was reported in 2016 by a single client and a maximum of 18 individuals reported in 2016 by BIOR). Since its annual contribution to the total UoA catches is below 5% for at least the last 6 years this stock was assessed as a 'Minor Primary' species (MSC Fisheries Standard v2.01 SA3.4.5).

All other species except the Sea lamprey (ETP species) are classified as 'Secondary Minor', as they are all managed without reference points. In all cases their specific catch share represents less than 5% in volume of the total catch. The only species in the list that fall under the MSC definition for ETP species (MSC Fisheries Standard v2.01 SA3.1.5) is the Sea lamprey, as this species is listed in Annex II of the Habitats Directive (Council Directive 92/43/EEC).

There are no records of interactions between the Latvian pelagic trawl fishery targeting sprat in the Baltic Sea and marine mammals or seabirds. BIOR has an observer program in place for meeting requirements established in Council Regulation (EC) No 812/2004 of 26.4.2004 which includes the sprat pelagic trawling fishery in the Baltic Sea. These observers have the mandate to record and report interactions with cetaceans and seabirds. See **section 7.3.3.5** for more details on the ETP species.

Classification of species included in the UoA catch composition has not been modified for this reassessment as the data obtained from the different sources of information is similar to the one received during the previous years assessed.

7.3.3.3 Primary species

A comprehensive list of species with recorded interactions with the assessed fleet is presented in **Table 7.3.3**. Two primary species were identified, i.e., the Central Baltic herring and the cod.

Central Baltic herring catches annual contribution to the total UoA catches is above 5% in all the years assessed from both the client and BIOR data. Therefore, the Baltic herring stock is assessed as the only ´Main Primary' species. Cod annual contribution to the total UoA catches is below 5% for at least the last 6 years, therefore, this stock is classified as a 'Minor Primary' species (MSC Fisheries Standard v2.01 SA3.4.2-SA3.4.5).

Herring (Clupea harengus) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea) (ICES, 2021d)

A recent interbenchmark assessment (ICES, 2020b) introduced updated natural mortalities for 1974–2018, which led to a downward revision of SSB and an upward revision of fishing mortality compared to previous assessments. Furthermore, the strength of the 2019-year class was downgraded at the 2021 assessment. The biomass reference points were lowered by about 25%. FMSY and the corresponding range were practically unchanged, while Flim and Fpa increased slightly. The reference points that are currently accepted are given in **Table 7.3.4**.

ICES (2021d) concludes that fishing pressure on the stock is above FMSY and between Fpa and Flim and that spawning-stock size is below MSY Btrigger and between Bpa and Blim.

The Central herring stock is assessed as a primary main by-catch, (by-catch > 5%). Furthermore, Central Baltic herring is classified as a Key LTL stock and this lifts the lower biomass level from Blim (330,000 t) to Blim + (Bpa - Blim)/3 = 375,000 t (calculated as 373,333 t). Bpa is set at 460,000 t. The SSB estimate for 2021 is found as 365,448.

Table 7.3.4 Reference points for Central Baltic Herring. Source: ICES, 2021d.

Reference points

Herring in subdivisions 25–29 and 32, excluding the Gulf of Riga. Reference points, values, and their technical basis. Weights are in tonnes.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	460 000	B_{pa}	ICES (2020)
	F_{MSY}	0.21	Estimated by EqSim	ICES (2020)
Precautionary approach	B_{lim}	330 000	The lowest SSB that has resulted in above-average recruitment, i.e. year 2002 (the SSB in 2002 happens to correspond to B_{loss})	ICES (2020)
	B_{pa}	460 000	$1.4 \times B_{lim}$	ICES (2020)
	F_{lim}	0.59	Estimated by EqSim as the F with 50% probability of SSB being less than B_{lim}	ICES (2020)
	F_{pa}	0.32	F_{P05}. The F that leads to SSB ≥ B_{lim} with 95% probability	ICES (2021a)
Management plan	MAP MSY $B_{trigger}$	460 000	MSY $B_{trigger}$	ICES (2020)
	MAP B_{lim}	330 000	B_{lim}	ICES (2020)
	MAP F_{MSY}	0.21	F_{MSY}	ICES (2020)
	MAP target range F_{lower}–F_{MSY}	0.15–0.21	Consistent with the ranges which result in no more than a 5% reduction in long-term yield compared to MSY	ICES (2020)
	MAP target range F_{MSY}–F_{upper}	0.21–0.26	Consistent with the ranges which result in no more than a 5% reduction in long-term yield compared to MSY	ICES (2020)

Fishing mortality has shown an increasing trend since 2014 and has been above F_{MSY} since 2015. The high recruitment in 2015 was followed by below average or average recruitment and recruitment in 2020 is average (**Figure 7.3.10**). Moreover, the estimate of the large 2014-year class is imprecise. In addition, species misreporting of herring has occurred in the past, and there are indications of sprat being misreported as herring. These effects have not been quantified; however, they may affect the quality of the assessment (ICES, 2021d).

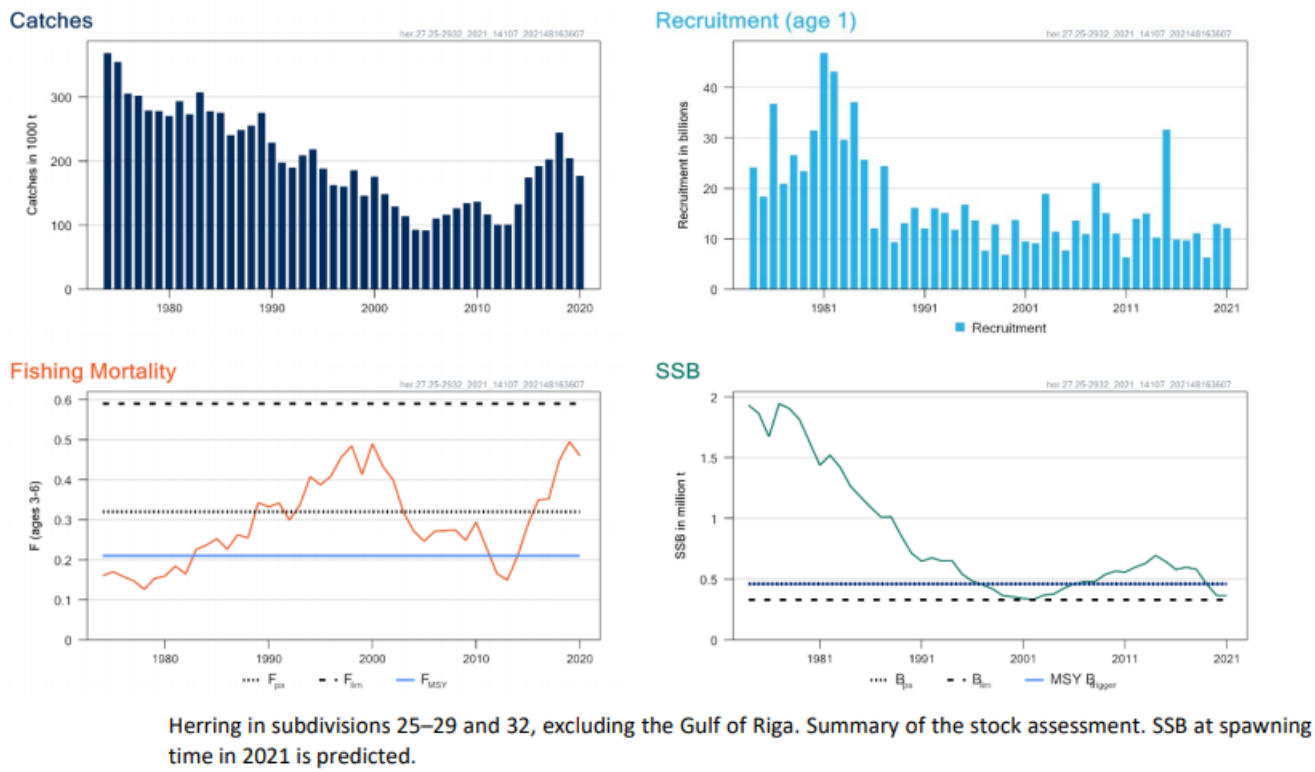


Figure 7.3.10 Herring in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). Above: Summary of the stock assessment (SSB at spawning time in 2020 is predicted). Below: State of the stock and the fishery relative to reference points. Source: ICES, 2021d.

The management of the Central Baltic herring stock is based on an EU multiannual plan (MAP) for stocks in the Baltic Sea (Regulation 2016/1139, Regulation 2019/472). This Plan provides measures, primarily TAC adjustments, that are expected to ensure that the UoA does not hinder recovery and rebuilding.

Management has reacted based on the ICES (2021d) assessment and has reduced TACs for 2021 consistent with the advice (**Table 7.3.4**). This reduction applies to all herring fisheries in the Central Baltic not only the MSC certified fisheries. So, it is ensured that the fisheries collectively do not hinder recovery and rebuilding.

Table 7.3.4. Summary of ICES advice for Central Baltic Herring, Total TAC (EU+Russia) and Total catch. Source: ICES, 2021d.

Year	ICES Advice summary	TAC (EU+Russia) (t)	Total catch (t)
2018	MAP target F ranges: Flower to Fupper (0.16–0.28), but F higher than FMSY = 0.22 only under conditions specified in MAP **200236–331510**, but catch higher than 267745 only under conditions specified in MAP	258,855	244,365
2019	MAP target F ranges: Flower to Fupper (0.16–0.28), but F higher than FMSY = 0.22 only under conditions specified in MAP **115591–192787**, but catch higher than 155333 only under conditions specified in MAP	200,260	204,438
2020	MAP target F ranges: Flower to Fupper (0.16–0.28), but F higher than FMSY = 0.22 only under conditions specified in MAP **130546–214553**, but catch higher than 173975 only under conditions specified in MAP	182,484	177,079

2021	MAP 111852 (range **83971– 138183**)	126,051	
2022	MAP	53,653 (EU) + Russia	

*Eastern Baltic Sea Cod (*Gadus morhua*) stock status.*

The assessment strategy for the eastern Baltic Sea cod was changed since the initial assessment of the fishery and ICES (2018c) presented a SPiCT assessment and advice based on this assessment. This involved reference points which were not available previously (ICES, 2016). Hence, cod was reassessed as a primary minor by-catch during the 2nd Surveillance audit of the first certification cycle. The assessment presented in 2021, ICES (2021e) is based on Age–length based analytical assessment with Stock Synthesis model (ICES, 2021a).

The Eastern Baltic cod stock is biologically distinct from the adjacent Western Baltic (subdivisions 22–24) stock although there is mixing of the two stocks in SD 24 that is taken into account in the ICES assessment (ICES, 2021e). However, this does not affect the Latvian sprat fishery where the fishery is restricted to ICES 25 and areas further east.

The results of the 2021 ICES assessment and advice on the Eastern Baltic Sea Cod (ICES, 2021e) are shown in **Figure 7.3.11**.

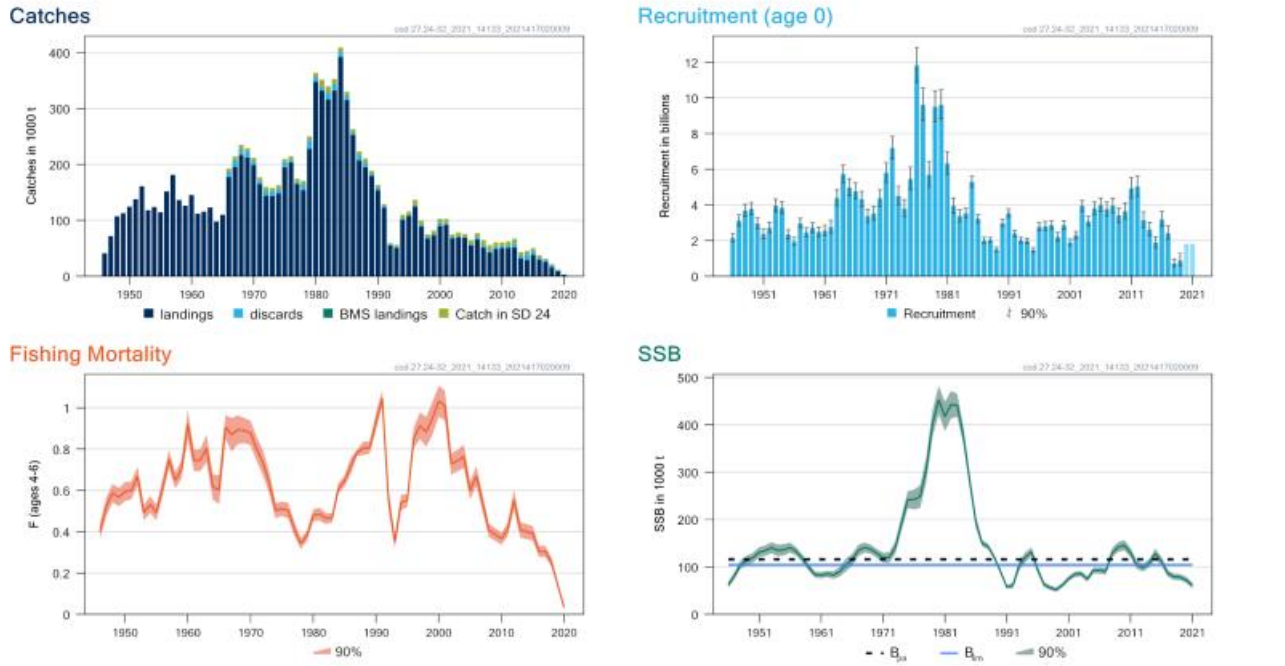


Figure 7.3.11 Cod in subdivisions 24–32 eastern Baltic stock. Above: Summary of the stock assessment. R, F, and SSB (spawning stock biomass at the spawning time) have confidence intervals (90%) in the plot. Assumed R values are unshaded. The EU landing obligation entered into force in 2015; therefore, landings since 2015 include fish above and below the minimum conservation reference size (MCRS). Below: State of the stock and fishery relative to reference points. Source: ICES, 2021e.

Since the 1990s, the SSB has fluctuated, but has been declining since 2015 and is estimated to be below B_{lim} in the last 3 years. Fishing mortality (F) has declined since 2012 and the value estimated for 2020 is the lowest recorded. Recruitment (R) has been declining since 2012, and the recruitment in 2017 is estimated to be the lowest in the time series.

B_{lim} and B_{pa} are defined as biomass reference points, MSY $B_{trigger}$ and B_{MSY} are not defined. The spawning stock size being below B_{lim} and B_{pa}. Fishing pressure reference points are not defined, and neither is the stock status relative to these, see **Table 7.3.5.**

Table 7.3.5. Eastern Baltic Stock. Stock status in relation to biomass reference points. Source: ICES, 2021e.

SSB 2021	60 366 t	Age–length based analytical assessment with Stock Synthesis model (ICES, 2021b)
B_{lim}	104 402 t	SSB in 2012 which produced the last strong year-class, in the recent period of low productivity
B_{pa}	116 061 t	Blim × exp (1.645 × σ), where σ = 0.07

The poor status of the Eastern Baltic cod is largely driven by biological changes in the stock during the last decades. Growth, condition (weight at length), and size at maturation have substantially declined. These developments indicate that the stock is stressed and with reduced reproductive potential. Natural mortality has increased and is estimated to be considerably higher than the fishing mortality in recent years. Population size structure has continuously deteriorated during the last years as the size of the largest fish in the population has shown a decline since 1990.

Due to the large decline in size at maturation, the development of the exploitable stock size is not consistently represented by SSB, especially in recent years. This implies that the SSB now includes small cod that were not part of SSB in earlier years. The biomass of commercial sized cod (≥ 35 cm) is currently at the lowest level observed since the 1950s.

The low growth, poor condition, and high natural mortality of cod are related to changes in the ecosystem, which include the following:

i) Poor oxygen conditions that can affect cod directly by altering metabolism and indirectly from a shortage of benthic prey, while also affecting the survival of offspring,
ii) Low availability of fish prey in the main distribution area of cod. This is because sprat and herring are more northerly distributed in recent years and are overlapping less with the distribution of the cod stock,
iii) High levels of parasite infestations; this is related to an increased abundance of grey seals.

These drivers are interrelated, and the relative effects on the cod stock are unclear.

The management of the Eastern Baltic Cod stock is based on an EU multiannual plan (MAP) for stocks in the Baltic Sea (Regulation 2016/1139, Regulation 2019/472). However, as noted above, F_{MSY} ranges are not available for the eastern Baltic cod stock. In fact, the concept of F_{MSY} assuming long-term equilibrium is not considered appropriate for this stock presently, due to a large decline in productivity in later years (ICES, 2019f). 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 (ICES, 2021e).

7.3.3.4 Secondary species

A comprehensive list of species with recorded interactions with the assessed fleet is presented in **Table 7.3.3**. A total of 6 secondary species were identified. According to their contribution to the UoA catches and the BIOR samplings they were all assigned as minor subcomponents:

- Minor secondary species: Flounder, smelt, four horn sculpin, eelpout, great sandeel and lumpfish.

The ICES Baltic Fisheries Assessment Working Group (WGBFAS) assesses and provides separate advice for 4 different flounder stocks in the Baltic:

- Flounder in SD 22-23
- Flounder in 24-25
- Flounder in 26, 28 (Eastern Gotland and Gulf of Gdansk)
- Flounder 27, 29-32 (Northern flounder)

The UoA fishing area overlaps with three of the four stocks (those in the Western Baltic, 25-32). However, its impact is negligible; flounder catches by the UoA are estimated in 69 individuals during the 8 years assessed by BIOR (see **Table 7.3.2**). This is the only species with a defined stock. Flounder is regulated locally but there are no reference points involved with setting these TACs.

There are general by-catch limitations on the other species but not species-specific regulation.

7.3.3.5 ETPs impacted by the UoA

According to MSC requirements (SA 3.1.5), the team shall assign ETP species as follows:

a. Species that are recognized by national ETP legislation.
b. Species listed in binding international agreements given below:
    - Appendix 1 of the Convention on International Trade in Endangered Species (CITES), unless it can be shown that the particular stock of the CITES listed species impacted by the UoA under assessment is not endangered.
    - Binding agreements concluded under the Convention on Migratory Species (CMS), such as the Agreement on the Conservation of small cetaceans of the Baltic and North Sea (ASCOBANS).
c. Species classified as 'out-of scope' (amphibians, reptiles, birds and mammals) that are listed in the IUCN Redlist as vulnerable (VU), endangered (EN) or critically endangered (CE).

The main Latvian national legislation concerning the protection of biodiversity, including marine biodiversity, are the Law on Specially Protected Nature Territories and the Law on Species and Habitats Conservation. Both laws cover a wide range of regulations and include lists of protected species and habitats, the establishment of marine protected areas as well as general and specific rules on the protection and use of protected areas.

European Union nature protection legislation includes two directives: The Birds Directive (Council Directive 2009/147/EC on the conservation of wild birds) and the Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). These directives are based on the Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats), a binding international legal instrument on the conservation of species and habitats for the EU Member States. These two directives are the basis of the creation of the Natura 2000 network of protected areas, but in addition their annexes include lists of species of special concern that require special conservation efforts.

Apart from the global (worldwide) IUCN Red List, the IUCN provides a regional assessment at a European level. The European Red List identifies those species that are threatened with extinction at the European level so that appropriate conservation action can be taken to improve their status. The IUCN listings apply only to birds and mammals in the context of the MSC assessment.

In addition, the HELCOM Red List of Baltic Sea species in danger of becoming extinct (HELCOM, 2013d) is the first threat assessment for Baltic Sea species that covers all marine mammals, fish, birds, macrophytes (aquatic plants), and benthic invertebrates, and follows the Red List criteria of the IUCN. Specifically, there is a Red List of Fish and Lamprey species (including the sea lamprey *Petromyzon marinus*). HELCOM (Baltic Marine Environment Protection Commission - Helsinki Commission) is the governing body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, known as the Helsinki Convention. Latvia is one of its Contracting Parties and as such it has to implement through its national legislation the Recommendations made by HELCOM.

As seen under **Section 7.3.3.1**, different sources of information are being analysed in order to elaborate a complete list of species for which interactions with the UoA have been recorded. The list of species is presented in **Table 7.3.2,** and it only includes 1 ETP species, the sea lamprey. Based on the MSC criteria for ETP species qualification in assessments, potential ETP fish species to consider in the context of the Latvian sprat fishery are Atlantic salmon, twaite shad and sea lamprey. Furthermore, interactions with harbour porpoise, harbour and grey seals and seabirds are also evaluated.

A list of all other ETPs (including seabirds, marine mammals and fish species) that potentially may interact with the Latvian pelagic trawl fishery targeting sprat is shown in **Table 7.3.6.**

Table 7.3.6. ETP species that might interact with the assessed fleet (although no interactions with the fishery have been recorded). Description of: (a) Habitats Directive: Annex II- Animal and plant species of community interest whose conservation requires the designation of special areas of conservation, Annex IV- Animal and plant species of community interest in need of strict protection, Annex V- Animal and plant species of community interest whose taking in the wild and exploitation may be subject to management measures; (b) Birds Directive: Annex I- Bird species in danger of extinction, rare, vulnerable to specific changes in their habitat or requiring particular attention for reasons of the specific nature of their habitat, Annex II- Bird species which may be hunted under certain circumstances, Annex III- Bird species which may be traded. The Red List categories are: LC- Least Concern; VU- Vulnerable; CR- Critically Endangered.

Name	Scientific name	Habitats Directive	Birds Directive	IUCN European Red List	HELCOM Red List
Fish and lamprey species					
Altantic Salmon	*Salmo salar*	Annex II*	-	LC	NA
Twaite shad	*Alosa fallax*	Annex II, V	-	LC	NA
Marine Mammals					
Harbour porpoise	*Phocoena phocoena*	Annex II, IV	-	CR	Baltic subpopulation (CR)
Grey seal	*Halichoerus grypus*	Annex II, V		LC	LC
Ringed seal	*Pusa hispida botnica*	Annex II, V		LC	VU
Birds					
Red-throated diver	*Gavia stellata*	-	Annex I	LC	Wintering (CR)
Black-throated diver	*Gavia arctica*	-	Annex I	VU	Wintering (CR)
Common shelduck	*Tadorna tadorna*	-	Article 1	LC	(LC)
Common merganser	*Mergus merganser*	-	Annex II	LC	Wintering (VU)
Long-tailed duck	*Clangula hyemalis*	-	Annex II	VU	Wintering (EN)
Velvet scoter	*Melanitta fusca*	-	Annex II	VU	Breeding (VU); wintering (EN)
Little gull	*Larus minutus*	-	Annex I	NT	Wintering (NT)
Great Cormorant	*Phalacrocorax carbo*	-	Article 1	LC	(LC)

*** Only fresh- water populations are protected.**

The two fish species (i.e, the Atlantic salmon and the Twaite shad) potentially interacting with the UoA are classified as Least Concern (LC) by the EU-IUCN list and therefore, not meeting the MSC criteria for ETP species.

Grey seals are known to be abundant in the Baltic Sea and are classified as Least Concern (LC) both by the EU-IUCN Red list and the HELCOM list. Nevertheless, as the grey seal is included in the Habitat Directive (which can be considered a “national” legislation), the species meets the MSC criteria for ETP species. Regarding the ringed seals, they are classified as Vulnerable (VU) by the HELCOM list, but as LC by the EU-IUCN Red list. Ringed seals meet the MSC criteria for ETP species because they are also included in the Habitats Directive. Even though both species are considered ETPs, there are no recorded interactions between these species and the pelagic trawl fishery in the Baltic Sea, and the distribution of both species makes it unlikely that they are impacted by the sprat fishery. Therefore, no seals were considered as scoring elements for this fishery. However, general information on these species and conservation management for seals is provided below in the marine mammal’s section.

Even though the harbour porpoise does not occur regularly, and no interactions with the pelagic trawl fishery in the assessed fishery have been recorded, it has been included as a **scoring element** in the assessment due to its high

vulnerability, i.e., the Baltic Sea subpopulation is classified as Critically Endangered (CR) both by the IUCN list and the HELCOM list. Moreover, BIOR observers are being deployed in vessels inside and outside the GoR with the objective of recording interactions with harbour porpoises. For further details on the harbour porpoise, see below on marine mammals' section.

Finally, a list of protected seabirds (based on Bojārs, 2009) is also presented in **Table 7.3.6**. No interactions between the assessed fleet were reported by the BIOR observers. Therefore, no seabirds were considered as scoring elements for this fishery. However, general information and conservation management on seabirds is provided below in this section. In addition, the potential impact of the UoA on seabirds is also assessed.

Fish species

Sea lamprey

The sea lamprey is an anadromous long-distance migrating species. Adults enter freshwater habitats in late winter or spring and migrate upstream to their spawning sites.

It is distributed throughout the Baltic but is very rare in most basins, in particular in the northern parts **(Figure 7.3.12**). It may have been more common in the past but in the Baltic Proper and the Gulfs it has been very rare at least since the early 1800s. In the ocean, sea lampreys are found from inshore to deep waters, either on rock bottom where they can attach with their sucking disk, or parasitic on their prey.

Figure 7.3.12. Map showing the sub-basins in the HELCOM area where the Sea lamprey is known to occur regularly. Source: HELCOM, 2012.

In the northern Baltic Sea, it is caught irregularly: in Finland, Russia and Latvia the species is not an annual catch, although it is caught almost annually in Estonia. For example, it has been reported only eight times since 1927 in the Russian part of Gulf of Finland (HELCOM, 2013b).

A small population with a suspected continuing decline and less than 1,000 individuals in the largest subpopulation lead HELCOM to classify this species as Vulnerable (HELCOM, 2013b). Besides, this species is also included in Annex II of the European Habitat Directive (Council Directive 92/43/EEC) in order to ensure protection for core areas of its habitat (under the Natura 2000 network). This species is considered rare and highly sensitive to human activities according HELCOM (HELCOM, 2013b). This is the only species found from the samples taken by BIOR on the commercial pelagic trawl fishery in the Baltic Sea that falls under the MSC definition for ETP species (MSC Fisheries Standard v2.01 SA3.1.5).

Seabirds

Europe is home to more than 500 wild bird species. But at least 32 % of the EU's bird species are currently not in a good conservation status. The Birds Directive (Directive 2009/147/EC) aims to protect all of the 500 wild bird species naturally occurring in the European Union. Habitat loss and degradation are the most serious threats to the conservation of wild birds. The Directive therefore places great emphasis on the protection of habitats for endangered and migratory species. It establishes a network of Special Protection Areas (SPAs) including all the most suitable territories for these species. Since 1994, all SPAs are included in the Natura 2000 ecological network, set up under the Habitats Directive 92/43/EEC.

In addition, in 2012 the European Commission adopted a Plan of Action for reducing incidental catches of seabirds in fishing gears. The Action Plan seeks to provide a management framework to minimise seabird bycatch to as low levels as are practically possible. This is in line with the objectives of the reformed Common Fisheries Policy (CFP) of moving towards ecosystem management covering all components of the ecosystem including seabirds. It is also consistent with the framework of an International Plan of Action (IPOA) for Reducing the Incidental Catches of Seabirds in Longline Fisheries adopted in 1999 by the UN Food and Agriculture Organisation (FAO) Committee on Fisheries (COFI).

In the Baltic Sea, in the HELCOM Baltic Sea Action Plan (BSAP) - an ambitious programme to restore the good ecological status of the Baltic marine environment by 2021 -, it has been agreed to increase knowledge on and protection of Baltic marine habitats, communities and species by i.a. the development and implementation of effective monitoring and reporting systems for all by-caught birds and mammals. In addition, the ministers also decided to take action to reduce the negative impacts of fishing activities on the marine ecosystem and to this end, support the development of fisheries management and technical measures to minimize unwanted by-catch of fish, birds and mammals in order to achieve the close to zero target for by-catch rates of the Baltic Sea Action Plan and minimize damage to seabed habitats (Declaration point 15B).

In **Table 7.3.6,** it is shown a number of potential ETP bird species in the assessed area. In HELCOM (2013c), the threats for all endangered seabird species in the Baltic were described and assessed at the species level. The threat of birds being caught as bycatch in the Baltic is strongly linked to the use of gillnets in shallow coastal areas or on shallow offshore grounds, as the fine monofilament nets are nearly invisible to birds and thus they become entangled while diving for food. Several studies from different parts of the Baltic Sea carried out since the early 1980s have shown that set net (gillnet) fisheries cause the death of tens of thousands of birds every year (see HELCOM 2013b and Žydelis et al. 2009 & 2013 for comprehensive reviews). The list of seabirds with high bycatch rates includes several ETP species: the Slavonian grebe (*Podiceps auritus*), the tufted duck (*Aythya fuligula*), the greater scaup, the velvet scoter (*Melanitta fusca*) and the eider (*Somateria mollissima*) are quite often found in gillnet fishing gear. At the southern coast of the Baltic Sea (Germany, Poland, Lithuania and Latvia), the long-tailed duck (*Clangula hyemalis*) is the most numerous species caught in gillnets, followed by the black scoter (*Melanitta nigra*), the velvet scoter (*Melanitta fusca*) and the red-throated diver (*Gavia stellata*). Bycatch appears to be an important problem also for wintering velvet scoters off the Latvian, Lithuanian and Polish coasts. The available studies mainly investigate bird bycatch in near-coastal waters. Information on the bycatch in fishing grounds further offshore is scarce, although it is known that high densities of birds and seasonal high fishing intensity may also overlap in these areas. The total ban of driftnets within the EU in 2008 has probably contributed to reducing bycatch; however, shifting the effort to long-lining in salmon fishing may be having the opposite effect, especially in the southern Baltic Sea (HELCOM, 2013c). In addition, it is unclear (due to insufficient data) whether the bycatch has declined due to a reduction in gillnet fishing effort or to seabird population declines (Žydelis et al., 20013).

There are no records of the UoA vessels (or any other vessel fishing for sprat) interacting with seabirds. In general, available information indicates that there is no concern on trawl fisheries interacting with seabirds in the Baltic Sea. None of the MSC certified fisheries in the Baltic Sea (see **Table 9.8**) considered interactions between bottom or pelagic trawling and seabirds in their assessments.

Marine mammals

a. Harbour porpoise

The harbour porpoise is one of the smallest cetacean species and the only year-round resident whale species in the brackish waters of the Baltic Sea. It inhabits temperate and cold coastal and shelf waters throughout the northern hemisphere. In the 19th and early 20th centuries harbour porpoises were widespread throughout the entire Baltic, as far as the northeast part of the Gulf of Bothnia and the Gulf of Finland. Today, their geographical range has been reduced considerably, and currently porpoises are considered to be virtually absent in the north-eastern Baltic (**Figure 7.3.13**).

Different studies indicate that there are two populations of harbour porpoises in the Baltic Sea area, one in the western Baltic Sea encompassing the Kattegat, the Belt Sea, the Sound and the German Baltic and a second one in the proper Baltic Sea (Evans and Teilmann, 2009; Sveegaard et al., 2015; ICES, 2018a). Recently, an extensive Static Acoustic Monitoring (SAM) approach was used for collecting data on population size and spatial and temporal distribution of harbour porpoises in the Baltic (SAMBAH, 2016). The results found a clear separation of two population clusters during summer (**Figure 7.3.13**).

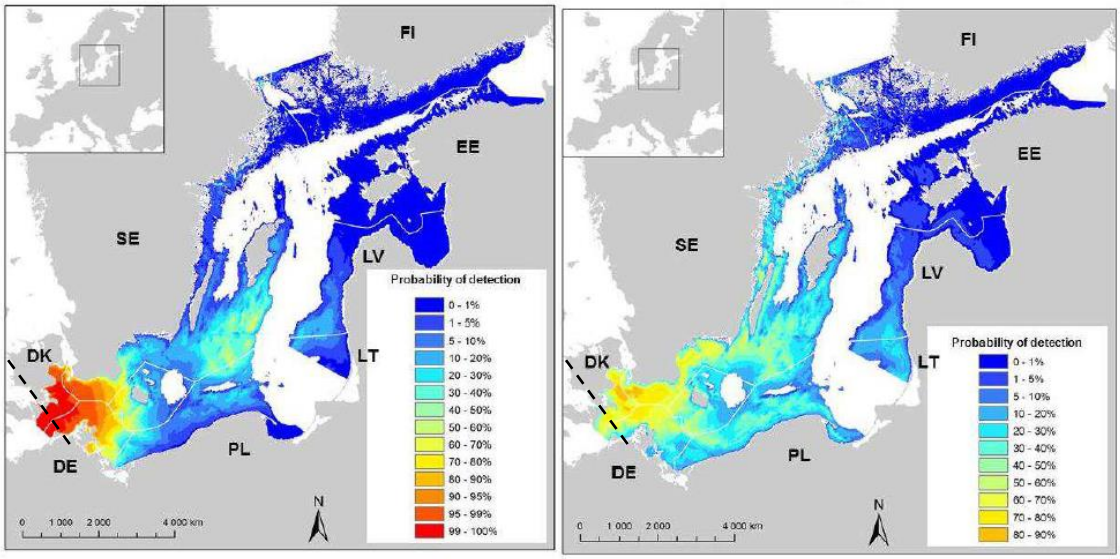


Figure 7.3.13. Porpoise distribution modelled as the probability of detecting click trains for (a) August and (b) February. Dashed line in (a) indicates the proposed delimitation border between the two summer clusters. Source: SAMBAH, 2016.

The harbour porpoise population in the Baltic proper has declined dramatically over the past 100 years and there are indications that this population is facing extinction (classified as Critically Endangered (CR C2a(ii)) under the IUCN Red List 2008). The number of mature individuals is estimated to be less than 250 and a continuing decline of at least 25% within one generation is assumed (HELCOM, 2013d). The most recent information on abundance of harbour porpoises in the Western Baltic showed a reduction from 28,000 in 1994 to 11,000 individuals in 2005 (this subpopulation is classified as Vulnerable by IUCN and HELCOM). IUCN and HELCOM classifications, however, are based on very uncertain abundance estimates. Results from the most recent acoustic monitoring carried out within the SAMBH project

estimated a population of 497 animals (95% CI 80-1,091) in the Baltic proper, and more than 21,390 porpoises (95% CI 13,461-38,024) in the Western Baltic.

In 2015, the ICES WGMME was asked to compile a matrix of threats (**Figure 7.3.14**) to the predominant marine mammal species in each of the MSFD regional seas (ICES, 2015). Regarding porpoises, they are threatened by a variety of anthropogenic activities and impacts (**Figure 7.3.14**) (ICES, 2019d). Among these, bycatch in fisheries is of greatest concern (Berggren, 1994; Vinther, 1999; Skóra & Kuklik, 2003). Bottom-set gillnets are thought to be responsible for most bycatches, but porpoises are also taken by semi-drifnets (ICES, 2019d) and occasionally in trawls (Berggren, 1994). Murphy et al. (2010) found indications for a link between higher organochlorine concentrations and lower pregnancy rates in harbour porpoises. Porpoises in the Baltic Sea have been reported to have up to 254% higher mean levels of PCBs than samples from Kattegat and Skagerrak (Berggren et al., 1999; Bruhn et al., 1999). In later years, levels of PCBs in Baltic biota have declined, so the negative impacts of pollution may be reduced in the future.

Baltic Sea			HARBOUR PORPOISE	GREY SEAL	HARBOUR SEAL	RINGED SEAL
POLLUTION & OTHER CHEMICAL CHANGES	Contaminants		H	H	H	H
	Nutrient enrichment		L	L	L	L
	Microplastics		Risk of contamination leading to ill health or death possible, but no evidence of to date			
PHYSICAL LOSS	Habitat loss		L	M	L	H
PHYSICAL DAMAGE	Habitat degradation		M	M	M	H
OTHER PHYSICAL PRESSURES	Litter (including plastics and discarded fishing gear)		L	L	L	L
	Underwater noise	Military Sonar	H	L	L	L
		Seismic surveys	H	L	L	L
		Pile-driving	M	L	L	L
		Explosions	H	L	L	L
		Shipping	M	L	L	L
	Barrier to species movement (offshore windfarm, wave or tidal device arrays)		L	L	L	L
	Death or injury by collision	Death or injury by collision (with ships)	L	L	L	L
		Death or injury by collision (with tidal devices)	Tidal devices do not exist in the region			
BIOLOGICAL PRESSURES	Introduction of microbial pathogens		L	L	L	L
	Removal of target and non-target species (prey depletion)		M	M	M	M
	Removal of non-target species (marine mammal bycatch)		H	M	M	H
	Disturbance (e.g. wildlife watching)		L	L	L	L
	Deliberate killing + hunting		Does not take place within the region	M	M	M

Figure 7.3.14. Threat matrix for the Baltic Sea. Source: ICES, 2019d.

Other threats in the Baltic Marine Area include habitat degradation, acoustic disturbances and prey depletion due to over-fishing (**Figure 7.3.14**). For example, the collapse of herring stocks in the North Sea during the 1960s has been implicated in declines of harbour porpoise in the region, whilst during the 1990s, observed declines in porpoises in the Shetland Islands were linked to reduction in local sandeel stocks (ICES, 2019d and references therein). Harbour porpoise is likely to be particularly vulnerable to prey depletion due to its high energetic requirements (Read and Hohn, 1995; Wisniewska et al., 2016).

In the EU marine area, harbour porpoises are under strict protection, because they are not only listed in Annex II, but also in Annex IV of the EU Habitats Directive. Article 12 of the Habitats Directive establishes that Member States shall establish a system to monitor the incidental capture and killing of the animal species listed on Annex IV. To comply with the provision of Article 12, the EC adopted Regulation 812/2004. This Regulation obliges the use of deterrents (ex. pingers) in specific fisheries to avoid contact with cetaceans (mainly gillnets) and also requires monitoring by observers of incidental catches in specific gears. The species is also part of the ASCOBANS, which has specifically focused on the recovery of the proper Baltic Sea population with the enactment of a recovery plan for Baltic Sea, the so called Jastarnia Plan (ASCOBANS, 2016), and the conservation plans for the Western Baltic, the Belt Sea and Kattegat (ASCOBANS, 2012) and for the North Sea (ASCOBANS, 2009). They list recommendations and mitigation actions concerning threats to the species and its habitats and state the need for monitoring population trends. ASCOBANS (2012), for example, has advised that, to be sustainable, the maximum annual anthropogenic induced mortality (including bycatch) for harbour porpoises should not exceed 1.7% of the population size (Resolution No. 3, Incidental Take of Small Cetaceans, Bristol 2000), which in the case of the Baltic Proper would mean around 8.5 individuals.

Furthermore, the International Whaling Commission (IWC) stated that the flag of concern should be raised if the number of small cetaceans captured is greater than 1% of their total population size. In addition, the ASCOBANS Recovery Plan (Jastarnia Plan), states that every effort should be made to reduce bycatch towards zero as quickly as possible, noting that gillnet fisheries are considered the primary threat for the survival of the harbour porpoise population primarily inhabiting the Baltic Proper.

The Jastarnia Plan, which has the interim goal of restoring the Baltic harbour porpoise population to at least 80% of the carrying capacity, has been reviewed at the 8th Meeting of the Parties to ASCOBANS in Helsinki between the 30th august and 1st September 2016, and the results were issued as the ASCOBANS Resolution 8.3 (ASCOBANS, 2016) which includes a set of actions to be taken. ASCOBANS invites non-party range States (such as Latvia) to implement this Plan fully without delay. The HELCOM Recommendation 17/2 (adopted in 1996 and revised in 2013) recommends that the Governments of the Contracting Parties to the Convention take action in close cooperation with ASCOBANS and ICES for collection and analysis of additional data on several aspects of the harbour porpoise biology, population and ecology.

Since Regulation (EC) No 812/2004 came into force, Latvia has not observed any incidental catch of cetaceans. This fact leads BIOR to conclude that the cetaceans monitoring has no practical significance and is an unnecessary expenditure of financial and human resources. Every year, BIOR suggests on behalf of Latvia to stop this monitoring program and instead of intensive observations of cetaceans proposes to use information from National fisheries data collection programs or from other available data sources. Latvia suggests reviewing the requirements of the (EC) No 812/2004 and proposes looking for possibilities to replace the monitoring program on incidental catches of cetaceans with information gathering from other available data sources in the areas where there have been no observations of cetaceans for several continuous years.

Data provided by BIOR during the reassessment site visit shows (see **figure 7.3.15**) that during 2021, the harbour porpoise monitoring was done using 13 vessels during a total of 446 fishing days covered. There was no harbor porpoise bycatch observed during that period.

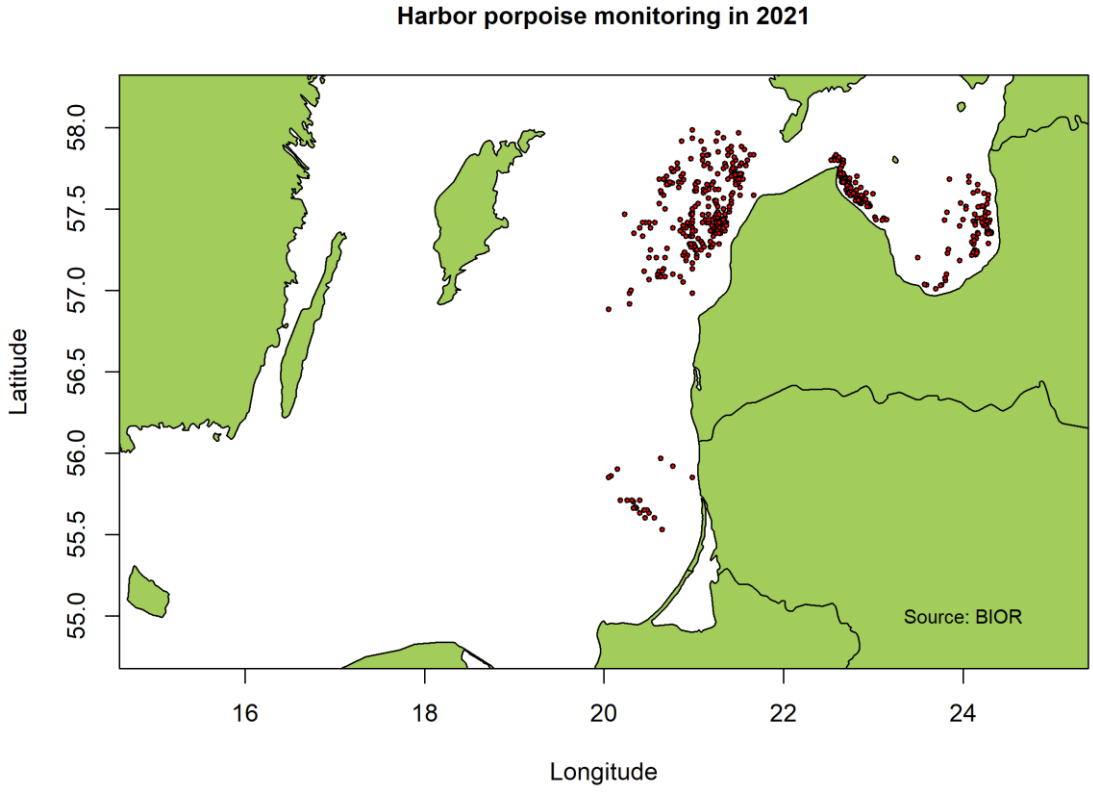


Figure 7.3.15. Harbour porpoise monitoring in 2021, 13 vessels with a total of 446 fishing days. Source: BIOR

ICES (2020j) defined a number of areas where it is recommended to close fisheries with static gears as a conservation measure for harbour porpoise (**Figure 7.3.16**).

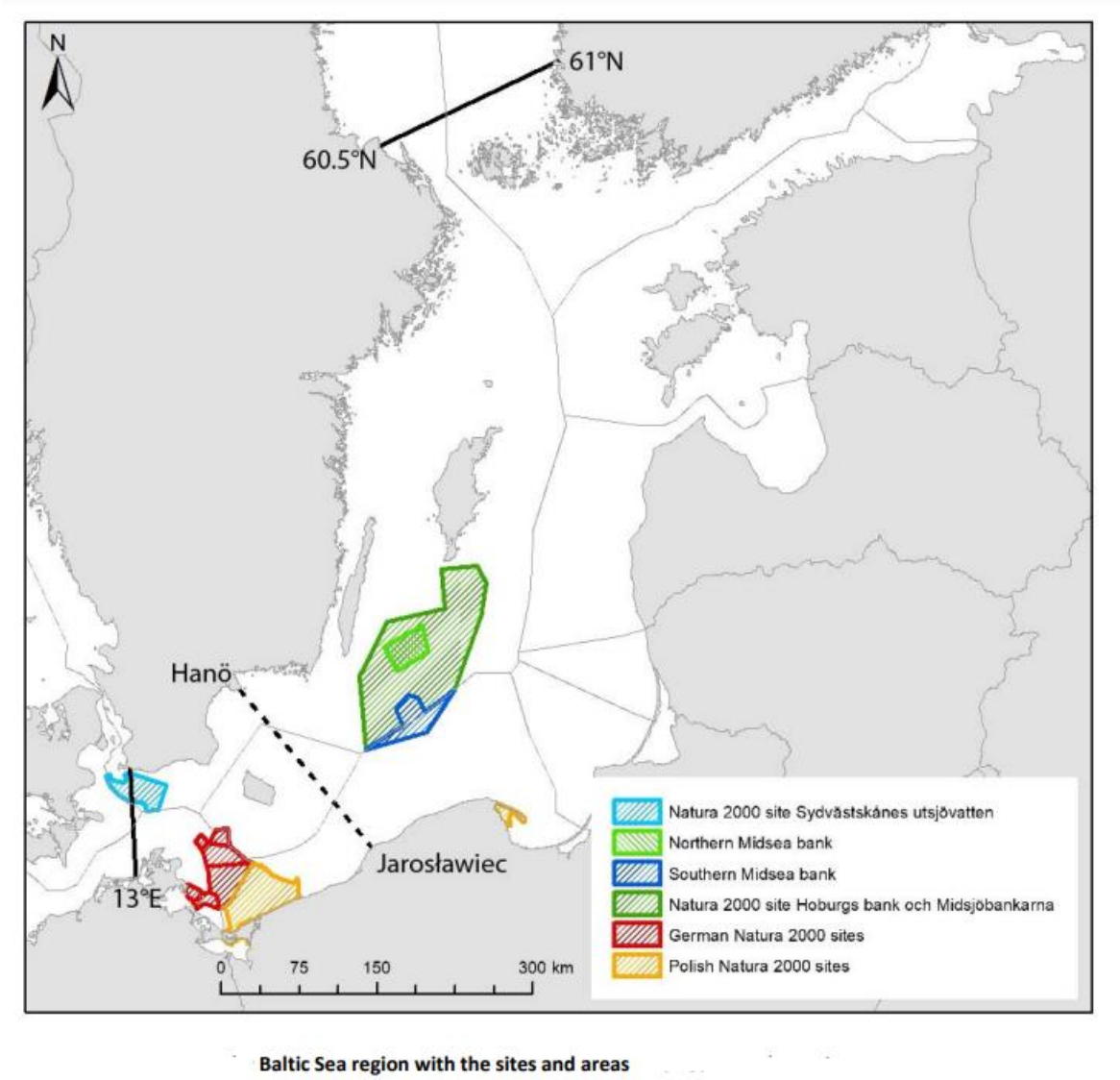


Figure 7.3.16 Sites and areas where ICES (2020j) recommends closing the Northern Midsea Bank for all fishing and a number of other areas for fishing with static gears.

The recommendations are listed below:

i. Close the Northern Midsea Bank **for all fisheries**, with the exception of passive gears proven not to bycatch harbour porpoises. Such gears include for example pots, traps, and longlines. Static nets with pingers or other acoustic devices should not be allowed.
ii. Close the Natura 2000 site Hoburgs bank och Midsjöbankarna (SE0330308) for fishing **with static nets**.
iii. Close the Southern Midsea Bank for fishing **with static nets**.
iv. Close the Natura 2000 sites Adlergrund (DE1251301), Westliche Rönnebank (DE1249301), Pommersche Bucht mit Oderbank (DE1652301), and Greifswalder Boddenrandschwelle und Teile der Pommerschen Bucht (DE1749302) and the site Pommersche Bucht (DE1552401) designated under the Directive 2009/147/EC for fishing with **static nets** during November–April.

v. Close the Natura 2000 sites Ostoja na Zatoce Pomorskiej (PLH990002) and Wolin i Uznam (PLH320019) for fishing **with static nets‡** during November-April. Alternatively prohibit the use of static nets without the simultaneous use of pingers, provided the use of such devices is in line with the conservation objectives of the site.

vi. Obligatory use of pingers on **static nets** in the Zatoka Pucka i Półwysep Helski (PLH220032) Natura 2000 site, area to the west from the sandbank Ryf Mew (Figure 10), and in areas outside the borders of the Natura 2000 site (including outer Puck Bay). Close the Zatoka Pucka i Półwysep Helski (PLH220032) Natura 2000 site, the area east from the sandbank Ryf Mew, for fishing with static nets. Both mitigation measures (pingers and closure) must be implemented simultaneously.

vii. During May–October, the use of **static nets** without the simultaneous use of pingers should be prohibited in the EU waters between the south western management border proposed by Carlén et al. (2018) (a line drawn from island of Hanö, Sweden, to Jarosławiec near Słupsk, Poland) and a line drawn between 60.5°N at the Swedish ICES | WKEMBYC 2020 | 57 coast and 61°N at the Finnish coast, and during November–April, the EU waters between a line drawn along east of longitude 13°E between the Swedish and German coasts and a line drawn between 60.5°N at the Swedish coast and 61°N at the Finnish coast, with the exception of the Natura 2000 sites and other areas where static net fisheries have been closed.

None of these areas overlap with fishing grounds for Latvian sprat fisheries.

However, PI 2.3.1a SG80 requires that the effects on the harbour porpoise are evaluated based on the combined MSC UoAs (including the Polish and Swedish sprat fishery) and for these fisheries the PI 2.3.1a SG80 is not met.

The ICES WGBYC report 2022 (ICES, 2022) provides an overview of monitoring and fishing effort data contained in the WGBYC database for 2019 and 2020. This showed that during 2020, in most geographical areas of relevance, at-sea monitoring effort was significantly affected by the Covid-19 pandemic. For Latvia the program was reduced in 2020 (1 sample) and 2021 (1 sample) (**Table 7.3.2**).

No incidental bycatch of cetaceans was observed in 2020-2021. The target for observer coverage for the Latvian sprat fleet targeting sprat in the Baltic proper is around 9% irrespective of the indicator used (fishing trips, fishing days, N hauls, towing time) allowing the observation of a single harbour porpoise over more than 15 years found in the catches. It is expected that this target will be back to pre-pandemic levels in 2022.

b. Seals

Two species of seals have been identified as ETPs (see **Table 7.3.6**), the grey seal *(Halichoerus grypus*) and the Baltic ringed seal (*Pusa hispida botnica*). However, neither of these species appear in the catches of the Baltic Sprat fishery in ICES 28.2 nor are expected to do so based on the known distribution of the seals.

Grey seal

Grey seals are found on both sides of the North-Atlantic in temperate and sub-Arctic waters. Their abundance is well known, and the Baltic population which is monitored annually has been increasing in the Baltic since the mid-1980s, with the most pronounced growth in the southern and western parts of the moulting distribution. During recent years, however, the growth has shown signs of stabilising, which can be an indication of approaching carrying capacity of the current Baltic Sea environment (ICES, 2019d). In any case, for now, there is no reason to suspect a population decline in the future. This species is, therefore, categorized as Least Concern both by the IUCN and HELCOM, although it is listed in Annexes II and V of the Habitats Directive (HELCOM, 2013d).

Monitoring of the grey seal population in the Baltic Sea (*Halichoerus grypus* ssp*. grypus*) is based on internationally coordinated censuses during the moulting season, covering the entire Baltic moulting distribution of the species. The maximum number (not corrected for individuals in water) counted during 2–3 replicate surveys in each sea area is used for assessing abundance and trends. The grey seal population in the Baltic has been growing throughout the span of the coordinated surveys (starting in 2003). Around 38 000 seals were counted in 2019 and 40 000 in 2020, indicating that the population is still growing (HELCOM EG MAMA). Of the hauled-out population, around 80% were found in the

core moulting area in the central Baltic proper (archipelagos of central Sweden, southwestern Finland and western Estonia) (ICES, 2021g) (**Figure 7.3.17**).

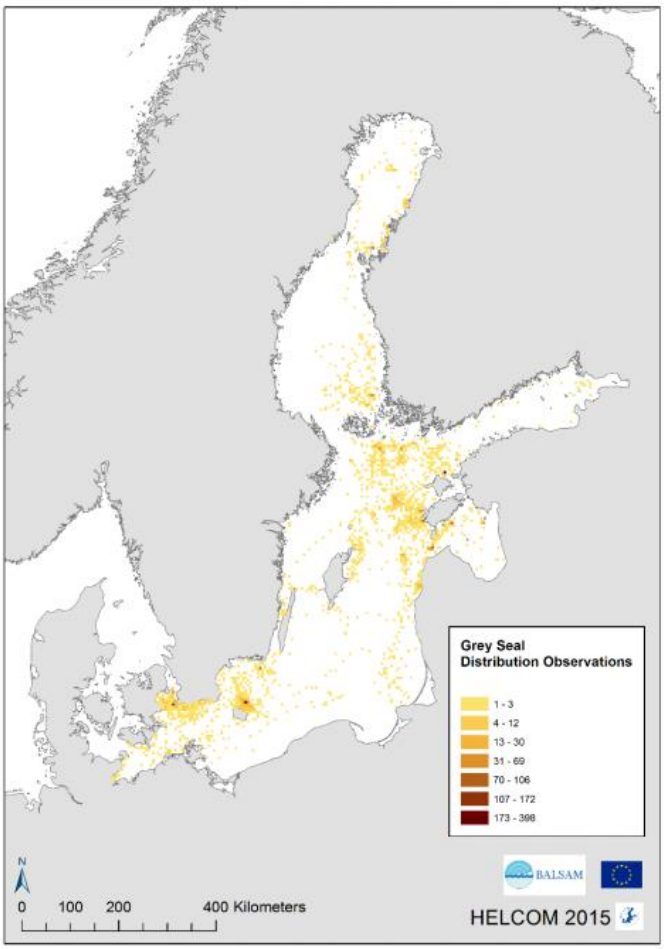


Figure 7.3.17. Grey seal distribution based on reported information. Source: HELCOM, 2015.

As the abundance of the population has increased, its range has expanded to also include the southern Baltic, where grey seals have been breeding regularly, although in small numbers, since 2003 (Galatius et al., 2019).

Outside the breeding and moulting seasons, grey seals travel and forage in other areas too. As the size of the population has increased, its range has expanded to also include the southern Baltic, where grey seals have been breeding regularly, although in small numbers, since 2003 (Galatius et al., 2020). In most of the recent years, pups have also been observed Kattegat. (Galatius et al., 2020). The annual numbers of grey seals observed during moult surveys in different subareas of the Baltic are shown in **Figure 7.3.18.**

Even though grey seals are recovering after a population decline in the late 20th century, they face a changed ecosystem both in terms of human-induced mortality (hunting and by-catch in fishing gear) and in availability of food resources. A study analysing the by-catch of grey seals (*Halichoerus grypus*) in Finland, Sweden, and Estonia (including the northern part of the GoR) in 2012 was conducted. The analysis showed that trap nets make about 88% of the total by-catch, i.e., between 2180 and 2380 individuals (Vanhatalo et al., 2014). An average of only 9–13% of the seal population is outside the aforementioned study area; therefore, it is likely that the by-catch covered in this study represents at least 90% of the total fisheries-induced mortality of grey seals (trawls included) in the Baltic Sea (Vanhatalo et al., 2014).

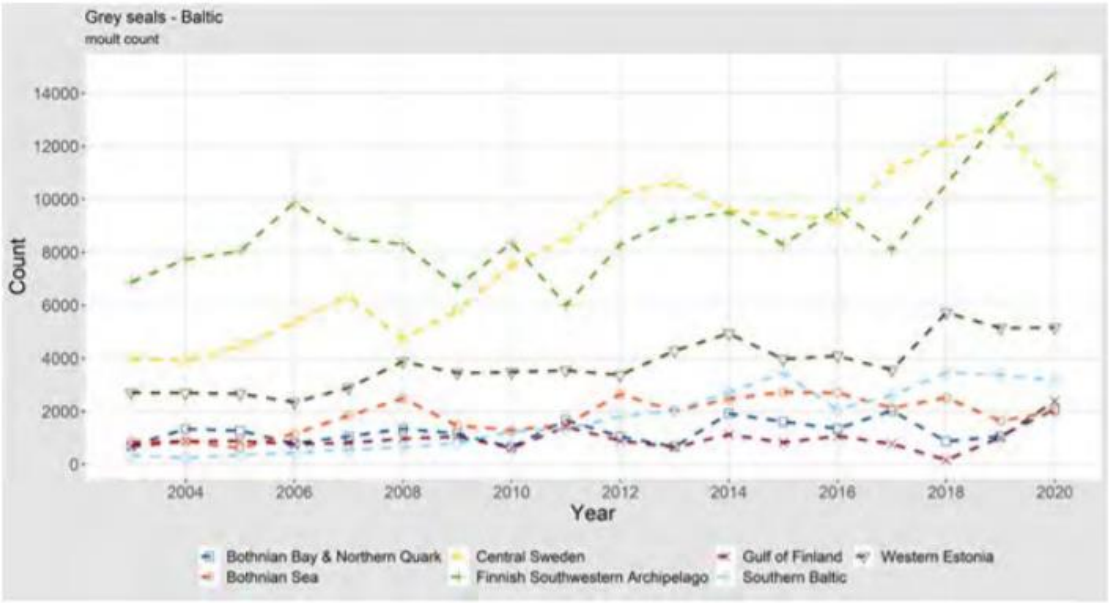


Figure 7.3.18. Trends for results of moult counts of grey seals in subareas of the Baltic Sea. Source: ICES, 2021g.

The grey seal is not recognised by the Latvian legislation as an ETP species, is not listed in CITES or the CMS, and even though it is an "out-of-scope" species, it is not listed as vulnerable, endangered or critically endangered in the IUCN Red list. However, as it is listed as a protected species in Annexes II and V of the EU Habitats Directive (Council Directive 92/43/EEC of 21 May, 1992), this means that a) core areas of their habitat must be protected under the Natura 2000 Network and the sites managed in accordance with the ecological requirements of the species (Annex II), and b) it has to be ensured that their exploitation in the wild is compatible with maintaining them in a favorable conservation status (Annex V) (ICES, 2018a). Therefore, according to SA3.1.5 of the MSC Fisheries Standard v2.01 and considering the Habitats Directive as "national" legislation (see the following interpretation: https://mscportal.force.com/interpret/s/article/Should-species-that-are-listed-under-the-prohibitions-set-out-in-EU-Fisheries-Regulations-be-regarded-as-ETP-species-SA3-1-5-1527262010509), the grey seal is an ETP species.

Numerous countries have invoked protective measures to limit grey seal harvests, culls, disturbance, and by-catch (Bonner, 1981; ICES, 2005). In the Baltic, licenses for hunting have been issued predominantly in Finland and Sweden, but Baltic countries being members of the EU are obliged to ensure that Baltic seals will achieve 'favourable conservation status' and, according to the Habitats Directive criteria, the Baltic grey seal has a favourable conservation status.

The aim of the EU Marine Strategy Framework Directive (MSFD) is to achieve or maintain "good environmental status" (GES) of Europe's marine environment by 2021, although it is not very clear regarding the status of Baltic marine mammals. On the other hand, the HELCOM Seal recommendation (HELCOM, 2006), which has been ratified by all Baltic countries in 2006 states that the long-term objectives of the conservation of marine mammals in the Baltic are: 1) natural distribution; 2) natural abundance; and 3) a health status that ensures the future persistence of marine mammals in the Baltic.

Ringed seal

The ringed seal (*Pusa hispida*) is an arctic species with a separate population and subspecies in the Baltic Sea (*Pusa hispida botnica*). The ringed seal had traditionally been the most numerous seal species in the Baltic Sea, with a population of approximately 200,000 individuals at the beginning of the 20th century. Nowadays, however, it is estimated at about 20,000 individuals. Especially the southern subpopulations in the Gulf of Finland, the Archipelago Sea and the Gulf of Riga are small and vulnerable. The subpopulations of the Gulf of Riga and Finnish Archipelago Sea have been estimated to consist of about 1000 individuals (M. Jüssi, *pers. comm*, 2013, within ICES WGMME, 2018) and 200–300 (Halkka and Tolvanen, 2017), respectively (**Figure 7.3.19**). (ICES, 2018a)

The Baltic ringed seal population decreased from 190,000-220,000 to approximately 5,000 from the beginning of the century to the late 1970s (**Figure 7.3.20**). In the mid-1960s the remaining populations were afflicted by sterility, caused

by organochlorine and heavy metal contaminants, and in the 1970s, only 17% of females were thought to be fertile (Bäcklin et al., 2013; ICES, 2019d). Thus, the decrease in seal numbers was a consequence of excessive hunting, but the low numbers at present are due to lowered fertility rates after 1965 (Harding and Härkönen, 1999).

Although infertility levels in Baltic seals have declined since restrictions came into force on use and release of persistent organic pollutants, fertility rates of ringed seal females are only about 68% in the Bothnian Bay, below the rates found in some Arctic populations (Bäcklin et al., 2013). Therefore, as a result of the population decline during the 20th century, the current ringed seal population is divided into four geographical subpopulations: the Bay of Bothnia (the largest subpopulation), the Archipelago Sea, the Gulf of Riga (the largest of the southern breeding populations) and the Gulf of Finland (**Figure 7.3.19**) (Halkka and Tolvanen, 2017; ICES, 2019d).

Figure 7.3.19. Ringed seals in the Baltic. Source: Halkka and Tolvanen, 2017.

Before the population collapse of the 20th century, the ringed seal was numerous in the southern areas, and had been hunted there since prehistoric times as part of a specialised hunting culture. At present, up to 90 per cent of the Baltic population inhabit the Gulf of Bothnia. The locations of the breeding areas roughly correspond to areas which form relatively good ice cover in normal ice years. However, as Baltic winters have already warmed considerably, poor ice years are now relatively common (Halkka and Tolvanen, 2017). Probably as a result of reduced breeding success caused by reduced extent and duration of sea ice with less snow compared to historically average winters, these subpopulations are threatened with extinction (ICES, 2019d). Baltic ringed seals have been classified as “Vulnerable” under the HELCOM Red List (HELCOM, 2013d) and under a previous IUCN assessment (2009), but as “Least Concern” in the latest IUCN assessment (Härkönen, 2015).

Despite these classifications, the threats of climate warming apply to all southern subpopulations of the Baltic subspecies, which are facing a risk of regional extinction. Depopulation of the southern remains of the historical breeding distribution will lead to a significant loss of the total breeding range of the Baltic ringed seal. Although the species is recovering from the lowered reproductive ability caused by environmental contaminants and the subpopulation in the Bothnian Bay is currently growing (**Figure 7.3.20**), albeit at a low rate, the projected negative trends in suitable breeding

habitat and reproductive success due to climate warming are threatening the whole subspecies in a longer perspective (ICES, 2018a).

As ringed seals are listed as protected species in Annexes II and V of the EU Habitats Directive (Council Directive 92/43/EEC of 21 May, 1992), this means that a) core areas of their habitat must be protected under the Natura 2000 Network and the sites managed in accordance with the ecological requirements of the species (Annex II) and b) it has to be ensured that their exploitation in the wild is compatible with maintaining them in a favorable conservation status (Annex V) (ICES, 2018a).

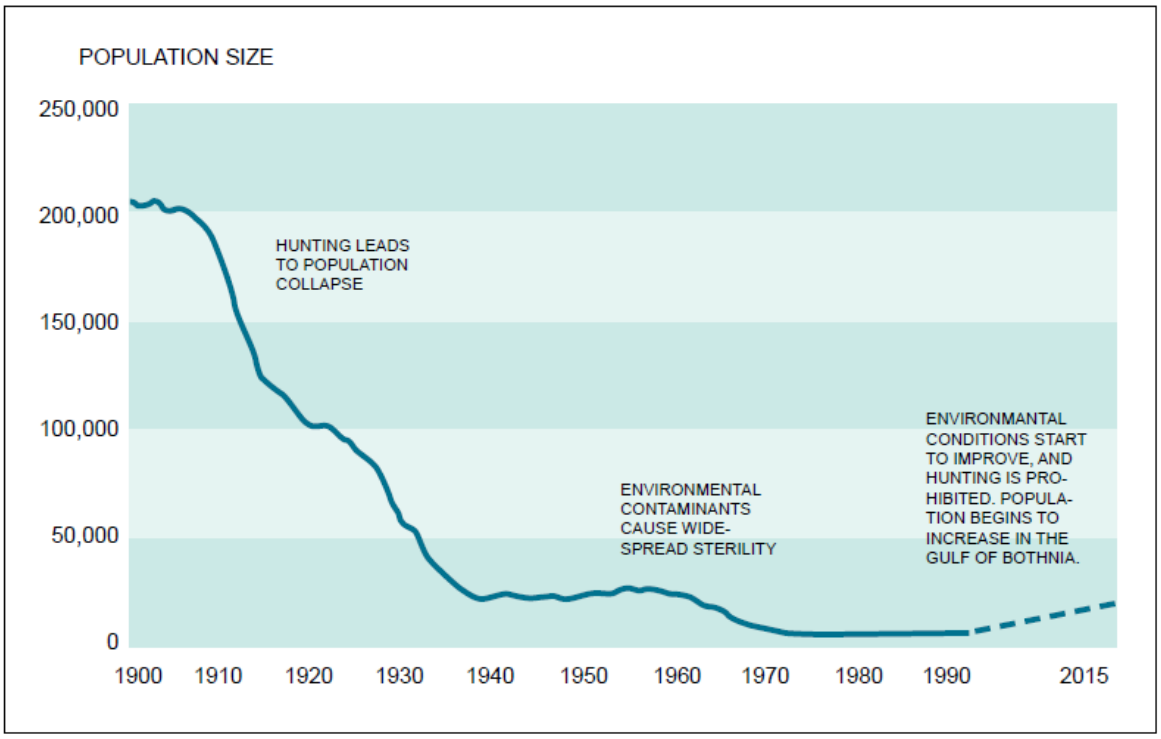


Figure 7.3.20. Population development of the Baltic Ringed seal since the beginning of the 20th century. Adapted after Hårding & Härkönen (1999); recent population estimate from IUCN (Härkönen, 2015). Source: Halkka and Tolvanen, 2017.

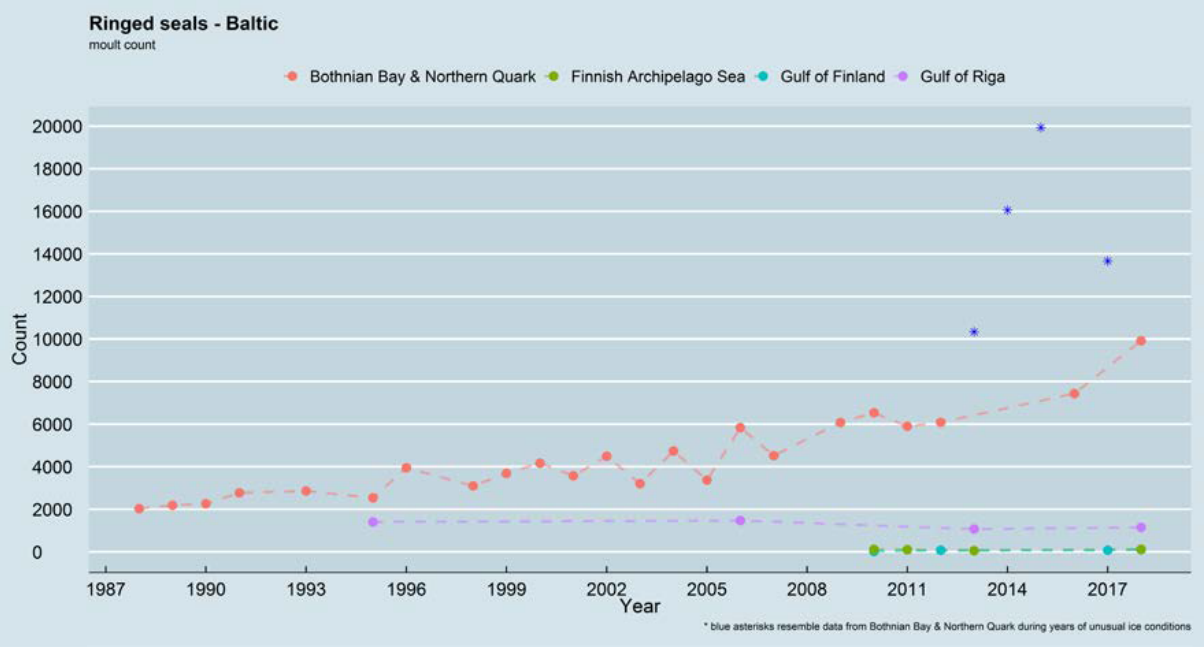


Figure 7.3.21. Trends of estimated numbers of ringed seals hauled out on sea ice during moult surveys in the Baltic. Source: ICES, 2019d.

The number of hauled out individuals during the surveys in largely normal ice-conditions has increased from around 2000 in the first survey years to 9919 in 2018 (**Figure 7.3.21**), corresponding to an annual average population increase of 4.7%. The increase rate has been slightly higher in the latter half of the period (2004–2018: 5.6% per year). Both increase rates are clearly below the intrinsic natural rate in a situation without limiting factors. Anomalous survey results in 2013, 2014, 2015, 2017, 2019 and 2020 are considered to be a result of early ice breakup. These datapoints are excluded from the trend analysis, as they are not comparable to previous data. The phenomenon behind the anomalous results and the role of early ice breakup are not fully understood, and besides their deviation from results from 'normal' ice years, there is a large amount of variation in counts among 'anomalous' ice years. The situation was discussed in the WGMME 2018 report (ICES, 2018).

No direct impacts of human activities on seal sites have been reported in recent years in the regions under review in the North-East Atlantic at OSPAR, i.e., the Artic Waters, the Greater North Sea, Celtic Seas, the Bay of Biscay Iberian Coast and the Wider Atlantic (OSPAR, 2010; 2017). However, regarding the threats for the ringed seal in the Baltic Sea, the species is still thought to be affected by pollutants, although the health status has significantly improved during the last decades (Nyman et al., 2002; Routti, 2009 – within ICES, 2015). As an ice-breeding species, and as mentioned above, in areas such as the Gulf of Riga and Bothnian Bay, it is affected by warmer winters and less ice coverage in recent years as a result of climate warming (Meier *et al*., 2004; ICES, 2005; Sundqvist et al., 2012). Other threats include bycatch, disturbance, and increasing shipping destroying the pack ice habitat (Stenman et al., 2005).

The ringed seal is not recognised by the Latvian legislation as an ETP species, and is not listed in CITES or the CMS, and even though it is an "out-of-scope" species, it is not listed as vulnerable, endangered or critically endangered in the IUCN Red list. However, the ringed seal is considered an ETP species because it is listed as a protected species in Annexes II and V of the EU Habitats Directive (Council Directive 92/43/EEC of 21 May, 1992), which can be considered a "national" legislation (following the MSC interpretation https://mscportal.force.com/interpret/s/article/Should-species-that-are-listed-under-the-prohibitions-set-out-in-EU-Fisheries-Regulations-be-regarded-as-ETP-species-SA3-1-5-1527262010509), and according to SA3.1.5 of the MSC Fisheries Standard v2.01.

Even though Latvia does not have particular protection for the species in its national legislation, nearby countries do (HELCOM, 2013e), such as Estonia – where the species is protected by the Nature Conservation Act; all known important areas for the species are under national protection; and hunting is not allowed -, Finland – where the species is considered a game animal but hunting permits have not been granted since 1988; killing seals to avoid damage (e.g. to fisheries), however, is possible; the maximum annual quota is 30 animals, but only a few animals have been killed yearly -, Germany – where all hunting of seals is forbidden -, Poland - where the species is under strict protection, and disturbing, catching or killing are forbidden; the species is recognized as requiring active protection -, Russia - where

since 1970s hunting on seals in the Russian part of the Baltic Sea is fully prohibited; ringed seal is included in the Red Data Book of the Russian Federation -, Sweden – where the species is protected under the Species Protection Act 4 §, paragraphs 2 and 4, which means that it is forbidden to disturb the species or disturb or damage its habitats; according to the Hunting Act 3§, it is forbidden to capture of kill the species unless it is allowed in other parts of the hunting legislation.

The aim of the EU Marine Strategy Framework Directive (MSFD) is to achieve or maintain “good environmental status” (GES) of Europe’s marine environment by 2021, although it is not very clear regarding the status of Baltic marine mammals. On the other hand, the HELCOM Seal recommendation (HELCOM, 2006), which has been ratified by all Baltic countries in 2006 states that the long-term objectives of the conservation of marine mammals in the Baltic are: 1) natural distribution; 2) natural abundance; and 3) a health status that ensures the future persistence of marine mammals in the Baltic.

7.3.4 Marine habitats

According to MSC requirements (SA 3.13.1), the team shall assess the habitats component in relation to the effects of the UoA on the structure and function of the habitats impacted by the UoA. The habitat’s structure and function (i.e., the ecosystem services that it provides), including abundance and biological diversity, is of concern in an MSC assessment. Thus, an assessment should look not only at the impact on the habitat but also the habitat’s delivery of ecosystem services.

Prior to the assessment of the habitats component, the team shall determine and justify which habitats are commonly encountered, vulnerable marine ecosystems (VMEs), and minor (i.e., all other habitats).

7.3.4.1 Baltic Sea benthic habitats.

The distribution and sensitivity of marine habitats in the Baltic Sea has most recently been evaluated by the Helsinki Commission, HELCOM. The distribution of marine habitats in the Baltic Sea is shown in **Figure 7.3.6**. The fishing gear used in the trawl fishery is designed for use in the water column and is not intended to contact the seabed.

The open water column is the key setting for productivity in the Baltic Sea. Microscopic primary producers support the growth of zooplankton, which all fish species depend upon during at least some part of their life. The status of pelagic habitats is affected by human induced pressures such as eutrophication and hazardous substances, as well as by natural and human-induced changes in climate (HELCOM, 2018a).

The status of the pelagic habitats in the open sea was assessed using the biodiversity core indicator ‘Zooplankton mean size and total stock’ (HELCOM, 2018b), which evaluates the zooplankton community structure. In good status, zooplankton is dominated by large-bodied species. Not all open sea areas could be assessed due to lack of agreed threshold values.

Furthermore, the eutrophication core indicator ‘Chlorophyll-a’ and the pre-core indicator ‘Cyanobacterial bloom index ‘were used in order to represent changes in primary producers (HELCOM, 2018c; 2018d). Chlorophyll-a concentration is used as a proxy of phytoplankton biomass. It increases along with eutrophication as a result of higher nutrient concentrations. The ‘Cyanobacterial bloom index’ evaluates the accumulation of cyanobacteria in the surface water and the biomass of cyanobacteria during summer.

Additionally, indicators representing changes in the species and size structure of phytoplankton are under development in HELCOM and are presented descriptively for testing in a few sub-basins: the ‘Diatom/dinoflagellate index’ (HELCOM, 2018e), which measures the relative abundance of diatoms and dinoflagellates in the water column, and the ‘Seasonal succession of phytoplankton’ (HELCOM, 2018f).

Coastal areas were assessed using national indicators on chlorophyll-a, and phytoplankton bio-volume, as used for assessments under the Water Framework Directive. The corresponding indicators are also used in the assessment of eutrophication (http://stateofthebalticsea.helcom.fi/biodiversity-and-its-status/benthic-habitats/). However, the results of the biodiversity assessment may differ from results of the eutrophication assessment in coastal areas, due to differences in the scaling methods of the BEAT tool as applied here, and in the HEAT tool used for eutrophication assessment.

The pelagic habitats were assessed at assessment scale 4, encompassing Baltic Sea sub-basins in the open sea and water bodies or water body types as used nationally under the Water Framework Directive in coastal areas.

The Baltic Sea is a young ecosystem formed after the latest glaciation, continuously undergoing postglacial successional changes and diversification. It is a semi-enclosed, non-tidal ecosystem and has distinct latitudinal and vertical salinity gradients. There is strong permanent vertical stratification for much of the Baltic Sea. Substrate distribution is affected by water movement. Muddy sediments and occasionally sand are most common in the deeper parts, whereas rocky and mixed sediments can occur in near-shore and wave-exposed areas. The southern parts, including the Belt Sea, are connected to the Kattegat and show salinity levels around 25–30. Surface salinity levels in the central Baltic Sea are around 7–8, dropping to around 5 at the entrances to the northern Gulfs. In the most northern and eastern parts of the Baltic Sea, conditions are close to those of freshwater (ICES, 2018b).

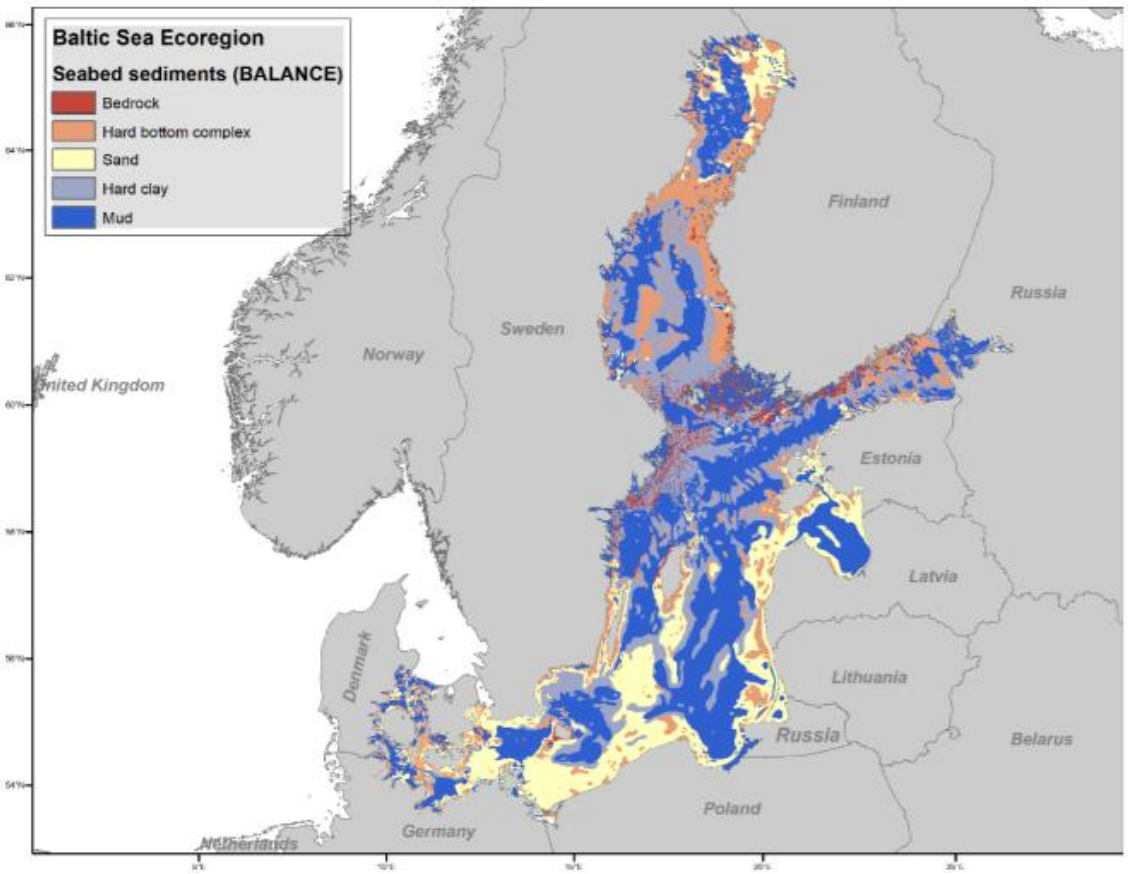


Figure 7.3.22. Major substrates on the shelf of the Baltic Sea. Source: http://maps.helcom.fi/website/mapservic

a. Commonly encountered habitats

Commonly encountered habitats are defined by MSC Fisheries Standard v2.01 SA3.13.3.1 as a habitat that regularly comes into contact with a gear used by the UoA, considering the spatial (geographical) overlap of fishing effort with the habitat's range within the management area(s) covered by the governance body(s) relevant to the UoA. Also, as it is stated in MSC Fisheries Standard GSA3.13.3.1, commonly encountered habitats would likely include those that the target species favours, that the UoA's gear is designed to exploit, and/or that make up a reasonable portion of the UoA's fishing area.

The fishery is conducted with trawl designed to not touch the sea bottom but to 'fly' 8-10 m above it. Any contact with the sea bottom would jeopardize the integrity of the gear. Therefore, the pelagic habitat is the commonly encountered habitat for this fishery as defined by MSC.

The fishery doesn't change the characteristics of the water column, e.g., the temperature, salinity, or currents.

b. VMEs

According to MSC Fisheries Standard v2.01 SA3.13.3.2, VMEs have one or more of the following characteristics, as defined in paragraph 42 of the FAO Guidelines: (i) Uniqueness or rarity; (ii) Functional significance of the habitat, (iii) Fragility; (iv) Life-history traits of component species that make recovery difficult; (v) Structural complexity.

The FAO Guidelines' Annex identifies the following species groups, communities, and habitat-forming species that may form VMEs and may be indicative of the occurrence of VMEs: (i) Certain cold water corals and hydroids; (ii) Some types of sponge-dominated communities; (iii) Communities composed of dense emergent fauna where large sessile protozoans and invertebrates (e.g., hydroids and bryozoans) form an important structural component of habitat; (iv) Seep and vent communities comprised of invertebrate and microbial species found nowhere else (i.e., endemic).

The FAO Guidelines' Annex also lists various geographical features that are often associated with these communities.

Spatial protection is central to the biodiversity agreements in the Baltic Sea Action Plan, and the designation of marine protected areas has been a key instrument for the protection of biodiversity in the Baltic Sea for more than thirty years (HELCOM, 2018g). As the first marine region in the world in 2010, the Baltic Sea reached the target of conserving at least 10 % of coastal and marine areas set by the United Nations Convention on Biological Diversity. Today the area protected through marine protected areas has reached 12 %. The protection is however not evenly distributed between sub-basins or between coasts and open sea, and the aim remains to reach the target in all offshore sub-basins. A specific aim for the HELCOM network of marine and coastal Baltic Sea protected areas (HELCOM MPAs) is to be 'ecologically coherent', meaning that a network of protected sites should be designed so that it delivers more benefits than individual areas (HELCOM, 2018g). The HELCOM assessment of ecological coherence (HELCOM, 2016) showed that two of the evaluated aspects were at an acceptable level for supporting a coherent marine protected area network: the areal representation of different types of broad scale habitats and the replication of a set of indicative species and biotope complexes. However, the evaluation indicated that the connectivity, which measures how well the network supports the migration and dispersal of species is not yet optimised. Management plans remain to be implemented in about 30 % of the marine protected areas. HELCOM is working towards the development of a method to assess the management effectiveness of HELCOM marine protected areas and the network. Such an assessment will be important to corroborate environmental positive effects and marine protected area management (HELCOM, 2018g).

The HELCOM Underwater Biotope and habitat classification (HELCOM HUB, https://helcom.fi/baltic-sea-trends/biodiversity/helcom-hub/) defines a total of 328 benthic and pelagic habitats. Of these HELCOM HUB biotopes, a threat assessment was made for 209 biotopes of which 59 were red listed. Of the assessed biotopes, 73% were classified LC and are therefore currently not seen to be at risk of collapse. Only one biotope was categorized in the most severe threat category CR, the biotope delineated by aphotic muddy bottoms dominated by the ocean quahog (*Arctica islandica*) mussel. The Red List assessment results indicate that many of the threatened biotopes occur in the deep areas of the Baltic Sea. The reason for most of these biotopes becoming threatened is eutrophication, indirectly causing oxygen depletion in the deep areas. Many of the deep biotopes occurring on soft sediments have declined due to destructive fi shing methods such as bottom trawling. Furthermore, many of the red-listed biotopes occur in the southwestern Baltic Sea due to the salinity restricted distribution of the species that are characteristic of the biotope.

In this context, VMEs in the Baltic Sea are represented by the HELCOM MPAs and Natura 2000 sites that have been designated by HELCOM and the EU respectively. The current extent of HELCOM MPAs and Marine Natura 2000 sites is shown in **Figure 7.3.23**. HELCOM have also produced a "Red List" of Baltic Sea biotopes and habitats (see **Table 7.3.7** below). A review of protected areas in the Baltic Sea in 2016 found that the network of protected areas covered 16.7% of the marine area, an increase from the extent in the previous assessment in 2015 (HELCOM, 2015; 2016). There are presently 174 HELCOM MPAs in the Baltic Sea. The relationship between HELCOM MPAs and fishing activities by vessels equipped with Vessel Monitoring System (VMS) equipment is shown in **Figure 7.3.24**.

Table 7.3.7.- HELCOM Red List of Baltic Sea biotopes and habitats (showing just the Critically Endangered, Endangered and Vulnerable biotopes & habitats). Source: HELCOM, 2013a.

Biotope code	Biotope/Habitat name	Threat category	Confidence of threat assessment	Criterion for assessment	National concern
AB.H3L3	Baltic aphotic muddy sediment dominated by ocean quahog (*Arctica islandica*)	CR	M	A2	
AA.M1Q2	Baltic photic mixed substrate dominated by stable aggregations of unattached *Fucus* spp. (dwarf form)	EN	L	A1	
AA.H1Q2	Baltic photic mud dominated by stable aggregations of unattached *Fucus* spp. (dwarf form)	EN	L	A1	
AA.I1Q2	Baltic photic coarse sediment dominated by stable aggregations of unattached *Fucus* spp. (dwarf form)	EN	L	A1	
AA.J1Q2	Baltic photic sand dominated by stable aggregations of unattached *Fucus* spp. (dwarf form)	EN	L	A1	
AA.D	Baltic photic maerl beds (unattached particles of coralline red algae)	EN	M	B1+2a(ii)	
AB.D	Baltic aphotic maerl beds (unattached particles of coralline red algae)	EN	L	B1+2a(ii)	
AB.B1E4	Baltic aphotic hard clay dominated by *Astarte* spp.	EN	M	B2c(ii)	
AB.H3L5	Baltic aphotic muddy sediment dominated by *Astarte* spp.	EN	M	A1	
AB.H2T1	Baltic aphotic muddy sediment characterized by sea-pens	EN	M	A1	
AB.H1I2	Baltic aphotic muddy sediment dominated by *Haploops* spp.	EN	M	A1	
AE.O5	Baltic Sea aphotic pelagic below halocline oxic	EN	L	A3	
AA.G	Baltic photic peat bottom	VU	M	B2b	
AB.J3L3	Baltic aphotic sand dominated by ocean quahog (*Arctica islandica*)	VU	M	A1	
AC	Baltic Sea seasonal ice	VU	L	A1+2a	
AA.E1F1	Baltic photic shell gravel dominated by vase tunicate (*Ciona intestinalis*)	VU	L	B1a(ii)	
AB.E1F1	Baltic aphotic shell gravel dominated by vase tunicate (*Ciona intestinalis*)	VU	L	B1a(ii)	

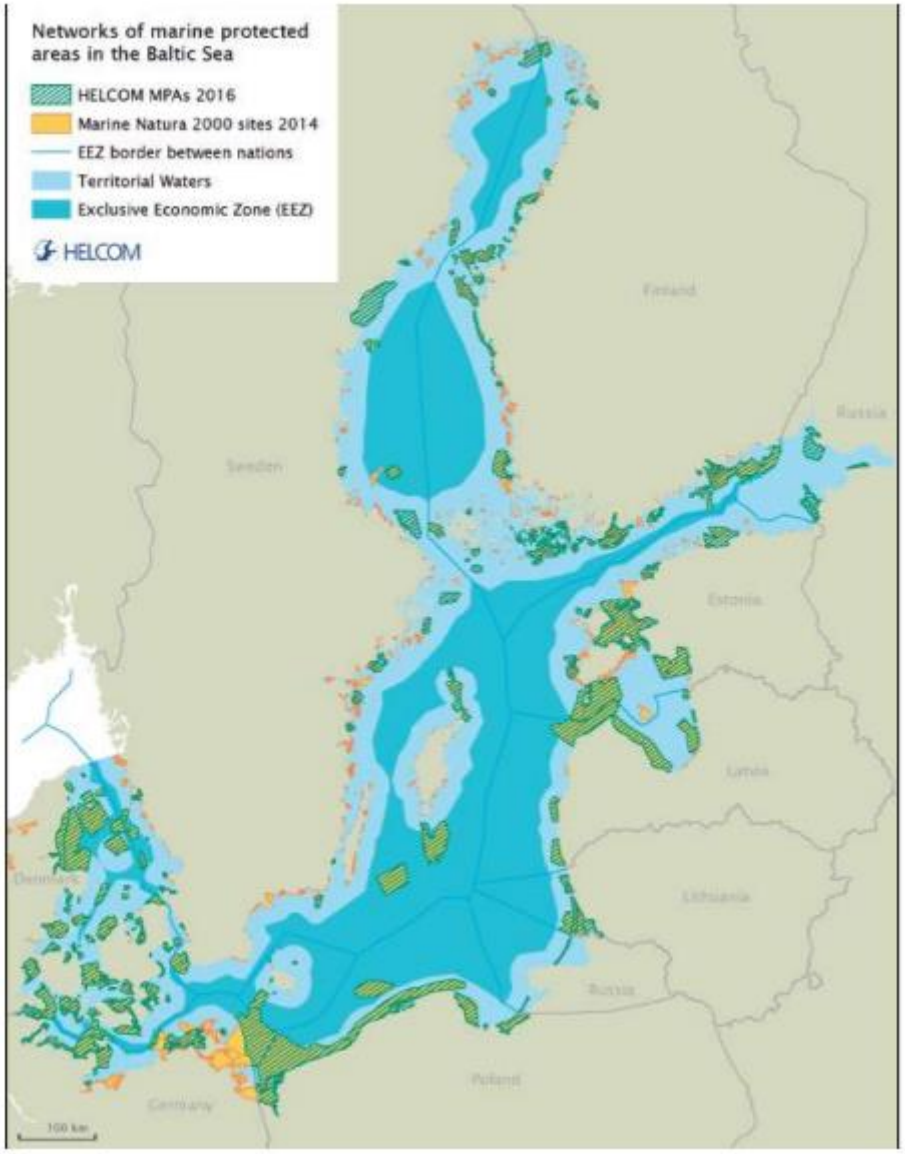


Figure 7.3.23.- Map showing the location of marine Natura 2000 sites and HELCOM MPAs in the Baltic Sea. Source: HELCOM, 2016.

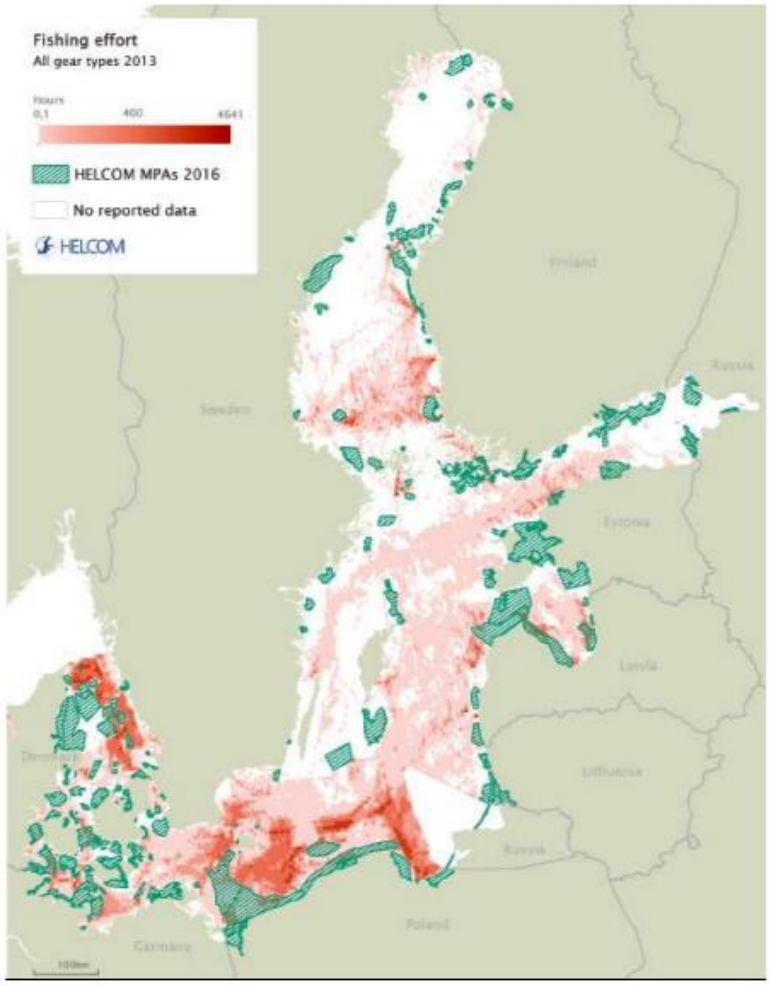


Figure 7.3.24.- Map showing the location of HELCOM MPAs in the Baltic Sea and spatial distribution of Vessel Monitoring System (VMS) data for all fishing types. Note that white areas on the map may indicate both no data being available or no fishing by vessels equipped with VMS. Source: HELCOM, 2016.

c. Minor habitats

Minor habitats are defined by MSC as those that do not fall within the classification of Commonly Encountered Habitats or VMEs (GSA3.13.3). Therefore, for this assessment, minor habitats are the major substrates on the shelf of the Baltic Sea (**Figure 7.3.6**)

7.3.5 Ecosystems

To score the ecosystem PIs, it is helpful (but not an explicit MSC requirement) to define the ecosystem within which the fishery operates. The MSC does, though, require the 'key ecosystem elements' to be defined, and describes them as: "*the features of an ecosystem considered as being most crucial to giving the ecosystem its characteristic nature and dynamics, and are considered relative to the scale and intensity of the UoA. They are features most crucial to maintaining the integrity of its structure and functions and the key determinants of the ecosystem resilience and productivity*" (MSC Fisheries Standard v2.01 SA3.16.3).

The key feature of the Baltic Sea ecosystem is that it is a large, semi-enclosed brackish water sea. It has a narrow connection to the North Sea, from which inflows of higher salinity oxygen rich water intermittently enter the Baltic, affecting both water quality and the distribution of plants and animals in the Baltic (Lessin et al., 2014). Water temperature and salinity vary greatly from north to south in the Baltic Sea. The northern Baltic waters have a very low salinity and are prone to freezing; waters in the southern Baltic are more saline. The gradient in salinity and its relationship to the range of marine and freshwater species in the Baltic Sea is illustrated in **Figure 7.3.25**.

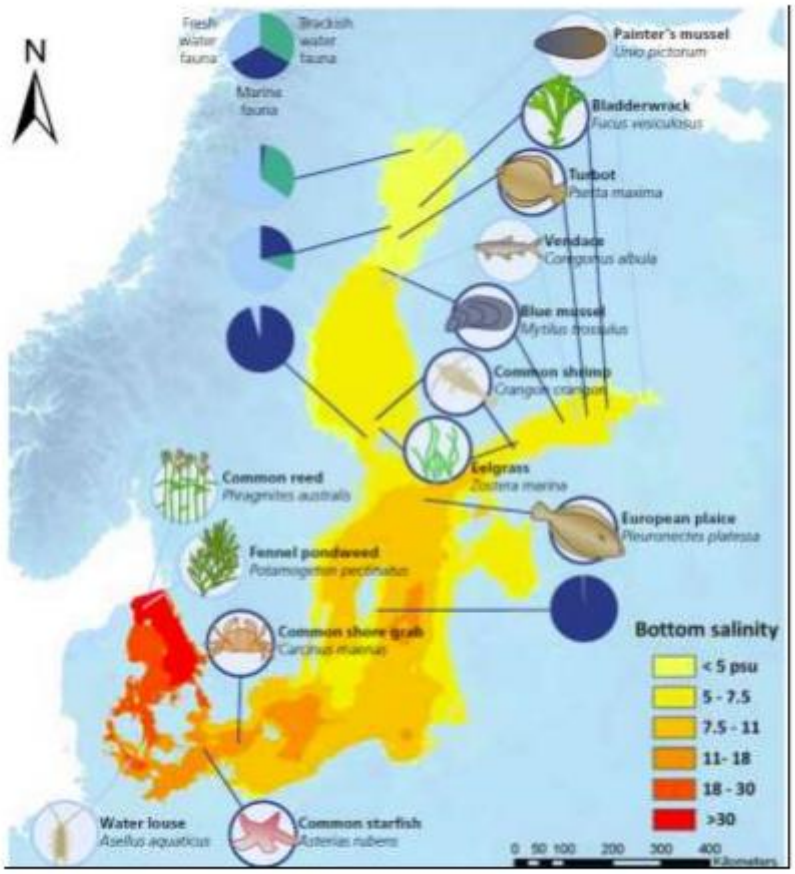


Figure 7.3.25: Map illustrating the relationship between the salinity of bottom waters (shading) and the distribution of marine species (dark blue circles) and freshwater species (light blue circles) in the Baltic Sea. Source: HELCOM, 2010.

The Baltic Sea ecosystem is dominated in terms of biomass and abundance by a relatively small number of species that are able to thrive in these brackish conditions. The fish fauna is dominated by cod, sprats and herring which together make up approximately 80% of the Central Baltic Sea fish biomass (Ojaveer et al., 2010). The interactions between these commercially fished species and the effect on fishing on their role in the ecosystem has been investigated and modelled (Margonski et al., 2010; ICES, 2013b), and are considered in some detail in **section 7.2.2** of this report. Very briefly, herring and sprat are competitors, and both are predated on by cod, creating a dynamic relationship between the three species (see **Figure 7.3.26**); the only ecosystem components that are considered likely to be affected by fishery removals of sprat in the Central Baltic Sea apart from the target species would be cod.

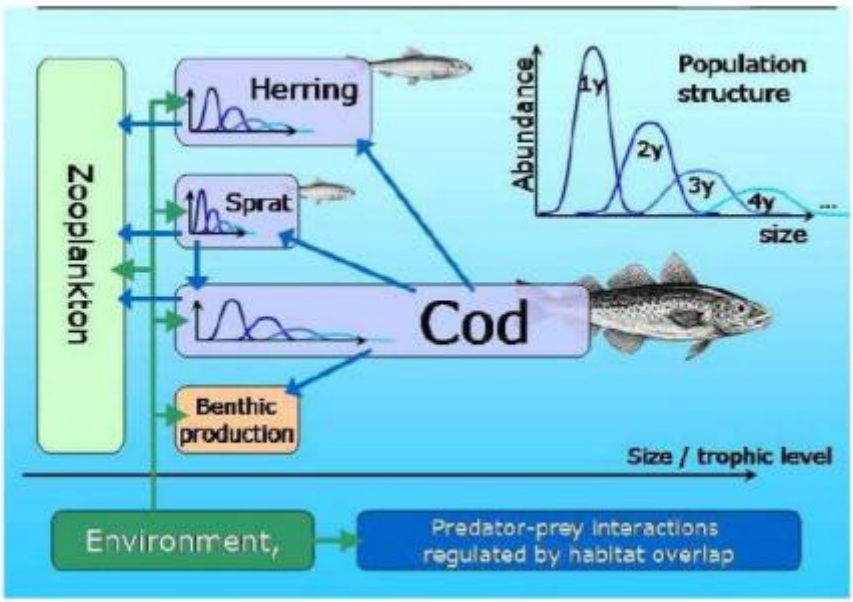


Figure 7.3.26: Representation of key ecosystem interactions in the Central Baltic Sea. Source: Tomczak et al., 2010.

The relatively simple "linear" ecosystem illustrated in **Figure 7.3.26** results from an ecological regime shift that is a consequence of the combined effect of a fall in salinity and targeted fishing for cod in this area (Casini et al., 2008; Tomczak et al., 2013). This is one of several regimes shifts in the Baltic Sea ecosystem that have been documented in the 20th century. These have been driven by increased nutrient loads that have created a eutrophied environment, climate change, and also fishing pressure on Baltic cod stocks. The result is that the fish fauna in the Central Baltic is now dominated by sprats, rather than cod, and the abundance of macroalgae has declined as phytoplankton blooms have made the water more turbid. As a consequence of the loss of macroalgal vegetation there has been a loss of associated fauna. These changes are summarised and documented in the BalticSTERN report (BalticSTERN, 2013) and illustrated in **Figure 7.3.8**.

Ecosystem studies throughout the Baltic Sea have demonstrated the importance of climate and anthropogenic factors (both fishing and eutrophication) on ecosystems (Suikkanen et al., 2013; Arula et al., 2014; Bergström et al., 2015; Mustamäki and Mattila 2015; Pekcan-Hekim et al. 2016). Ecosystem models have been constructed for the Central Baltic, Bothnian Sea and Bothnian Bay which show the energy flow between different ecosystem components. These studies indicate that the main factors affecting ecosystem function are eutrophication and climate change in these areas.

The BalticSTERN report reviews the past and current status of the Baltic Sea and considers the consequences for the ecosystem of different management scenarios, including the HELCOM Baltic Sea Action Plan (HELCOM, 2007, BalticSTERN, 2013). This demonstrates that there is a good understanding of human influences on ecosystem function in the Baltic Sea, and also a holistic approach to managing adverse impacts. The HELCOM Baltic Sea Action Plan aims to restore the good ecological status of the Baltic marine environment by 2021. The Latvian government and associated agencies are active participants in both HELCOM and BalticSTERN, and a signatory to the Baltic Sea Action Plan.

In relation to management and information to inform ecosystem impacts of the fisheries under assessment, industry and management authorities are guided by commitment to a number of relevant conventions and European Directives, such as:

- EU Common Fisheries Policy (CFP) with a clear commitment to fishing at an exploitation rate that supports maximum sustainable yield, and by applying the precautionary approach, taking into account all ecosystem impacts of fisheries.
- HELCOM The Helsinki Commission (HELCOM) is the governing body of the "Convention on the Protection of the Baltic Sea Area". All riparian countries of the Baltic Sea Area are members of the Commission. HELCOM

works as an environmental policymaker for Baltic Sea concerns, but also as the body to coordinate and supervise the implementation by the Contracting Parties. In addition to that, HELCOM provides information about the environmental status and trends in the Baltic Sea Area, the measures and their efficiency. HELCOM produced a Baltic Sea Action Plan in 2007 which sets an ambitious programme to restore the good ecological status of the Baltic marine environment by 2021.

- ASCOBANS was concluded in 1991 as the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS) under the auspices of the Convention on Migratory Species (CMS or Bonn Convention) and entered into force in 1994. So far Latvia is a non-party range state.
- Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds aims at providing long-term protection and conservation of all bird species naturally living in the wild within the European territory of the Member States (except Greenland).
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora came into force on 21 May 1992. The central aim of the Directive is to conserve biodiversity across the area of the European Union through a coherent network of Special Areas of Conservation (SACs).
- CBD - the Convention on Biological Diversity was signed at the UN Rio Conference on Environment and Development (1992). This aims conserve biological diversity, encourage sustainable use of its components and the fair and equitable sharing of the benefits arising from the use of these resources

7.3.6 Principle 2 Performance Indicator scores and rationales

PI 2.1.1 – Primary species outcome

PI 2.1.1		The UoA aims to maintain primary species above the point where recruitment would be impaired (PRI) and does not hinder recovery of primary species if they are below the PRI		
Scoring Issue		SG 60	SG 80	SG 100
a	Main primary species stock status			
	Guide post	Main primary species are **likely** to be above the PRI. OR If the species is below the PRI, the UoA has measures in place that are **expected** to ensure that the UoA does not hinder recovery and rebuilding.	Main primary species are **highly likely** to be above the PRI. OR If the species is below the PRI, there is either **evidence of recovery** or a demonstrably effective strategy in place **between all MSC UoAs which categorise this species as main**, to ensure that they collectively do not hinder recovery and rebuilding.	There is a **high degree of certainty** that main primary species are above the PRI **and are** fluctuating around a level consistent with MSY.
	Met?	**Yes**	**Yes**	**No**
Rationale				

Herring is the only P2 species caught by the UoA (**see Table 7.3.3**) for which biological reference points exist and its proportion in the UoA catch accounts for more than 5% of the total UoA catches, therefore, it is the only P2 species categorized as 'Primary Main' (MSC Fisheries Standard v2.01 SA3.1.3.3- SA3.4.4).

Of the 4 existing herring stocks in the Baltic Sea, the UoA only interacts with the Central Baltic Herring Stock (CBH), which extends through ICES SD 25-27, 28.2, 29 & 32. The ICES WGBFAS provides separate assessment and advice for CBH.

A recent interbenchmark assessment (ICES, 2020b) introduced updated natural mortalities for 1974–2018, which led to a downward revision of SSB and an upward revision of fishing mortality compared to previous assessments. Furthermore, the strength of the 2019-year class was downgraded at the 2021 assessment. The biomass reference points were lowered by about 25%. FMSY and the corresponding range were practically unchanged, while Flim and Fpa increased slightly. The reference points that are currently accepted are given in **Table 7.3.4**.

Table 7.3.4 Reference points for Central Baltic Herring. Source: ICES, 2021d

Reference points

Herring in subdivisions 25–29 and 32, excluding the Gulf of Riga. Reference points, values, and their technical basis. Weights are in tonnes.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	460 000	B_{pa}	ICES (2020)
	F_{MSY}	0.21	Estimated by EqSim	ICES (2020)
Precautionary approach	B_{lim}	330 000	The lowest SSB that has resulted in above-average recruitment, i.e. year 2002 (the SSB in 2002 happens to correspond to B_{loss})	ICES (2020)
	B_{pa}	460 000	1.4 × B_{lim}	ICES (2020)
	F_{lim}	0.59	Estimated by EqSim as the F with 50% probability of SSB being less than B_{lim}	ICES (2020)
	F_{pa}	0.32	F_{P05}. The F that leads to SSB ≥ B_{lim} with 95% probability	ICES (2021a)
Management plan	MAP MSY $B_{trigger}$	460 000	MSY $B_{trigger}$	ICES (2020)
	MAP B_{lim}	330 000	B_{lim}	ICES (2020)
	MAP F_{MSY}	0.21	F_{MSY}	ICES (2020)
	MAP target range F_{lower}–F_{MSY}	0.15–0.21	Consistent with the ranges which result in no more than a 5% reduction in long-term yield compared to MSY	ICES (2020)
	MAP target range F_{MSY}–F_{upper}	0.21–0.26	Consistent with the ranges which result in no more than a 5% reduction in long-term yield compared to MSY	ICES (2020)

The CBH SSB in 2021 was estimated to be 365,448 t, above Blim (330 kt) but below the proxy reference point (Blim +(Bpa-Blim)/3 applied because CBH is classified as Key LTL species. The fishing mortality for 2020 is estimated at F age 3-6 was estimated at 0.46. This is well above FMSY of 0.21.

The management of the Central Baltic herring stock is based on an EU multiannual plan (MAP) for stocks in the Baltic Sea (Regulation 2016/1139). This plan affects the different herring stocks in the Baltic Sea. This Plan provides measures, primarily TAC adjustments, that are expected to ensure that the UoA does not hinder recovery and rebuilding. The UoA (Latvian sprat fishery in the Open Sea) is small in comparison to the total fishery on the CBH stock and this combined with the overall measures established under the EU Russian fisheries agreement and the EU Multiannual Plan for Baltic fish stock assures that the UoA does not hinder recovery. **SG60 is met.**

Management has reacted based on the ICES (2021d) assessment and has reduced TACs for 2021 consistent with the advice see **Table 7.3.4**. This reduction applies to all herring fisheries in the Central Baltic not only the MSC certified fisheries. So, it is ensured that the fisheries collectively do not hinder recovery and rebuilding. **SG80 is met.**

Table 7.3.4. Summary of ICES advice for Central Baltic Herring, Total TAC (EU+Russia) and Total catch. Source: ICES 2021d.

Year	ICES Advice summary	TAC (EU+Russia) (t)	Total catch (t)
2018	MAP target F ranges: Flower to Fupper (0.16–0.28), but F higher than FMSY = 0.22 only under conditions specified in MAP **200236–331510**, but catch higher than 267745 only under conditions specified in MAP	258,855	244,365
2019	MAP target F ranges: Flower to Fupper (0.16–0.28), but F higher than FMSY = 0.22 only under conditions specified in MAP **115591–192787**, but catch higher than 155333 only under conditions specified in MAP	200,260	204,438
2020	MAP target F ranges: Flower to Fupper (0.16–0.28), but F higher than FMSY = 0.22 only under conditions specified in MAP **130546–214553**, but catch higher than 173975 only under conditions specified in MAP	182,484	177,079
2021	MAP 111852 (range **83971– 138183**)	126,051	

2022	MAP 71939 (range **52443–87581**)	53,653 (EU) + Russia	

There is not a **high degree of certainty** that the main primary species, central Baltic herring is above the PRI and fluctuating around a level consistent with MSY. **SG100 is not met.**

	Minor primary species stock status			
b	Guide post			Minor primary species are highly likely to be above the PRI. OR If below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species.
	Met?			**Yes**

Rationale

Cod (*Gadus morhua*) is the only P2 species caught by the UoA (**see Table 7.3.3**) for which biological reference points exist and its proportion in the UoA catch accounts for less than 5% of the total UoA catches, therefore, it is the only P2 species categorized as 'Primary Minor' in this fishery (MSC Fisheries Standard v2.01 SA3.1.3.3- SA3.4.5).

The cod is part of the Eastern Baltic Cod stock. The total catch of the eastern Baltic cod stock was 21,605 t in 2018 and 11,938t in 2019 (ICES, 2019f and ICES, 2021e, respectively) but cod catches by the assessed fleet are very rare and limited (maximum percentage of 2.79% of cod of the total catch was reported in 2016 by a single client and a maximum of 18 individuals reported in 2016 by BIOR).

The spawning stock biomass (SSB) has been declining since 2015 and ICES assesses that spawning-stock size is below Blim and Bpa (ICES, 2021e). Fishing mortality (F) has declined since 2012; the value estimated for 2020 is the lowest recorded. Recruitment (R) has been declining since 2012, and the recruitment in 2018 is estimated to be the lowest in the time series.

The declining trend in size at maturation over time means that the development of the commercial sized cod biomass (≥ 35 cm) is not consistent with SSB, especially since 2000. This is because SSB in recent years included small mature cod that were not part of the SSB in earlier years. The 2020 biomass of both commercial sized cod and SSB are close to the lowest level observed since the 1950s.

Sampling of landings and discards was considerably reduced in 2020 due to a combination of COVID-19 disruption and low catches. Low quotas may also have caused misreporting of landings. However, the perception of the stock status and present advice were found robust to possible uncertainties in catch data in 2020. At the current low productivity, the stock is estimated to remain below Blim in the medium term, even with 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.

However, the catch of cod in the sprat fishery is very limited. Therefore, there is evidence that the UoA does not hinder recovery or rebuilding of the Eastern Baltic Cod stock. Thus, **SG100 is met**.

References

ICES, 2021e; ICES, 2019f; ICES, 2020b; ICES, 2021d; Regulation 2016/1139;

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**90**
Condition number (if relevant)	**NA**

PI 2.1.2 – Primary species management strategy

PI 2.1.2		There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are **measures** in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to be above the PRI.	There is a **partial strategy** in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the PRI.	There is a **strategy** in place for the UoA for managing main and minor primary species.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

As discussed in **Section 7.3.3.2** and in previous SI, the only main primary species impacted by the UoA is herring, and in particular the Central Baltic Stock (CBH). Therefore, SG60 and SG80 will be assessed just against the CBH.

According to MSC Fisheries Standard v2.01, a 'strategy' represents "*a cohesive and strategic arrangement which may comprise one or more measures, and understanding of how it/they work to achieve an outcome and which should be designed to manage impact on that component specifically*" (i.e. CHB). Further, a strategy needs to be "*appropriate to the scale, intensity and cultural context of the fishery and should contain mechanisms for the modification of the fishing practices in the light of the identification of unacceptable impacts*".

A strategy is in place for managing the CBH based on the ICES approach "to advice on fishing opportunities integrates the ecosystem and precautionary approach with the objective of achieving maximum sustainable yield (MSY) (ICES, 2021f). Even though the CBH is a shared stock with Russia, quotas are set autonomously. For central Baltic herring, the EU TAC is set consistent with the ICES advice (e.g., Council Regulation (EU) 2020/1579 of 29 October 2020 fixing for 2021 the fishing opportunities in the Baltic). The implementation of the strategy is using quotas as well as technical measures. The sum of the combined EU and Russian TACs has generally been within ICES advice and catches have also generally been in line with the advice (see **Table 7.3.4** and Table 6 from ICES,2021d).

The Latvian share of the CBH TAC is allocated by the Ministry of Agriculture to the Latvian fishing companies targeting sprat in SD 25-29 and 32, excluding GoR. The herring quotas are allocated as a bycatch of the sprat fishery, fixing a maximum level which in 2016 was set at 14.95%. Therefore, the Latvian fleet, managers and scientists are integrated into the mentioned CBH management strategy, as landings are reported to ICES and they participate in the EU DCF which feeds ICES assessments and advices.

Stocks assessed by ICES are periodically benchmarked in order to determine the quality of the assessments and the performance of the fishery, thus providing a mechanism to modify the strategy if necessary. The CBH was benchmarked in 2020. Compliance and performance of the fishery is also assessed at a European and national level and actions can be taken at both levels.

A multiannual management Plan for cod, herring and sprat in the Baltic was adopted on the 6th of July 2016 by the European Union (EU Regulation 2016/1139 and amended by Regulation EU 2019/472). As expressed in the Regulation: "The objective of the plan should be to contribute to the achievement of the objectives of the CFP, especially reaching and maintaining MSY for the stocks concerned." The aim of this multi-species management plan is to be an effective tool to incorporate into management the dynamics between the stocks of cod, herring and sprat, and also take into

account the by-catch species for those fisheries (plaice, flounder, turbot and brill). According to its Article 15, the results and impacts of the Plan on the concerned stocks have to be evaluated by 21st July 2019 and every 5 years thereafter. Following this provision, the first report on the implementation of the Multiannual Plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks was published in 2020 (EC, 2020).

The above demonstrates that there are measures and elements of a strategy which are specific to the element being assessed, the CBH, hence **SG60, SG80 and SG100** are met.

Cod is the only primary minor species assessed in this fishery. The cod caught by the UoA is part of the eastern Baltic stock which is subject to the Baltic Sea MAP (Regulation EU 1139/2016). Targets for herring, sprat and cod in this plan are built on input from ICES and the reference points laid down in this plan are consistent with reference points evaluated by ICES. This is a multi-species MAP which takes into consideration predator-prey relationships between the three target species. This plan is subject to regular evaluations.

In addition, trawl fisheries targeting herring/sprat in the Baltic Sea are subject to by-catch regulations laid down in Regulation (EC) 2187/2005, now repealed by Regulation (EU) 2019/1241 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures. This regulation limits the minimum conservation reference sizes of a list of 8 different species for the Baltic Sea. Cod is included in that list. Furthermore, this Regulation also establishes that cod bycatches shall be limited to a maximum of 10 % of the total catch in live weight. Furthermore, Latvian legislation restricts cod by-catch and the observed by-catches in the Latvian sprat fishery in ICES 28.2 is minimal.

Other elements to be included in the strategy to manage cod is the scientific research performed by BIOR, the sampling monitoring in ports as part of the EU-DCF, and the MCS system implemented by SES (see PI 3.2.3 for more details).

Based on the information presented above the team concludes that there is a strategy (by-catch regulation) in place for all UoAs that apply to the only primary minor species impacted: cod (*Gadus morhua)*. **SG100 is also met for cod**.

b	Management strategy evaluation			
	Guide post	The measures are considered **likely** to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is some **objective basis for confidence** that the measures/partial strategy will work, based on some information directly about the fishery and/or species involved.	**Testing** supports **high confidence** that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The measures and strategy described in SI(a) seems to work based on general experience, interviews with the Latvian Ministry and the Latvia Control authorities. **SG60 is met.**

The EU Multiannual Plan for Baltic fisheries implies that the stock will recover if the plan is followed. The Baltic MAP is based on biological knowledge. There is therefore some basis for the expected recovery. Rigorous measures have been adopted which restrict fishing on eastern Baltic cod e.g., closing directed fishery. Annual, scientific stock assessments are undertaken coordinated by ICES, which includes modelling of SSB for a range of catch scenarios. TACs are set on the basis of the advice provided by ICES, subject to the conditions within the Baltic MAP. There is confidence that the measures will work, based on information directly about the species. The poor status of the eastern Baltic cod is largely driven by biological changes in the stock during the last decades. These developments indicate that the stock is distressed and is expected to have reduced reproductive potential. Natural mortality for Eastern Baltic cod has increased and is estimated to be considerably higher than the fishing mortality in recent years. The fishery for sprat has limited effect on the status of the cod stock.

Stock assessments for Central Baltic herring (25-29 & 32) and cod in Eastern Baltic (24-32) are supported by SSB modelling for various catch scenarios. These catch scenarios test how certain levels of catch will impact the SSB for each stock, providing a percentage change in SSB (increase or decrease) for the forthcoming year. The level of agreed TAC can then be compared to understand the modelled effect on the stock. **SG80 is met** for all elements.

Testing has been undertaken of the strategy through the ICES advice which assesses performance of the stocks in relation to reference points and exploitation levels. However, as noted in SIa, Central Baltic herring stock has been above FMSY for some time and there is not high confidence that the strategy will work. Moreover, the cod spawning stock biomass (SSB) has been declining since 2015 and ICES assesses that spawning-stock size is below Blim and Bpa (ICES, 2021e). Fishing mortality (F) has declined since 2012; the value estimated for 2020 is the lowest recorded. Recruitment (R) has been declining since 2012, and the recruitment in 2018 is estimated to be the lowest in the time series.

Therefore, the assessment team finds that **there is no high confidence** that the partial strategy/strategy will work, based on information directly about the fishery and the 2 primary species involved, therefore **SG 100 is not met**.

	Management strategy implementation			
C	Guide post		There is **some evidence** that the measures/partial strategy is being **implemented successfully**.	There is **clear evidence** that the partial strategy/strategy is being **implemented successfully and is achieving its overall objective as set out in scoring issue (a).**
	Met?		**Yes**	**No**
Rationale				

The strategy including the associated package of measures described in SI(a) (TAC, technical measures) is implemented effectively. The strategy has led to an increase in the herring stock since the early 2000's. Compliance (see Principle 3) is good. The herring stock seems to recover while the cod stock is influenced by a range of biological factors outside the fisheries.

As explained in **section 7.3.3.3.3**, species misreporting of herring has occurred in the past, and there are indications of sprat being misreported as herring. These effects have not been quantified; however, they may affect the quality of the assessment (ICES, 2021d). Nevertheless, as explained in the 4th Surveillance audit report (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments), "*based on the input from the control authorities and the Client and based on the sampling program and the nature of the fishery, it is not considered that misreporting of the species composition is a significant issue in the Latvian sprat fishery*".

In relation to an essential part of the management strategy, the scientific monitoring, there is evidence that it is implemented effectively as all countries concerned take part in the data collection through the EU DCF. Most countries provide age composition of their major landings. In ICES (2021a), detailed data on the level and frequency of herring sampling is presented, the overall frequency was 3.3 samples, 398 fish measured and 171 fish aged per 1000 tonnes landed. The landings for which age composition was missing represented about 16% of the total catches in 2020 (ICES, 2021a).

Data from the self-sampling by the industry at landings supplemented by sampling by BIOR on ports indicate that there are – as intended – virtually no by-catch of primary species. SES confirmed that cod is not a species which might be subject to misreporting in this type of fishery.

The multiannual management plan was established in 2016. An annual TAC has been set for the Central Baltic herring stock since 1988. ICES reports annual total catches against agreed TAC since 2004, indicating that annual catches have been less than the annual TAC for all years except 2012 and 2019 (ICES, 2021d).

Regarding primary minor species, cod represents a negligible part of the UoA catches whose catches have in fact been decreasing since 2016 (see **Table 7.3.1** and **Table 7.3.2**), and it is almost exclusively occurring in ICES 25+26 with little overlap with the Latvian Sprat fishery. Furthermore, the MCS system implemented by the SES is comprehensive and no infringements related to limit of cod bycatch have been imposed since the initial assessment (see PI 3.2.3 for more details on the MCS system implemented).

All the above provides some evidence that a partial strategy is being implemented successfully, hence, **meeting SG80**.

However, the objective of maintaining both the Central Baltic herring stock and the cod stock at a level above MSY is not being attained. Therefore, there is **no clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its overall objective as set out in scoring issue (a). SG100 is not met.**

	Shark finning			
d	Guide post	It is **likely** that shark finning is not taking place.	It is **highly likely** that shark finning is not taking place.	There is a **high degree of certainty** that shark finning is not taking place.
	Met?	**NA**	**NA**	**NA**
Rationale				

None of the primary species caught by the UoA are sharks, therefore this SI is **Not Applicable.**

	Review of alternative measures			
e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species.	There is a **regular** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species and they are implemented as appropriate.	There is a **biennial** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all primary species, and they are implemented, as appropriate.
	Met?	**NA**	**NA**	**NA**
Rationale				

Both sources of information (**Section 7.3.3.1**) confirmed that sprat and herring constitute over 97% of the total catches and discarding is negligible for this stock. Any unwanted parts of catch are sold for fish meal, thus are utilized. Hence, the assessment team is confident that there is no mortality of unwanted catch in the sprat fishery.

This scoring issue is not applicable for the assessment and there is no need to score it, as per MSC FCP GSA3.5.3.

References

Regulation 2072/2015; EU Regulation 2020/1781; Regulation (EC) 2187/2005; Regulation EU 227/2013; Regulation EU 2019/1241; EC, 2020; Council Regulation (EU) 2020/1579; EU Regulation 2016/1139 and amended by Regulation EU 2019/472
ICES,2021d; ICES,2021f; ICES, 2021; ICES, 2021e; ICES, 2021d; ICES, 2021a

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

PI 2.1.3 – Primary species information

PI 2.1.3		Information on the nature and extent of primary species is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage primary species		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impact on main primary species			
	Guide post	Qualitative information is **adequate to estimate** the impact of the UoA on the main primary species with respect to status. **OR** **If RBF is used to score PI 2.1.1 for the UoA:** Qualitative information is adequate to estimate productivity and susceptibility attributes for main primary species.	Some quantitative information is available and is **adequate to assess** the impact of the UoA on the main primary species with respect to status. **OR** **If RBF is used to score PI 2.1.1 for the UoA:** Some quantitative information is adequate to assess productivity and susceptibility attributes for main primary species.	Quantitative information is available and is **adequate to assess with a high degree of certainty** the impact of the UoA on main primary species with respect to status.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

Sprat and herring are caught in mixed fisheries in the Baltic and there are well established sampling programs which are mandatory by law (Regulation (EU) 227/2013, now repealed by Regulation (EU) 2019/1241) and that provide annually fairly accurate estimates by catch by species, **thus addressing SG60**.

Species misreporting of herring/sprat has occurred in the past. These effects have not been quantified; however, they may affect the quality of the assessment (ICES, 2021d). Nevertheless, as explained in the 4th Surveillance audit report (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments), "*based on the input from the control authorities and the Client and based on the sampling program and the nature of the fishery, it is not considered that misreporting of the species composition is a significant issue in the Latvian sprat fishery*The Latvian vessels fishing sprat have to complete their logbooks including separate estimations of sprat and herring catches. Regular inspections at dockside are performed aiming to verify that sprat and herring composition was correctly estimated by the skipper, a mistake greater than 10% implies sanctions, **thus meeting SG80**.

Data from the Baltic Pelagic Acoustic survey provide fishery independent data on the herring stock status and these data are used in the herring assessments. Mixing of western Baltic herring and central Baltic herring is considered to occur in the southern Baltic in ICES subdivisions 24-26 (particularly 24 and 25) and the level of this mixing is presently unknown and needs further investigation. WGBFAS considers it could potentially be high but do not quantify it at this stage (ICES, 2018e). However, as the fishery under assessment does not fish in SD24 where it has no quota for herring and very little in SD 25-26, furthermore the major overlap is likely in SD 25 (east of Bornholm) and at present the western Baltic herring is at a low level indicating the there is only a very low risk of taking Western Baltic herring in the Latvian Sprat fishery. Furthermore, Sprat is the dominating species in this fishery. Hence, this is not an issue that could significantly affect the current assessment.

There is comprehensive information available to assess with high degree of certainty the impact of all fishery-related mortality on the CBH with respect to its status. As this is the only main primary species impacted by the UoA the assessment, the team considers that **SG100 criteria is met**.

b	Information adequacy for assessment of impact on minor primary species			
	Guide post			Some quantitative information is adequate to estimate the impact of the UoA on minor primary species with respect to status.
	Met?			**Yes**
Rationale				

The cod is well researched and assessed on an annual basis, see ICES (2021c) for the latest Eastern Baltic Cod advice. ICES provides annual advice based on stock assessment. The information available is quantitative, catch data and survey indices. These are adequate to assess the overall impact on the stock. **SG100 is met**.

c	Information adequacy for management strategy			
	Guide post	Information is adequate to support **measures** to manage **main** primary species.	Information is adequate to support a **partial strategy** to manage **main** primary species.	Information is adequate to support a **strategy** to manage **all** primary species, and evaluate with a **high degree of certainty** whether the strategy is achieving its objective.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

For both primary species assessed in this fishery, i.e., the Central Baltic herring and the Eastern Baltic Cod it was concluded that the information available is adequate to assess with a high degree of certainty the impact of all fishing-related mortalities on the Central Baltic Herring with respect to status (PI2.1.3 SI(a)), and that some quantitative information is adequate to estimate the impact of the UoA of Eastern Baltic Cod with respect to status (PI2.1.3 SI(b).

Moreover, the different sources of information available (logbooks, port samplings performed by BIOR as part of the EU-DCF, BIOR surveys), together with the ICES stock assessments and advice provide precise information to manage all primary species.

SG60, SG80 and SG100 are met.

References

Regulation EU 227/2013 , now repealed by Regulation (EU) 2019/1241
ICES 2021d; ICES 2021c; ICES 2018e

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**100**
Condition number (if relevant)	**NA**

PI 2.2.1 – Secondary species outcome

PI 2.2.1		The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit		
Scoring Issue		SG 60	SG 80	SG 100
a	Main secondary species stock status			
	Guide post	Main secondary species are **likely** to be above biologically based limits. OR If below biologically based limits, there are **measures** in place expected to ensure that the UoA does not hinder recovery and rebuilding.	Main secondary species are **highly likely** to be above biologically based limits. OR If below biologically based limits, there is either **evidence of recovery** or a **demonstrably effective partial strategy** in place such that the UoA does not hinder recovery and rebuilding. AND Where catches of a main secondary species outside of biological limits are **considerable**, there is either **evidence of recovery** or a, **demonstrably effective strategy in place between those MSC UoAs that have considerable catches of the species**, to ensure that they collectively do not hinder recovery and rebuilding.	There is a **high degree of certainty** that main secondary species are above biologically based limits.
	Met?	**NA**	**NA**	**NA**
Rationale				

Data on catch composition provided by the UoA (**Table 7.3.1**) and BIOR observer surveys on board Latvian trawlers targeting sprat (**Table 7.3.2**) indicate that sprat and herring make up at least 97% of the total catches in weight, therefore, the secondary species (**Table 7.3.3**) represent, all together, less than 3% in weight of the UoA catches and therefore none of the secondary species identified by the assessment team can be considered as 'main' secondary species based on the criteria defined by MSC.

As there are no main secondary species and following MSC interpretation guidance (available at: https://mscportal.force.com/interpret/s/article/P2-species-outcome-PIs-scoring-when-no-main-or-no-minor-or-both-PI-2-1-1-1527262009344) SIa is **not applicable.**

b	Minor secondary species stock status			
	Guide post			Minor secondary species are highly likely to be above biologically based limits.

				OR If below biologically based limits', there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species
	Met?			**Yes**

Rationale

Table 7.3.1 and **Table 7.3.2**, show 6 different secondary species are caught by the UoA in extremely low quantities and include: Flounder, smelt, four horn sculpin, eelpout, great sandeel and lumpfish.

The **flounder** caught by the UoA is part of the Flounder 26, 28 (Eastern Gotland and Gulf of Gdansk). This is the only species with a defined stock. Flounder is regulated locally but there are no reference points involved with setting these TACs. There are general by-catch limitations on the other species but not species-specific regulation. Catches represent and average of less than 1,3% of the total catches among the 6 years of data collected. Therefore, even if below biological based limits, the team considers that there is evidence that the catches of flounder by the UoA do not hinder the recovery and rebuilding of this species either.

The remaining catches for 5 out of the 6 minor secondary species (except flounder) represent < 0.03% of total catches. Even if such stocks were to be below biologically based limits, catches from this UoA are so small that they would be inconsequential to their (potential need for) recovery and as such we can determine the UoA does not hinder the recovery and rebuilding of these minor secondary species. **SG100 is met for all secondary species.**

References

Client and BIOR data

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**100**
Condition number (if relevant)	**NA**

PI 2.2.2 – Secondary species management strategy

PI 2.2.2		There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are **measures** in place, if necessary, which are expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a **partial strategy** in place, if necessary, for the UoA that is expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a **strategy** in place for the UoA for managing main and minor secondary species.
	Met?	**Yes**	**Yes**	**Flounder: Yes** **Rest of minor secondary: No**
Rationale				

As explained in PI2.2.1 SI(a), none of the secondary species identified by the assessment team (**table 7.3.3**) can be considered as 'main' secondary species. As there are no main secondary species **SG60 and SG80 are met by default**.

According to the MSC definition:
A **"strategy"** represents a cohesive and strategic arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome, and which should be designed to manage impact on that component specifically. A strategy needs to be appropriate to the scale, intensity and cultural context of the fishery and should contain mechanisms for the modification fishing practices in the light of the identification of unacceptable impacts.

Based on this definition, and as seen in PI2.1.2a, there is a strategy in place for managing main and minor primary species. Specifically, the EU Baltic Sea Multiannual Plan (EU Regulation 2016/1139 and its amendments) which has a strategy for managing cod, herring and sprat, but also certain by-caught species within these fisheries (i.e., plaice, flounder, turbot and brill). In addition, the LFPO sprat fishery is subject to by-catch regulations laid down in Regulation (EU) 2019/1241 (which repealed COUNCIL REGULATION (EC) No 2187/2005) for the conservation of fishery resources and the protection of marine ecosystems through technical measures. The regulation prescribes that no more than 10% of the total catch shall be cod.

The key fisheries rules and regulations in place for the Baltic Sea sprat fisheries are the catch constraints imposed by the annually agreed TACs, the technical measures included in Baltic Sea MAP (Regulation 2016/1139 with its amendments) and also in Regulation (EU) 2019/1241 (which repealed Regulation 2187/2005). These technical measures are mainly: more restrictive measures for prior reporting and the use of logbooks, establishing a margin of tolerance for catches landed unsorted, and effort restrictions.
In addition, the Control Regulation (Council Regulation (EC) No 1224/2009) requires, inter alia, that fishing vessels over 15m LOA broadcast a VMS and AIS signal; that all vessels over 10m LOA have a logbook and that vessels over 12m LOA have an electronic logbook.

Flounder: ICES provides separate assessment and advice for the stocks impacted by the UoA. However, as these stocks are considered as data poor, no analytical assessment is provided. The advice is based on a comparison of the average from two most recent index values with the 3 preceding values (trends assessment). No TACs are issued for this species. As indicated above, the EU Regulation establishing a multiannual management plan for cod, herring and

sprat stocks in the Baltic (Regulation EU 2016/1139) also applies to bycatches of flounder caught when fishing for the stocks concerned. In its Article 6 provides specific conservation measures for bycatch species (plaice, flounder, turbot and brill). The Latvian fleet targeting sprat is affected by the multi-species plan for managing cod, herring and sprat in the Baltic. Therefore, the assessment team considers that there is a strategy in place for the UoA for managing flounder. **SG100 is met.**

All the other minor secondary species: The Council Regulation 2187/2005 determines some technical rules to achieve (minimum mesh sizes according to the gear type and area, and other provisions on active gears). Besides, BIOR performs annual samplings on board fishing vessels targeting sprat in order to collect detailed information of the fishery. BIOR samplings confirm that the proportion in the UoA by-catches (excluding herring) is negligible (<0.1%) (**Table 7.3.2**). This sampling program allows detecting if the UoA is catching a species at a level in which it would be necessary to take measures. However, it is not made explicit that measures will be established, and the assessment team does not consider that a 'strategy' as defined by MSC is in place. Therefore, **SG100 is not met**.

	Management strategy evaluation			
b	Guide post	The measures are considered **likely** to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).	There is **some objective basis for confidence** that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.	**Testing** supports **high confidence** that the partial strategy/strategy will work, based on information directly about the UoA and/or species involved.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The MSC has provided an interpretation to guide the application of this SI which states that the "if necessary" clause included in SIa above should also apply to SIb and SIc ("Use of 'if necessary' in P2 management PIs (FCR v2.0 - Annex SA PI 2.1.2, 2.2.2, 2.4.2, 2.5.2)" see relevant interpretation available at: https://mscportal.force.com/interpret/s/article/Use-of-if-necessary-in-P2-management-PIs-2-1-2-2-2-2-2-4-2-2-5-2-PI-2-1-2-1527262011402). In accordance with this MSC interpretation, a management strategy evaluation is not necessary in the absence of any main secondary species in the catch. The **SG60 and 80 requirements are met by default.**

To meet SG100 a strategy or partial strategy must be tested. Despite the measures in place aiming to limit catches other than sprat and herring (those laid down in Regulation (EU) 2019/1241, which repealed Council Regulation 2187/2005) and the monitoring program in place, the assessment team considers that these elements do not achieve to conform a 'strategy' or even 'partial strategy'[2] to manage all secondary species. The multispecies management plan constitutes a 'strategy' in the case of flounder, but so far there is no testing. **SG100 is not met.**

	Management strategy implementation			
c	Guide post		There is **some evidence** that the measures/partial strategy is being **implemented successfully**.	There is **clear evidence** that the partial strategy/strategy is being **implemented successfully and is achieving its objective as set out in scoring issue (a).**
	Met?		**Yes**	**No**
Rationale				

[2] A "partial strategy" represents a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically". Source: MSC Table SA8. FCR v2.0

The MSC has provided an interpretation to guide the application of this SI which states that the “if necessary” clause included in SIa above should also apply to SIb and SIc ("Use of 'if necessary' in P2 management PIs (FCR v2.0 - Annex SA PI 2.1.2, 2.2.2, 2.4.2, 2.5.2)". See relevant interpretation available at: https://mscportal.force.com/interpret/s/article/Use-of-if-necessary-in-P2-management-PIs-2-1-2-2-2-2-2-4-2-2-5-2-PI-2-1-2-1527262011402).
In accordance with this MSC interpretation, assessment of management strategy implementation is not necessary in the absence of any main secondary species in the catch. The **SG80 requirements are met by default.**

Through the EU DFC, member states are providing data on landings and samplings to ICES and are also ensuring compliance with management measures through the technical measures set in Regulation (EU) 2019/1241 (which repealed Council Regulation 2187/2005) and Regulation 2016/1139 (and its amendments).

However, in previous surveillance audits, the SES has expressed some concerns in relation to a regulatory gap which may facilitate species misreporting in the mid-water trawl fisheries targeting sprat and herring (e.g. declaring a non-regulated species such as smelt instead of herring, or declaring less herring than sprat). Article 13 of the Baltic Sea MAP establishes that: “for catches which are landed unsorted the permitted margin of tolerance in estimates recorded in the fishing logbook of the quantities in kilograms of fish retained on board shall be 10 % of the total quantity retained on board”. This means that the margin of tolerance applies to all species together, while previously the Latvian authorities applied this margin to each of the species (more restrictive). Therefore, species misreporting is more likely to happen since Regulation 2016/1139 entered into force.

Even though the recent implementation of the LZIKIS system has improved the SES capacity to inspect processing plants and detect problems of underreporting certain species using the 10% margin of tolerance, the concerns expressed by the SES representative in this regard, together with the fact that, as explained in SIa, it cannot be considered that there is a strategy in place for managing all secondary species, prevents the team to score 100 at this SI. **SG100 is not met.**

Based on the concern expressed above the team decided to **set a non-binding recommendation** to the fishery. See **Section 5.2.4** for more details.

d	Shark finning			
	Guide post	It is **likely** that shark finning is not taking place.	It is **highly likely** that shark finning is not taking place.	There is a **high degree of certainty** that shark finning is not taking place.
	Met?	**NA**	**NA**	**NA**
Rationale				

There are no shark catches in the sprat fishery according to both fishery-dependent and fishery-independent sources of information analysed in this assessment (**section 7.3.3.1**). Therefore, this SI is **not applicable**.

e	Review of alternative measures to minimise mortality of unwanted catch			
	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of **unwanted** catch of main secondary species.	There is a **regular** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of **unwanted** catch of main secondary species and they are implemented as appropriate.	There is a **biennial** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of **unwanted** catch of all secondary species, and they are implemented, as appropriate.
	Met?	**NA**	**NA**	**NA**

Rationale

Both fishery-dependent and fishery-independent sources of information analyzed in this assessment (**section 7.3.3.1**) confirmed that sprat and herring constitute over 97% of the total catches. Besides, all landings are used either for direct human consumption or for fish meal and fish oil. Furthermore, the EU landing obligation (in force since January 2015 for the pelagic species) requires all European fleets to land all catches from species managed through quotas (in this case it would affect cod). Hence, the assessment team is confident that there is no unwanted catch in the sprat fishery.

Consequently, there is no or negligible unwanted catch of secondary species. In these circumstances, GSA3.5.3 (MSC Standard v2.01) sets out that this scoring issue may not be scored.

References

COUNCIL REGULATION (EC) No 2187/2005; COUNCIL REGULATION (EC) No 1224/2009; EU Regulation 2016/1139; EU Regulation 2020/1781; Council Regulation (EC) No 1224/2009.

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

PI 2.2.2 – Scoring Calculation for each scoring element.

The Combining scoring per elements set out in Table 4 (FCP v2.2) was used to determine the PI score. All elements meet SG80; a few achieve higher performance, but most do not meet SG100.

Scoring element	SIa	SIb	SIc	SId	SIe	PI score
Flounder	100	80	80	NA	NA	**85**
Rest	80	80	80	NA	NA	

PI 2.2.3 – Secondary species information

PI 2.2.3		Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impacts on main secondary species			
	Guide post	Qualitative information is **adequate to estimate** the impact of the UoA on the main secondary species with respect to status. OR **If RBF is used to score PI 2.2.1 for the UoA:** Qualitative information is adequate to estimate productivity and susceptibility attributes for main secondary species.	Some quantitative information is available and **adequate to assess** the impact of the UoA on main secondary species with respect to status. OR **If RBF is used to score PI 2.2.1 for the UoA:** Some quantitative information is adequate to assess productivity and susceptibility attributes for main secondary species.	Quantitative information is available and **adequate to assess with a high degree of certainty** the impact of the UoA on main secondary species with respect to status.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

Quantitative information is available and adequate to assess with a high degree of certainty the impact of the UoA on main secondary species with respect to status. The information available to assess the catch of secondary non-target species by the UoA is described in **section 7.3.3.1**. As previously noted, catches of secondary species are negligible and only minor secondary species have been defined. An MSC interpretation ("Scoring P2 species in absence of impact", https://mscportal.force.com/interpret/s/article/Scoring-P2-species-in-absence-of-impact-2-1-PI-2-2-1527586956973) specifies that it is necessary to, "ensure that there is adequate information to determine the impact of the UoA on primary species (look at whether information collected is adequate to show no impact on primary species)." The example used in the interpretation relates to primary species but the same principle also applies to secondary species.

Therefore, **SG60, SG80 and SG100 are met**.

b	Information adequacy for assessment of impacts on minor secondary species			
	Guide post			Some quantitative information is adequate to estimate the impact of the UoA on minor secondary species with respect to status.
	Met?			**Yes**
Rationale				

Taking into consideration the available information used to classify minor secondary species (as well as all the other species) and that catches of these stocks by this UoA are extremely low, which is consistent with our understanding of

the fishing practice used, it is considered that the information is adequate to estimate the impact of the UoA on this scoring element with respect to status (i.e., negligible). **SG100 is met.**

	Information adequacy for management strategy			
c	Guide post	Information is adequate to support **measures** to manage **main** secondary species.	Information is adequate to support a **partial strategy** to manage **main** secondary species.	Information is adequate to support a **strategy** to manage **all** secondary species, and **evaluate** with a **high degree of certainty** whether the strategy is **achieving its objective**.
	Met?	**Yes**	**Yes**	**No**

Rationale

As noted in SIa, information is available on catches of non-target species from the UoA. Although there are some uncertainties around the catch composition data for the trawl fisheries, the available information is that there are no main secondary species in the UoA and catches of non-target species are consistently very low in the UoA. This information is considered adequate to **meet the SG60 and 80 requirements**. **SG100 is not met** because this information is not adequate to support a strategy to manage all secondary species (i.e., both “main” and “minor”) and evaluate with a high degree of certainty whether the strategy is achieving its objective.

References

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**95**
Condition number (if relevant)	**NA**

PI 2.3.1 – ETP species outcome

PI 2.3.1		The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Effects of the UoA on population/stock within national or international limits, where applicable			
	Guide post	Where national and/or international requirements set limits for ETP species, the **effects of the UoA** on the population/ stock are known and **likely** to be within these limits.	Where national and/or international requirements set limits for ETP species, the **combined effects of the MSC UoAs** on the population /stock are known and **highly likely** to be within these limits.	Where national and/or international requirements set limits for ETP species, there is a **high degree of certainty** that the **combined effects of the MSC UoAs** are within these limits.
	Met?	**Yes**	**No**	**No**
Rationale				

As seen under **section 7.3.3.1**, different sources of information were analysed in order to elaborate a complete list of species for which interactions with the UoA have been recorded. The list of species is presented in **Table 7.3.3,** and it only includes 1 ETP species, the sea lamprey (*Petromyzon marinus*).

A list of all other possible ETPs (including seabirds, marine mammals and fish species) that **potentially** may interact with the Latvian pelagic trawl fishery targeting sprat in the Baltic Sea is shown in **Table 7.3.6.** Details on all the ETP species considered can be found in **Section 7.3.3.5**. As there are no international limits set for any of these species, apart from the Harbour porpoise, they will be assessed in SIb. The harbour porpoise, however, is assessed here.

Harbour porpoise (*Phocoena phocoena*):
Different studies indicate that there are two populations of harbour porpoises in the Baltic Sea area, one in the western Baltic Sea encompassing the Kattegat, the Belt Sea, the Sound and the German Baltic and a second one in the proper Baltic Sea (Evans and Teilmann, 2009; Sveegaard et al., 2015; ICES, 2018e). An extensive Static Acoustic Monitoring (SAM) approach was used for collecting data on population size and spatial and temporal distribution of harbour porpoises in the Baltic (SAMBAH, 2016). The results found a clear separation of two population clusters during summer (**Figure 7.3.13**).

The harbour porpoise population in the Baltic proper has declined dramatically over the past 100 years and there are indications that this population is facing extinction (classified as Critically Endangered (CR C2a(ii)) under the IUCN Red List 2008). The number of mature individuals is estimated to be less than 250 and a continuing decline of at least 25% within one generation is assumed (HELCOM, 2013d). The most recent information on abundance of harbour porpoises in the Western Baltic showed a reduction from 28.000 in 1994 to 11.000 individuals in 2005 (this subpopulation is classified as Vulnerable by IUCN and HELCOM). IUCN and HELCOM classifications, however, are based on very uncertain abundance estimates. Results from the most recent acoustic monitoring carried out within the SAMBAH project estimated a population of 497 animals (95% CI 80-1,091) in the Baltic proper, and more than 21.390 porpoises (95% CI 13.461-38.024) in the Western Baltic.

ASCOBANS (2012) advised that, to be sustainable, the maximum annual anthropogenic induced mortality (including bycatch) for harbour porpoises should not exceed 1.7% of the population size (Resolution No. 3, Incidental Take of Small Cetaceans, Bristol 2000). This means that the maximum annual limit would be 8.5 individuals for the Baltic proper and 663 individuals for the Western Baltic.

Recently, ICES has provided advice on emergency measures to prevent bycatch of the critically endangered Baltic Proper harbour porpoise (ICES, 2020d). For the Baltic Proper harbour porpoise, ICES advises a combination of spatial-temporal closures and application of pingers in static nets (i.e., trammelnet, gillnet, and semi-driftnet) fisheries. If the

Baltic Proper harbour porpoise management unit is to meet the management objective of achieving bycatches below the potential biological removal (PBR) limit (< 0.7 individuals per year), all fisheries of concern should be closed. ICES notes that it remains uncertain whether this management unit constitutes a population or a subpopulation. However, as stated above, this advice is not relevant for the fishery under assessment which uses trawls.

As a result of the implementation of Regulation (EC) 812/2004, Latvia implemented in 2006 a domestic monitoring program on incidental catches of cetaceans which involves deployment of observers on both pelagic and gillnet Latvian fishing vessels. No incidental catches of cetaceans were observed between 2010 and 2020, as it has been the case since the program started in 2006.

In fact, due to the absence of incidental catches since 2006, BIOR concludes that the cetaceans monitoring has no practical significance and is an unnecessary expenditure of financial and human resources. Every year, BIOR suggests on behalf of Latvia to stop this monitoring program and, instead of intensive observations of cetaceans, proposes using the information from the National fisheries data collection programs or from other available data sources. Latvia proposes that the monitoring program on incidental catches of cetaceans should be replaced with the gathering of information from other available data sources in the areas where there have been no observations of cetaceans for several continuous years of the monitoring program.

Harbour porpoises are threatened by a variety of anthropogenic activities and impacts (**Figure 7.3.14**) (ICES, 2019d). Among these, bycatch in fisheries is of greatest concern (Berggren 1994; Vinther 1999; Skóra & Kuklik 2003), being the bottom-set gillnets the responsible for most bycatches (ICES, 2019d). Based on the information presented above, the team considers that the effects of the UoA on the Baltic proper population of harbour porpoise are known and likely to be below the limits established by ASCOBANS (8.5 individuals). Thus, **SG60 is met**.

During the 2018 Working Group on Bycatch of Protected Species (WGBYC) (ICES, 2018d) an evaluation on the bycatch risk posed by different fishing gears to protected species in the Baltic Sea was conducted. Risk assessment for a species group to being bycaught by a specific gear type was done by expert judgement. Regarding the harbour porpoise, the bycatch risk factor for trawls was kept at one, except for all pelagic trawls, which were given a two. It is known that some bycatch occurs in trawls (Lunneryd et al., 2004), but from this information the bycatch risk cannot be assigned to a specific métier. In Polish data, one bycatch could be assigned to a pelagic trawl (Skóra and Kuklik, 2003), which was the reason why the WGBYC gave a risk factor of 2 to pelagic trawls. Nevertheless, catches of harbour porpoises in pelagic trawls is considered to be very rare and none have been reported from the Latvian fishery over several years.

Moreover, in the 2019 WGBYC (ICES, 2019g), it was stated that estimating the annual bycatch of the Baltic Proper harbour porpoise is not possible as bycatch events are extremely rare due to the low abundance of the Baltic harbour porpoise. The WGBYC database from 2006 until 2018 in the ICES subdivision 24 to 32, holds 7258 monitored DaS across métiers and only one recorded bycaught harbour porpoise in a bottom trawl.

The 2020 WGBYC report states that the Latvian national monitoring programme of incidental catches of cetaceans in 2018 covered observations of 508 trips in pelagic trawl fisheries (ICES, 2020f). The observations were carried out by 5 observers on 13 different vessels. No incidental bycatch of cetaceans was observed in 2018. Reported observer coverage of the pelagic trawl fishery (12–18 m vessels) towing time was 8.6% or 9% of hauls in area 27.3.d (Subdivision 8.1–Gulf of Riga). For the vessels 24–40 m in Division 27.3.d (subdivisions 25, 26 and 28.2) the corresponding towing time and haul coverage was 8.6% in both cases. The covered days at sea for vessels 12–18 m and 24–40 m length was 7.5% and 8.9%, respectively.

With regard to cumulative impacts, as of January 2022, there are five other MSC certified fisheries in the Baltic Sea overlapping with the UoA under assessment, i.e., NZRO Gulf of Riga herring and sprat trawl fishery, FFA Finland Baltic herring and sprat trawl and trap fishery, Denmark, Estonia, Germany, Sweden Baltic herring and sprat trawl and purse seine fishery, Poland herring and sprat fishery, and the Poland flatfish trawl and gillnet fishery.

The team assessing the Denmark, Estonia, Germany, Sweden Baltic herring and sprat fishery confirmed during harmonization meetings held during the preparation of the second surveillance audit report (and drafts shared with the BV team) that observer coverage in those fisheries was below 5%. Furthermore, the ICES WGBYC noted that while bycatch in pelagic trawls are considered extremely rare, observing 5% of pelagic trawl effort in the Baltic cannot provide estimates of total cetacean bycatch with an acceptable level of uncertainty.

SG80 level requires justification that cumulatively all MSC fisheries (across Latvia, Finland, Denmark, Sweden, Germany Estonia, and Poland) are highly unlikely to have an impact above the acceptable limit of 8.5 harbour porpoises. Across seven countries, this equates to 1.2 individuals each.

On the basis of the available evidence, including frequency / proportion of observer coverage, the combined effects of the UoAs, covering Latvia, Finland, Sweden, Denmark, Germany, Estonia and Poland cannot be considered to be highly likely to be within the ASCOBANS limit of 8.5 individuals. **SG80 is not met.**

b	Direct effects			
	Guide post	Known direct effects of the UoA are likely to not **hinder recovery** of ETP species.	Direct effects of the UoA are **highly likely** to not **hinder recovery** of ETP species.	There is a **high degree of confidence** that there are no **significant detrimental direct effects** of the UoA on ETP species.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

As shown in Tables **7.3.3** and **7.3.6**, apart from the Harbour porpoise, which has already been assessed under SIa, the additional possible ETP species that were found:

- Sea lamprey (Petromyzon marinus)
- Atlantic Salmon (Salmo salar)
- Twaite shad (Alosa fallax)
- Grey seal (Halichoerus grypus)
- Ringed seal (Pusa hispida botnica)
- Red-throated diver (Gavia stellate)
- Black-throated diver (Gavia arctica)
- Common shelduck (Tadorna tadorna)
- Common merganser (Mergus merganser)
- Long-tailed duck (Clangula hyemalis)
- Velvet scoter (Melanitta fusca)
- Little gull (Larus minutus)
- Great cormorant (Phalacrocorax carbo)

Fish species:

With regard to the Atlantic salmon and the Twaite shad, these species are not classified as ETPs under MSC requirements and furthermore, no impacts were recorded with the UoA, therefore it was concluded that neither the Atlantic salmon, nor the Twaite shad were going to be considered in the present report (for further details, see **Section 7.3.3.5**).

Regarding the Sea lamprey, this species is considered rare and highly sensitive to human activities according to HELCOM (HELCOM, 2013c). In the northern Baltic Sea, it is caught irregularly: in Finland, Russia and Latvia the species is not an annual catch, although it is caught almost annually in Estonia. For example, it has been reported only eight times since 1927 in the Russian part of Gulf of Finland (HELCOM, 2013c).

A small population with a suspected continuing decline and less than 1,000 individuals in the largest subpopulation, lead HELCOM to classify this species as Vulnerable (HELCOM, 2013c). Also, this species is included in Annex II of the European Habitat Directive (Council Directive 92/43/EEC).

No interactions between the UoA and sea lampreys were reported by the client. And, even though BIOR recorded this species within the catch composition of their biological samples collected during 2013-2020 (total of 136 samples) from the commercial pelagic trawl fishery in the Baltic Sea, just 2 individuals were caught (**Table 7.3.2**).

Furthermore, there have been none or very small amounts of catches recorded in the fish catch statistics for the Baltic Sea (ICES SD 24-26, 28.2, 29, 32) from the fishery-independent Estonian-Polish BIAS survey conducted by R/V "Baltica", i.e., 0.002%, 0.03%, 0.00% and 0.00% of the catches for Estonia - SD28.2, 29, 32 - in 2017-2020, respectively (ICES, 2018f; 2019h; 2021h). In addition, there are no fisheries targeting this species in the Baltic Sea. The assessment team concluded that **SG60, SG80 and SG100 are met.**

Seabirds:

The absence of reports of any direct impact (bycatch) of seabirds by the UoA (or any other vessel fishing for sprat), together with the low risk assessed for pelagic trawl by the ICES WGBYC (ICES, 2018d) and HELCOM (http://www.helcom.fi/action-areas/fisheries/ecosystem-effects/bycatch), and the fact that none of the stakeholders interviewed during the first certification cycle expressed any concern regarding seabirds, provides a high degree of confidence that there are no significant detrimental direct effects of the UoA on ETP bird species. **SG60, SG80 and SG100 are met**.

Seals:
Two species of seals were identified as possible ETPs (**Table 7.3.6**): the grey seal (*Halichoerus grypus*) and the Baltic ringed seal (*Pusa hispida botnica*).

As explained in section 7.3.3.5, according to SA3.1.5 of the MSC Fisheries Standard v2.01, both species are classified as ETP species, as they are included in the Habitats Directive (which can be considered a “national” legislation following the interpretation https://mscportal.force.com/interpret/s/article/Should-species-that-are-listed-under-the-prohibitions-set-out-in-EU-Fisheries-Regulations-be-regarded-as-ETP-species-SA3-1-5-1527262010509), even though they are not recognised by the Latvian legislation as ETP species, are not listed in CITES or the CMS, and even though they are “out-of-scope” species, they are not listed as vulnerable, endangered or critically endangered in the IUCN Red list. However, as no interactions have ever been reported from the UoA fishery dependent or independent (BIOR) reports and are neither expected to do so based on the known distribution of the seals, **SG60, SG80 and SG100 are met**.

	Indirect effects			
C	Guide post		Indirect effects have been considered for the UoA and are thought to be **highly likely** to not create unacceptable impacts.	There is a **high degree of confidence** that there are no **significant detrimental indirect effects** of the UoA on ETP species.
	Met?		**Yes**	**No**
Rationale				

Marine mammals:

A matrix of threats to the predominant marine mammal species in each of the MSFD regional seas was compiled (ICES, 2019d). The one specific for the Baltic Sea is presented in **Figure 7.3.14**. From the matrix obtained, it can be observed that indirect effects from fishing on marine mammals include underwater noise (for harbour porpoise) and prey depletion.

The commercial exploitation of fish & shellfish stocks, including smaller scale harvesting, angling and scientific sampling are also threats to marine mammals. Ecological consequences include the sustainability of stocks, impacting energy flows through food webs and the size and age composition within fish stocks (SAMBAH, 2016). The removal of prey species that are important in the diet of these mammals could have an impact on individuals and is probably a major determinant of spatiotemporal variation in species distributions, but impacts at the population level are not clear and are considered more difficult to be determined (SAMBAH, 2016; ICES, 2019d).

There has been a large increase in ambient noise in recent years, particularly in the northern hemisphere. Even though evidence of direct mortality does not exist, there is concern on the individual fitness and population consequences of displacement and change of behaviour (SAMBAH, 2016).

***Harbour Porpoise**:*

Santos and Pierce (2003) found that harbour porpoise's diet is similar to many piscivorous fish and that harbour porpoises predate on a wide range of species including herring (*Clupea harengus*).
Herring (*Clupea harengus*) is considered a key prey species in the Baltic Sea, although other species such as sprat (*Sprattus sprattus*) or small specimens of cod (*Gadus morhua*) are also important preys (Read, 1999; Börjesson and Read, 2003; Lockyer and Kinze, 2003). The herring stocks decreased steadily since the 1970s, but this trend changed at the turn of the century, and they are now increasing (Casini *et al*., 2008).
All this suggests that prey should not be a limiting factor for the harbour porpoise in the Baltic Sea. **SG80 is, therefore, met.**

Börjesson et al (2003), however, considered the food competition between cod fishery and porpoises as a possible concern. Thus, **not meeting SG100.**

***Seals**:*

As mentioned in SIb, and according to SA3.1.5 of the MSC Fisheries Standard v2.01, both seal species are classified as ETP species, as they are included in the Habitats Directive.

For the Baltic Sea, the effect of removal of target and non-target species (prey depletion) was considered a medium threat to marine mammals (including seals, harbour porpoise) (ICES, 2015). Moreover, HELCOM has reviewed and identified threats to the Baltic seal populations (HELCOM, 2013e). With the exception of grey seals, prey depletion is not identified as a major threat to the populations in the Baltic. Grey seals are generalist feeders taking a wide variety of prey including sandeels, gadoids (cod, whiting, haddock, ling) and flatfish (plaice, sole, flounder, dab) (ICES, 2015). Amongst these sandeels are typically the most important. Diet varies seasonally and from region to region. Taking into account these preferred forage species it is unlikely the UoA is posing a risk to grey seals. Therefore, **meeting SG80**.

However, as there is not much research into this in the Baltic, it cannot be said there is a high degree of confidence that there are no significant detrimental indirect effects of the UoA on ETP species. SG100 is not met for seals.

Sea lamprey:

There are several threat factors for the sea lamprey (HELCOM, 2013b): (i) construction of weirs and dams in river, (ii) eutrophication of the spawning habitats in rivers (since larvae survive only on well oxygenated sand bottoms), (iii) fisheries outside the HELCOM area (sea lamprey as target species, e.g. in Portugal, France), and (iv) fisheries on sea lamprey's prey species (large fish).

This information, therefore, shows that there are no significant detrimental indirect effects of the UoA on the sea lamprey, hence, **SG80 is met**.

However, due to the low observer coverage caused by the COVID-19 pandemic situation (**Table 7.3.2**), the team cannot conclude with a high degree of confidence that there are no significant detrimental indirect effects of the UoA on the sea lamprey, therefore, **SG100 is not met**.

Seabirds:

ICES Ecosystem Overview from 2018 (ICES, 2019e) states that "Three species that feed mainly on herring and sprat (common guillemot, razorbill, and Arctic tern) have increased in number over recent decades. White-tailed sea eagle and great cormorant have increased, following the cessation of hunting and the decline in persistent pollutants", which shows that food is available and that herring/sprat at present are not constraining sea birds. This information provides a high degree of confidence that there are no significant detrimental indirect effects of the UoA on ETP bird species. **SG60 and SG80 are met**.

Ghost fishing:

Gear loss is not a significant issue in the mid-water trawl fishery, in the Baltic the main fisheries affected by gear loss are fixed gillnets (mostly) and bottom trawls (MARELITT, 2019).

However, due to the low observer coverage caused by the COVID-19 pandemic situation (**Table 7.3.2**), the team cannot conclude with a high degree of confidence that there are no significant detrimental indirect effects of the UoA on ETP seabird species. **SG100**, therefore, **is not met.**

References

ASCOBANS, 2012.
Berggren, 1994.
Börjesson and Read, 2003.
Börjesson et al., 2003.
Casini et al., 2008.
Council Directive 92/43/EEC; Council Regulation (EC) No 812/2004.
Evans and Teilmann 2009.
HELCOM, 2013b; 2013e
ICES, 2015; ICES, 2018e; ICES, 2018f; ICES, 2018d; ICES, 2019d; ICES, 2019e; ICES, 2019g
Lundström et al. 2007.
Lunneryd et al., 2004.
Lockyer and Kinze, 2003.
MARELITT, 2019
Read, 1999.
SAMBAH, 2016.
Santos and Pierce, 2003.
Skóra and Kuklik, 2003.
Sveegaard et al., 2015;
Vanhatalo et al., 2014;
Vinther, 1999.

Draft scoring range	**60-79**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**75**
Condition number (if relevant)	**1**

PI 2.3.1 – Scoring Calculation for each scoring element.

The Combining scoring per elements set out in Table 4 (FCP v2.2) was used to determine the PI score. All elements meet SG60; most achieve higher performance, at or exceeding SG80; only a few fail to achieve SG80 and require intervention action.

Scoring element	SIa	SIb	SIc	PI score
Harbour porpoise	60	N/A	80	**75**
Grey seal	N/A	100	80	
Ringed seal	N/A	100	80	
Sea lamprey	N/A	100	80	
Seabirds	N/A	100	80	

PI 2.3.2 – ETP species management strategy

PI 2.3.2		The UoA has in place precautionary management strategies designed to: - meet national and international requirements; - ensure the UoA does not hinder recovery of ETP species. Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place (national and international requirements)			
	Guide post	There are **measures** in place that minimise the UoA-related mortality of ETP species, and are expected to be **highly likely to achieve** national and international requirements for the protection of ETP species.	There is a **strategy** in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to be **highly likely to achieve** national and international requirements for the protection of ETP species.	There is a **comprehensive strategy** in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to **achieve above** national and international requirements for the protection of ETP species.
	Met?	**Yes**	**Yes**	**No**
Rationale				

As explained in PI 2.3.1 SIa, from all the species identified as ETP, the harbour porpoise (*Phocoena phocoena*) is the only one subject to national or international requirements for its protection. The present SI is therefore only scored for this species, while the other species are scored in SIb (see MSC FCP at SA3.11.2).

Harbour porpoise:

In the EU, harbour porpoises are under strict protection, because they are not only listed in Annex II, but also in Annex IV of the EU Habitats Directive (92/43/EEC).

Under Annex II of the Habitats Directive, the harbour porpoise is listed as animal species of community interest whose conservation requires the designation of Special Areas of Conservation (SACs). These obligations are met through the Natura 2000 program (EU) and the HELCOM program for protected areas. However, there are no specific areas identified for harbour porpoises and no SAC with these objectives are defined.

Article 12 of the Habitats Directive establishes that Member States shall establish a system to monitor the incidental capture and killing of the animal species listed on Annex IV. To comply with the provision of Article 12, the EC adopted Regulation 812/2004, which is now repealed by Regulation (EU) 2019/1241. This Regulation obliges the use of deterrents (e.g., pingers) in specific fisheries to avoid contact with cetaceans (mainly gillnets) and also requires monitoring by observers of incidental catches in specific gears.

In addition, Article 2 of the basic CFP Regulation 1380/2013 sets out obligations to minimise the impacts of fishing on marine ecosystems. Its Preamble states the following: (11) The CFP should contribute to the protection of the marine environment, to the sustainable management of all commercially exploited species, and in particular to the achievement of good environmental status by 2020, as set out in Article 1(1) of Directive 2008/56/EC of the European Parliament and of the Council; (13) An ecosystem-based approach to fisheries management needs to be implemented, environmental impacts of fishing activities should be limited and unwanted catches should be avoided and reduced as far as possible. Even though there are a number of gear restrictions in effect in the Baltic fisheries to avoid cetacean by-catch - among which the most noticeable are the driftnet ban and the requirement to use pingers on gillnets -, none of these affect the sprat fishery.

Harbour porpoise is also part of the ASCOBANS, which has specifically focused on the recovery of the proper Baltic Sea population with the enactment of a recovery plan for Baltic Sea, the so called Jastarnia Plan (ASCOBANS, 2016), and the conservation plans for the Western Baltic, the Belt Sea and Kattegat (ASCOBANS, 2012) and for the North Sea (ASCOBANS, 2009). They list recommendations and mitigation actions concerning threats (including fishing) to the species and its habitats and state the need for monitoring population trends, in order to meet the requirements in the EU Habitats Directive and Regulation (EU) 812/2004 (now repealed by Regulation (EU) 2019/1241). The Jastarnia Plan serves as a framework for international collaboration towards achieving ASCOBANS' interim goal of restoring the harbour porpoise population to at least 80 per cent of carrying capacity, and, ultimately, a favourable conservation status for Baltic harbour porpoises.

Even though Latvia is not a Party to the ASCOBANS convention, many organisations of which Latvia is a Party to are, thus, it has obligations to provide information relevant to harbour porpoises. Examples of some of these instruments include the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Baltic Marine Environment Protection Commission, or the International Council for the Exploration of the Sea (ICES) through its Working Group on Marine Mammal Ecology (WGMME).

Moreover, the Latvian regulations regarding commercial fishing in territorial waters and EEZ (Cabinet Regulation N. 296 adopted on 2 May 2007) details the duties of fishers (Section II), and Article 8.10 states that fishermen shall "inform BIOR regarding the catching of marked or rare species of fish and birds, as well as marine mammals (for example, harbour porpoises) and to perform the relevant entries in the fishing logbook". The client confirmed that no incidental catches of cetaceans (including harbour porpoise) have been recorded/reported by the UoA vessels.

From all the above, it is clear that there is a strategy for avoiding by-catch and for avoiding ETP species in particular. Overall, the technical measures identified in the various EU directives protect against unwanted by-catch. The operational practise does not lead to such by-catch and therefore there is no specific national regulation in place. Management keeps the situation under observation through the ICES WGBYC (harbour porpoise) and the BIOR observer programs. The assessment team concludes that **SG80 is met.**

The HELCOM action plan and the EU regulations, which are the basis for the strategy to avoid ETP species, are defining international standards and therefore, by definition, not attempting to achieve above national and international requirements for the protection of ETP species, hence, **SG 100 is not met**.

	Management strategy in place (alternative)			
b	Guide post	There are **measures** in place that are expected to ensure the UoA does not hinder the recovery of ETP species.	There is a **strategy** in place that is expected to ensure the UoA does not hinder the recovery of ETP species.	There is a **comprehensive strategy** in place for managing ETP species, to ensure the UoA does not hinder the recovery of ETP species.
	Met?	**Yes**	**Yes**	**No**
Rationale				

In this SI, ETP species identified in **section 7.3.3.5** other than the harbour porpoise will be assessed.

Sea Lamprey:

No interactions between the UoA and sea lampreys were reported by the client. And, even though, BIOR recorded this species within the catch composition of their biological samples collected during 2013-2020 (total of 136 samples) from the commercial pelagic trawl fishery in the Baltic Sea, just 2 individuals were caught.

The measures in place, which are expected to ensure that the UoA does not hinder the recovery of ETP species, include the pelagic trawl fishing gear currently in use which is considered less likely than other métiers to have a direct impact on ETPs and is expected to not have a significant impact on lamprey. Moreover, fishing with trawls is prohibited at

locations where the depth does not exceed 20 m. In addition, fishermen have an obligation to report all bycatch including other fish and marine mammals, and vessel inspections at sea and at-sea observers are also measures monitoring the ongoing fishing activities. The team concludes **the SG60 requirement is met**.

There are international agreements, EU and national legislations in place, to ensure that the UoA does not hinder the recovery of the ETP species. In particular, the EU Habitats Directive (which sets out a framework for the creation of designated Special Areas of Conservation (SACs) for the protection of species listed on Annex II, and also habitats listed on Annex I which are of conservation importance at a European scale); the EU CFP (which addresses ecosystem impacts), and the Latvian Law on the Conservation of Species and Biotopes (available at: http://extwprlegs1.fao.org/docs/pdf/lat73461ENG.pdf).

In addition, Cabinet Regulation No. 296 states that one of the fishers' duties is "to inform the State scientific institute "Institute of Food Safety, Animal Health and Environment" (BIOR) regarding the catching of marked or rare species of fish and birds, as well as marine mammals (for example, harbour porpoises) and to perform the relevant entries in the fishing logbook".

Latvian scientific authorities also monitor and report annually different types of fishery information including bycatch. This information collection and analysis form part of the strategy to ensure that the UoA does not hinder recovery. Annual scientific surveys throughout the fishery also provide a means of verification of any changes in species distribution.

Given the abovementioned, the obligation to report, ongoing inspection and scientific surveys to monitor changes, significant other scientific studies which evaluated impacts to these ETP species, ongoing evaluation throughout the Baltic, and that there has only been very low lamprey bycatch, the team concluded there is a strategy to ensure the UoA does not hinder the recovery of ETP species. There is, however, no comprehensive strategy focused on this species (nor an identified need for) to achieve this, therefore the team concludes that **SG80 is met but not SG100**.

Seabirds:

The absence of reports of any direct impact (bycatch) of seabirds by the UoA (or any other vessel fishing for herring), together with the low risk assessed for pelagic trawl by the ICES WGBYC (ICES, 2018f) and HELCOM (http://www.helcom.fi/action-areas/fisheries/ecosystem-effects/bycatch), shows that the strategy in place is ensuring the UoA does not hinder the recovery of seabird ETP species. **SG60 and SG80 are met**.

There is, however, no comprehensive strategy focused on the seabird species identified to achieve this, therefore the team concludes that **SG100 is not met**.

	Management strategy evaluation			
C	Guide post	The measures are **considered likely** to work, based on **plausible argument** (e.g. general experience, theory or comparison with similar fisheries/species).	There is an **objective basis for confidence** that the measures/strategy will work, based on **information** directly about the fishery and/or the species involved.	The strategy/comprehensive strategy is mainly based on information directly about the fishery and/or species involved, and a **quantitative analysis** supports **high confidence** that the strategy will work.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The fact that there are hardly interactions between the ETP species and the UoA, provides an objective basis for confidence that the measures/strategy work.

In addition, Latvia is a member state and participating member of the ICES Working Group on Bycatch of Protected Species (WGBYC). The 2020 WGBYC report states that the Latvian national monitoring programme of incidental catches of cetaceans in 2018 covered observations of 508 trips in pelagic trawl fisheries (ICES, 2020f). The observations were carried out by 5 observers on 13 different vessels. No incidental bycatch of cetaceans was observed in 2018. Reported observer coverage of the pelagic trawl fishery (12–18 m vessels) towing time was 8.6% or 9% of hauls in area

27.3.d (Subdivision 8.1–Gulf of Riga). For the vessels 24–40 m in Division 27.3.d (subdivisions 25, 26 and 28.2) the corresponding towing time and haul coverage was 8.6% in both cases. The covered days at sea for vessels 12–18 m and 24–40 m length was 7.5% and 8.9%, respectively. The lack of observed bycatch over the full decadal time period indicates that cetacean monitoring under Reg. 812/2004 has no practical significance in Latvian fisheries. Traditionally, the Latvian pelagic trawl fishery targets sprat and herring, and 90–93% of effort is allocated to subdivision 28.2 and 28.1. Based on an annual coverage of 8–10% of the pelagic fishery in the Baltic since 2006 by Latvia, and the lack of reports from fishers of cetacean bycatch, Latvia reiterates its previous statement that continuation of a cetacean bycatch program is an unnecessary expenditure of financial and human resources (ICES, 2020f).

Moreover, following Cabinet Regulation N. 296, no incidental catches of sea lamprey, seabirds, or marine mammals (including harbour porpoises) have been recorded/reported by the UoA vessels. **Therefore, SG60 and SG80 are met.**

However, in the absence of a quantitative analysis of the strategy to support a high level of confidence and taking into account the precarious state of the harbour porpoise stock, **SG100 is not met.**

	Management strategy implementation			
d	Guide post		There is some **evidence** that the measures/strategy is being implemented successfully.	There is **clear evidence** that the strategy/comprehensive strategy is being implemented successfully and **is achieving its objective as set out in scoring issue (a) or (b).**
	Met?		**Yes**	**No**
Rationale				

There is evidence that the measures/strategy is being implemented successfully, i.e., the fishing gear used; the location reported and monitored; the obligation to report catches for which sanctions can be raised if significant variation or misreporting is discovered; BIOR continues to provide annual reports on behalf of Latvia under the DCF; the monitoring of the Natura 2000 network; the deployment of observers to monitor incidental catches of cetaceans; and the fact that not only the client is aware of their obligation to report any interaction with seabirds, fish and marine mammals in their logbooks, but no interactions have been registered. Therefore, **SG80 is met**.

There are no specific programs designed to explicitly confirm that the strategy for this UoA is achieving its objectives, hence **SG100 is not met**.

	Review of alternative measures to minimise mortality of ETP species			
e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species.	There is a **regular** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species and they are implemented as appropriate.	There is a **biennial** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality ETP species, and they are implemented, as appropriate.
	Met?	**Yes**	**Yes**	**No**
Rationale				

In the Baltic Sea, protected and endangered species are monitored through the WGBYC and the collection of protected species bycatch data through the DCF as part of the Multiannual Plan (EU-MAP - Regulations (EU) 2016/1139 and 2019/472). The WGBYC, which has been meeting regularly since 2009, reports and reviews the effectiveness and

practicality of alternative measures to minimize UoA-related mortality of ETP species. None has been deemed necessary or prescribed for the UoA fleet.

In addition, Latvia has participated in dedicated studies and is an active member of the ICES WGBYC and WGMME.

Moreover, even though the UoA fishery can potentially interact with the ETP species identified above (i.e., harbour porpoise, sea lamprey and seabirds), apart from a very low interaction observed by BIOR for sea lamprey, no catches of any of the other species have been recorded, even though their national legislation obliges them to do so.

Furthermore, as explained in PI 2.3.1 SIc, gear loss is not a significant issue in the mid-water trawl fishery, in the Baltic the main fisheries affected by gear loss are fixed gillnets (mostly) and bottom trawls (MARELITT, 2019).

SG60 and SG80 are, therefore, met.

In the absence of a biennial review of alternative measures, **SG100 is not met**.

References

ASCOBANS, 2016; ASCOBANS, 2012; ASCOBANS, 2009;
Cabinet Regulation No. 296; COUNCIL DIRECTIVE 92/43/EEC; Council Regulation (EC) No 812/2004; Regulation (EU) No 1380/2013; REGULATION (EU) 2016/1139; Regulation (EU) 2019/1241.
ICES, 2016; ICES, 2018f; ICES, 2020f
MARELITT, 2019

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**80**
Condition number (if relevant)	**NA**

PI 2.3.3 – ETP species information

PI 2.3.3		Relevant information is collected to support the management of UoA impacts on ETP species, including: - Information for the development of the management strategy; - Information to assess the effectiveness of the management strategy; and - Information to determine the outcome status of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impacts			
	Guide post	Qualitative information is **adequate to estimate** the UoA related mortality on ETP species. **OR** **If RBF is used to score PI 2.3.1 for the UoA:** Qualitative information is **adequate to estimate productivity and susceptibility** attributes for ETP species.	Some quantitative information is **adequate to assess** the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species. **OR** **If RBF is used to score PI 2.3.1 for the UoA:** Some quantitative information is **adequate to assess productivity and susceptibility attributes** for ETP species.	Quantitative information is available to assess with a high degree of certainty the **magnitude of UoA-related impacts, mortalities and injuries and the consequences for the status** of ETP species.
	Met?	**Yes**	**Yes**	**No**
Rationale				

Qualitative and quantitative information on mortality of ETP species is available from stakeholders, the ICES WGBYC, ASCOBANS and the DCF. There is information on the status of the ETP species, the quality of which is evaluated in the Species Information Sheets that accompany the HELCOM Red List report (HELCOM, 2013d). This information is applicable to all the ETPs identified in this assessment.

Through Cabinet Regulation No. 296, incidental catches of marked or rare fish and birds, as well as marine mammals have to be reported in the fishing logbooks.

In particular, as harbour porpoise is the only marine mammal ETP species that may occur in the fishery area based on the known distribution of the seals and the harbour porpoise, significant attention is given to harbour porpoise research and the ICES WGBYC work, which is primarily driven by the EU regulation 812/2004 (now repealed by Regulation (EU) 2019/1241), and which provides annual reviews of their status. There are studies using passive acoustic mapping of harbour porpoise abundance. Although the WGBYC expresses reservations on the accuracy of its by-catch estimates, with respect to the Latvian sprat fishery and other UoA-related impact, there is high degree of certainty of the magnitude of the UoA-related impacts, i.e., these are very small.

Member States are required, among other things, to report annually on the number of incidental catches of cetaceans, which is analysed by the WGBYC. In addition, data on cetacean bycatch may also be submitted through Reg. 2019/1241 reporting. These data are most commonly linked to at-sea observations carried out for the purposes of fisheries monitoring in accordance with the EU Data Collection Framework Regulation 2017/1004 (DCF).

The Latvian national monitoring programme of incidental catches of cetaceans in 2018 covered observations of 508 trips in pelagic trawl fisheries. The observations were carried out by 5 observers on 13 different vessels. No incidental

bycatch of cetaceans was observed in 2018. Reported observer coverage of the pelagic trawl fishery (12–18 m vessels) towing time was 8.6% or 9% of hauls in area 27.3.d (Subdivision 8.1–Gulf of Riga). For the vessels 24–40 m in Division 27.3.d (subdivisions 25, 26 and 28.2) the corresponding towing time and haul coverage was 8.6% in both cases. The covered days at sea for vessels 12–18 m and 24–40 m length was 7.5% and 8.9%, respectively. The lack of observed bycatch over the full decadal time period indicates that cetacean monitoring under Reg. 812/2004 has no practical significance in Latvian fisheries. Traditionally, the Latvian pelagic trawl fishery targets sprat and herring, and 90–93% of effort is allocated to subdivision 28.2 and 28.1. Based on an annual coverage of 8–10% of the pelagic fishery in the Baltic since 2006 by Latvia, and the lack of reports from fishers of cetacean bycatch, Latvia reiterates its previous statement that continuation of a cetacean bycatch program is an unnecessary expenditure of financial and human resources (ICES, 2020f).

However, there are no data on encounters (not leading to catch) and injuries, although these are believed to be minimal. Therefore, even though **SG60 and SG80 are met**, the information is not adequate to have a high degree of certainty of the magnitude of the UoA-related mortalities and injuries and the consequences for the status of ETP species, thus, **SG100 is not met.**

	Information adequacy for management strategy			
b	Guide post	Information is adequate to support **measures** to manage the impacts on ETP species.	Information is adequate to measure trends and support a **strategy** to manage impacts on ETP species.	Information is adequate to support a **comprehensive strategy** to manage impacts, minimise mortality and injury of ETP species, and evaluate with a **high degree of certainty** whether a strategy is achieving its objectives.
	Met?	**Yes**	**Yes**	**No**

Rationale

From what has been stated in PI 2.3.1 and 2.3.2, information gathered from the UoA fleet, other Latvian fishing fleets and from Baltic member states in general is sufficient to measure trends and to support a comprehensive strategy to manage impacts on harbour porpoises, seabirds and sea lampreys. **SG60 and 80 are, therefore, met**.

There is, however, insufficient information collected to support a strategy to minimize injury of ETP species and evaluate with a high degree of certainty whether the strategy is achieving its objectives, hence, the **SG100 is not met**.

References

Cabinet Regulation No. 296; COUNCIL REGULATION (EC) No 812-2004; HELCOM, 2013d; ICES, 2018f; Regulation (EU) 2017/1004.
ICES 2020f

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**80**
Condition number (if relevant)	**NA**

PI 2.4.1 – Habitats outcome

PI 2.4.1		The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates		
Scoring Issue		SG 60	SG 80	SG 100
a	Commonly encountered habitat status			
	Guide post	The UoA is **unlikely** to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	The UoA is **highly unlikely** to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	There is **evidence** that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

Commonly encountered habitats are defined by the MSC Fisheries Standard v2.01, SA3.13.3.1 as habitat, "*that regularly comes into contact with a gear used by the UoA…*".

According to SA3.13.4 of the Standard, Assessment Teams shall interpret "serious or irreversible harm" as reductions in habitat structure and function […] such that the habitat would be unable to recover at least 80% of its structure and function within 5-20 years if fishing on the habitat were to cease entirely".

Table SA8 of the Standard further specifies that the habitat structure and function referred to here, relates to habitat structure, biological diversity, abundance and function. The Assessment Team is required, when assessing the status of habitats and the impacts of fishing, "to consider the full area managed by the local, regional, national, or international governance body(s) responsible for fisheries management in the area(s) where the UoA operates (the "managed area" for short)" (SA3.13.5) and where there is reasonable evidence that the habitat distribution extends beyond the managed area, this should be documented, and the assessment of habitat impacts should be based on this extended distribution.

The UoA uses mid-water, pelagic trawls (single and pair trawls). These are designed to not touch the sea bottom but to 'fly' 8-10 m above it. Any contact with the sea bottom would jeopardize the integrity of the gear. Therefore, sprat fishing is conducted in the water column, interacting only with the pelagic community and are not designed to make contact with the seabed. This was also confirmed by BIOR representatives interviewed during the site visit, claiming that in the 227 days at sea performed in 2016 they did not record any interaction between the gear and the sea bottom. Consequently, the commonly encountered habitat affected by these gears is the pelagic habitat in the areas fished (see **section 7.3.4** for more details).

Eigaard et al (2013) concluded during the BENTHIS evaluation of benthic impacts from the perspectives of fisheries in EU waters; when considering the physical gear-seabed interaction as the primary impact mechanism, the contribution to the overall benthic impact from pelagic fisheries is assessed to be marginal.

Gear loss is not a significant issue in the mid-water trawl fishery, in the Baltic the main fisheries affected by gear loss are fixed gillnets and bottom trawls (MARELITT, 2019).

On the basis of the gears used in the UoA, the identified fishing area and habitats, the assessment team concludes that there is **evidence** that the UoA is **highly unlikely** to reduce habitat structure and function of the commonly encountered habitats (i.e., the pelagic habitat) to a point where there would be serious or irreversible harm. Therefore, **SG60, SG80 and SG100 are met.**

b	VME habitat status			
	Guide post	The UoA is **unlikely** to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	The UoA is **highly unlikely** to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	There is **evidence** that the UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.
	Met?	**Yes**	**Yes**	**No**
Rationale				

VME habitats are defined by the MSC Fisheries Standard v2.01, SA3.13.3.2 as habitat defined in paragraph 42 subparagraphs (i)-(v) of the FAO Guidelines and these are represented by the HELCOM MPAs and Natura 2000 sites that have been designated in the Baltic Sea to protect habitats including those of particular protected species (see **section 7.3.4** for further details).

According to SA3.13.4.1 of the Standard, Assessment Teams shall interpret “serious or irreversible harm” for VMEs as, “reductions in habitat structure and function below 80% of its unimpacted level” and GSA3.13.4 requires that the pre-existing historical extent of the habitat should be considered if historical extent is known and if recovery in those areas would be possible. Table SA8 of the Standard further specifies that the habitat structure and function referred to here relates to habitat structure, biological diversity, abundance and function. The Assessment Team is required, when assessing the status of habitats and the impacts of fishing, “to consider the full area managed by the local, regional, national, or international governance body(s) responsible for fisheries management in the area(s) where the UoA operates (the “managed area” for short)” (SA3.13.5) and where there is reasonable evidence that the habitat distribution extends beyond the managed area, this should be documented, and the assessment of habitat impacts should be based on this extended distribution.

VMEs in the Baltic Sea are represented by the HELCOM MPAs and Natura 2000 sites that have been designated by HELCOM and the EU respectively. The current extent of HELCOM MPAs and Marine Natura 2000 sites is shown in **Figure 7.3.23**. HELCOM have also produced a “Red List” of Baltic Sea biotopes and habitats (see **Table 7.3.7**). A review of protected areas in the Baltic Sea in 2016 found that the network of protected areas covered 16.7% of the marine area, an increase from the extent in the previous assessment in 2015 (HELCOM 2015, 2016). There are presently 174 HELCOM MPAs in the Baltic Sea. The relationship between HELCOM MPAs and fishing activities by vessels equipped with Vessel Monitoring System (VMS) equipment is shown in **Figure 7.3.24**.

All of these VMEs identified are located on the seabed, or very close to coast, the fishery does not overlap with these areas. Furthermore, and as mentioned in the scoring of SIa above, the fishing métier used in the UoA has very little impact on the seabed due to very infrequent contact with the sea bottom, therefore, the team concludes that the UoA is **highly unlikely** to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm, thus, **meeting SG60 and SG80**. However, as there is no **evidence** of it, **SG100 is not met**.

c	Minor habitat status			
	Guide post			There is **evidence** that the UoA is highly unlikely to reduce structure and function of the minor habitats to a point where there would be serious or irreversible harm.
	Met?			**Yes**
Rationale				

Minor habitats are defined by MSC as those that do not fall within the classification of Commonly Encountered Habitats or VMEs (GSA3.13.3). Therefore, for this assessment, minor habitats are the major substrates on the shelf of the Baltic Sea (**Figure 7.3.6**)

Minor habitats are shelf sublittoral coarse sediments, shallow sublittoral sand, and shelf sublittoral rock and biogenic reef (according to the MSFD predominant habitat classification). The fishery is conducted with midwater trawls designed to not touch the sea bottom but to 'fly' 8-10 m above it. Any contact with the sea bottom would jeopardize the integrity of the gear. Therefore, sprat fishing is conducted in the water column, interacting only with the pelagic community. Evidence from vessel mapping of gear performance indicates that bottom contacts does only occur as a maloperation of the gear and are very rare events. The UoA is highly unlikely to reduce structure and function of the minor habitats to a point where there would be serious or irreversible harm. Hence, **SG100 is met.**

References

MARELITT, 2019.; Eigaard, et al., 2013; FAO, 2019; HELCOM, 2013e; HELCOM, 2018a.; Raymond, 2011.

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**95**
Condition number (if relevant)	**NA**

PI 2.4.2 – Habitats management strategy

PI 2.4.2		There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are **measures** in place, if necessary, that are expected to achieve the Habitat Outcome 80 level of performance.	There is a **partial strategy** in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above.	There is a **strategy** in place for managing the impact of all MSC UoAs/non-MSC fisheries on habitats.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The MSC Fisheries Standard v2.01 defines “measures”, “partial strategy” and “strategy” as follows:

“Measures” are actions or tools in place that either explicitly manage impacts on the component or indirectly contribute to management of the component under assessment having been designed to manage impacts elsewhere.

A “partial strategy” represents a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically.

A “strategy” represents a cohesive and strategic arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome, and which should be designed to manage impact on that component specifically. A strategy needs to be appropriate to the scale, intensity and cultural context of the fishery and should contain mechanisms for the modification fishing practices in the light of the identification of unacceptable impacts.

There are measures and partial strategies in place regulating the procedures for the performance of commercial fishing in Latvia (i.e., Cabinet Regulation No. 296, Adopted on May 2, 2007). Among the measures, trawlers are prohibited to operate in less than 20 m depth, there are time (e.g. for spawning) and spatial closures; fishing limits (i.e., Lavtian quotas, specific coastal fishing limits, limits in the number of fishing gears); effort limits (i.e., limits to engine power, number of fishing vessels approved by the Ministry of Agriculture). In addition, within Cabinet Regulation No. 296, there is a Sampling Plan for the Conformity Supervision of the Engine Power of Fishing Vessels whose objective is to improve and ensure the conformity of the capacity of the fishing fleet with the requirements of the laws and regulations of the European Union and the national laws and regulations.

Moreover, the Latvian Law on the Conservation of Species and Biotopes (Adopted on March 16, 2000) (available at: http://extwprlegs1.fao.org/docs/pdf/lat73461ENG.pdf), includes the following purpose: to ensure biodiversity through the conservation of fauna, flora and biotopes characteristic to Latvia; and to regulate the conservation, management and supervision of species and biotopes.

Furthermore, there has been an increase in the understanding of potential gear impacts (through the BENTHIS project, an EU-FP7 project on the integration of marine benthic ecosystems in fisheries management, 2012- 2017), and an awareness to change, generated by the outcomes of the BENTHIS Project, whose objectives included, among others, ‘to develop sustainable management plans that reduce the impact of fishing and quantify its ecological and socio-economic consequences, together with the fishing industry and other stakeholders on a regional scale’.

In addition, the use of pelagic gear with net sounder equipment is key to avoid benthic habitat impact, by avoiding physical impact with the bottom. As concluded in few studies, this type of gear is considered to have very low or a marginal ecological impact on benthic habitats and bottom structures (Donaldson et al., 2010; Eigaard et al. 2013; and FAO, 2019), and, as noted above in PI2.4.1, it is **highly unlikely** to have an impact on the habitat. For all the aforementioned, it is deemed that **SG60 and SG80 are met**.

Management of habitats within the Baltic Sea is centred around the work of HELCOM and protections provided by the EU Habitats and Birds Directives (further details in **section 7.3.4**). The HELCOM Baltic Sea Action Plan (BSAP) is a programme to restore the good ecological status of the Baltic marine environment by 2021. The Plan, adopted by all the Baltic coastal states and the EU in 2007, provides the basis for HELCOM work. It incorporates the latest scientific knowledge and management approaches into strategic policy implementation and stimulates goal-oriented multilateral cooperation around the Baltic Sea region. The BSAP is regularly updated in ministerial meetings.

Under BSAP, several actions are being implemented. Of relevance here, is the establishment of an ecologically coherent and effectively managed network of coastal and marine Baltic Sea protected areas (HELCOM MPAs) to protect marine habitats and species. As at 2018, 11.8% of the total marine area of the Baltic Sea is covered by HELCOM MPAs. The target of conserving at least 10% of coastal and marine areas, set by the UN Convention on Biological Diversity (CBD), was reached in 2010 in the Baltic Sea. Through Recommendation 35/1 (adopted in 2014) (available at: https://www.helcom.fi/wp-content/uploads/2019/06/Rec-35-1.pdf), HELCOM further agreed to reach the 10% target for each sub-basin, when scientifically justified. This target has been met in 11 out of the 17 sub-basins.

In its latest assessment HELCOM (HELCOM, 2016) found that the network is not yet ecologically coherent, and improvements are needed. The Contracting Parties committed to this objective through HELCOM Recommendation 35/1 in 2014. HELCOM Recommendation 35/1 also emphasizes the development and implementation of management plans for MPAs, as well as assessing the effectiveness of management plans, or other measures, to ensure protection. One of the commitments is to develop and apply management plans, or measures, for all existing HELCOM MPAs by 2015, and to establish a management plan, or measures, for every new MPA within five years after its designation. This agreement has not been met; currently, of the 176 established HELCOM MPAs, 127 (72%) have a management plan in force, and 39 HELCOM MPAs (22%) have a management plan under preparation. Regarding the monitoring within MPAs which is required to assess their effectiveness, this occurs in 64% of HELCOM MPAs (HELCOM, 2016).

In addition to the work of HELCOM, habitats are provided protection through the Natura 2000 network established under the EU Birds and Habitats Directives (2009/147/EC; 92/43/EEC). This is a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right. Under Article 6 of the Habitats Directive, Member States are required to establish the necessary conservation measures, including if necessary, management plans for these sites and the impact of any ‘plans or projects’ likely to have a significant effect on the sites subject to assessment. The definition of “plans or projects” is broad and includes fishing activities. Conservation measures have been developed in the Baltic Sea, by excluding these gears in reef zones (Regulation (EU) 2017/1181). The Technical Measures Regulation (Regulation (EU) 2019/1241) also sets out technical measures which can protect habitats including regional measures under Article 15 and powers to introduce real-time closures and moving-on provisions. The regional measures for the Baltic Sea include a closed area for any active gear and temporal area restrictions on fishing with any gear (Annex VIII). The assessment Team could not find evidence that move-on provisions exist within the managed areas of any of the UoAs nor that they would be required to avoid contacts with VMEs given they are unlikely to significantly interact with them.

However, whilst the framework to deliver management is in place and evidence exists that measures have been put in place, it is unclear whether measures are in place for all fisheries or that assessments have been undertaken for all fishing activities to determine if it is necessary to restrict fishing activities in order to protect habitat structure and function. Consequently, it is not possible to determine that a strategy is in place to specifically manage the impact of the UoA fisheries, or other MSC UoAs/non-MSC fisheries interacting with the same commonly encountered, VME and minor habitats. **SG100 is not met.**

	Management strategy evaluation			
b	Guide post	The measures are **considered likely** to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/habitats).	There is some **objective basis for confidence** that the measures/partial strategy will work, based on **information directly about the UoA and/or habitats** involved.	**Testing** supports **high confidence** that the partial strategy/strategy will work, based on **information directly about the UoA and/or habitats** involved.

	Met?	**Yes**	**Yes**	**No**
Rationale				

The pelagic trawl is designed not to touch the bottom; therefore, this is considered a measure which is likely to work regarding the impact on the seabed habitats in the UoA. In addition, there is an objective basis for confidence that the measures and strategies in place will work, based on the fact that several studies have concluded that this type of gear is considered to have very low or a marginal ecological impact on benthic habitats and bottom structures (Donaldson et al., 2010; Eigaard et al. 2013; and FAO, 2019). Moreover, VMS data can confirm the location of the fishing activities, demonstrating that there is little or no overlap with VMEs. All this information meets the **SG60 and SG80.**

However, even though information on the impacts of pelagic trawling on marine habitats exist, no specific testing for the assessed fishery has been performed in relation to its impact on the habitats involved. Actions for reaching the objectives of HELCOM Recommendation 35/1 are in progress, but still only partly accomplished. For example, the goal to ensure that HELCOM MPAs provide specific protection to HELCOM Red Listed species, habitats, biotopes and biotope complexes has not been reached, since many threatened features are not protected in any of the HELCOM MPAs, at least not according to information reported by the Contracting Parties (HELCOM, 2016).
Based on the above, **SG100 is not met.**

	Management strategy implementation			
C	Guide post		There is **some quantitative evidence** that the measures/partial strategy is being implemented successfully.	There is **clear quantitative evidence** that the partial strategy/strategy is being implemented successfully and is achieving its objective, as outlined in scoring issue (a).
	Met?		**Yes**	**No**
Rationale				

The use of pelagic gear in the fishery, and the knowledge that these type of gear do not have adverse impacts on habitats, can be considered as an evidence that the measures to not cause adverse impact on habitats has been implemented successfully. Further, use of net sounder equipment on UoC member vessels and VMS data provides evidence of the spatial range where the fleet operates.

Since the designation of the first HELCOM MPAs in 1994, there has been a substantial increase in the areal coverage of MPAs: in 2004, the protected marine area of the Baltic Sea was 3.9%, in 2010 it was 10.3%, and today, in 2016, it is 11.8%. Thus, the target of conserving at least 10% of coastal and marine areas, set by the UN Convention on Biological Diversity, was reached in 2010 in the Baltic Sea (HELCOM, 2016). Three new BSPAs were established in Latvia since 2010, and a fourth was enlarged encompassing EEZ waters. In 2013, there are 7 HELCOM MPAs in Latvia, covering 33% of the Latvian territorial waters and 1% of its Exclusive Economic Zone, amounting a total of 4,364km2 (15% of the total Latvian maritime area). Based on the above, **SG80 is met**.

However, the 10% target has still not been reached in the areas where the UoA operates (8.7% Baltic Proper just 4.8% Gulf of Bothnia). Furthermore, in its latest assessment, HELCOM has recognized that that the network of HELCOM MPAs is not yet ecologically coherent (HELCOM, 2016). Improvements are needed in adequacy (quality of the network) and connectivity (how well the network supports migration and dispersal of species).

Furthermore, HELCOM Recommendation 35/1 also emphasizes the development and implementation of management plans for MPAs, as well as assessing the effectiveness of management plans, or other measures, to ensure protection. One of the commitments was to develop and apply management plans, or measures, for all existing HELCOM MPAs by 2015, and to establish a management plan, or measures, for every new MPA within five years after its designation. However, this agreement has not been met; currently only 67% of the HELCOM MPAs have management plans

(HELCOM, 2016). Regarding the assessment of the effectiveness of the plans, this has not yet taken place and joint guidelines still remain to be developed on how to carry out such assessments. At present, monitoring within MPAs, a prerequisite for the assessment of effectiveness, occurs in 64% of HELCOM MPAs (HELCOM, 2016). Given the above, the team concludes the **SG100 is not met**.

	Compliance with management requirements and other MSC UoAs'/non-MSC fisheries' measures to protect VMEs			
d	Guide post	There is **qualitative evidence** that the UoA complies with its management requirements to protect VMEs.	There is **some quantitative evidence** that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.	There is **clear quantitative evidence** that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.
	Met?	**Yes**	**Yes**	**No**

Rationale

There is qualitative and qualitative evidence, as described under 2.4.2c (i.e., mid-water trawl design, Latvia being a signatory to HELCOM with respect to HELCOM MPAs, and also as an EU Member State with respect to Natura 2000 sites), confirming that the UoA complies with the management requirements to protect VMEs. Thus, **meeting SG60**.

The VMEs present in the Baltic Sea where the UoA operates are described in **section 7.3.4.1**. However, all of the VMEs that have been identified in the Baltic Sea are located on the seabed, and as noted in the scoring of PI2.4.1 above, the fishing métier used in the UoA has very little impact on the seabed. Therefore, there are no specific management requirements imposed to the Latvian sprat fishery to protect VMEs.

Reports published by other relevant MSC UoAs (the Finland Baltic herring & sprat fishery, NZRO Gulf of Riga herring and sprat trawl fishery, Poland herring and sprat midwater trawl and gillnet, Poland flatfish trawl and gillnet and the Denmark, Estonia, Germany, Sweden Baltic herring and sprat fishery) were revised. None of these MSC UoAs has adopted additional protection requirements for VMEs. In addition, there are fisheries targeting sprat in the Baltic proper conducted with trawl similar to those used for sprat and with gillnets. But these fisheries, which are not MSC certified, neither represent significant cumulative impact on the habitats.

Therefore, even though there is some quantitative evidence that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant; such evidence cannot be considered clear enough. Hence, **SG80 is met, but SG100 is not**.

References

Cabinet Regulation No. 296; Council Directive 92/43/EEC; Directive 2009/147; EC. 2019 ; Regulation (EU) 2019/1241; REGULATION (EU) 2017/1181; HELCOM, 2016; Donaldson et al., 2010; Eigaard et al. 2013; FAO, 2019

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**80**

Condition number (if relevant)	**NA**

PI 2.4.3 – Habitats information

PI 2.4.3		Information is adequate to determine the risk posed to the habitat by the UoA and the effectiveness of the strategy to manage impacts on the habitat		
Scoring Issue		SG 60	SG 80	SG 100
a	Information quality			
	Guide post	The types and distribution of the main habitats are **broadly understood**. **OR** **If CSA is used to score PI 2.4.1 for the UoA:** Qualitative information is adequate to estimate the types and distribution of the main habitats.	The nature, distribution and **vulnerability** of the main habitats in the UoA area are known at a level of detail relevant to the scale and intensity of the UoA. **OR** **If CSA is used to score PI 2.4.1 for the UoA:** Some quantitative information is available and is adequate to estimate the types and distribution of the main habitats.	The distribution of all habitats is known over their range, with particular attention to the occurrence of vulnerable habitats.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

Information on benthic habitat nature, distribution and vulnerability is available from published reports and maps obtained from international projects (BALANCE, MESH project), or GIS-based interactive websites, such as the EMODnet (https://www.emodnet-seabedhabitats.eu/, which integrates different databases, including the EUSeaMaps for the whole European coastal and marine range), the HELCOM Map and Data service (http://maps.helcom.fi/website/mapservice/) or HELCOM's updated on-line MPA database launched at the end of 2015 (http://mpas.helcom.fi/apex/f?p=103:5:::::). Information on pressures, biotopes, and biotope complexes can be accessed and plotted on maps in HELCOM's websites.

In particular, the HELCOM Red List project (HELCOM, 2013e), defined 328 benthic and pelagic habitats. Of these, 209 biotopes were assessed, of which 59 were red-listed and classified as Critical Endangered, Vulnerable or Near Threatened. Moreover, ten biotope complexes were recognized in the HELCOM Underwater Biotope and habitat classification (HELCOM HUB). These ten biotope complexes are also listed in the EU Habitats Directive Annex 1 and were all red listed. The occurrence of all habitats, including vulnerable habitats in the Baltic Sea is, therefore, well understood, hence, **meeting SG60, SG80 and SG100**.

b	Information adequacy for assessment of impacts			
	Guide post	Information is adequate to broadly understand the nature of the main impacts of gear use on the main habitats, including spatial overlap of habitat with fishing gear.	Information is adequate to allow for identification of the main impacts of the UoA on the main habitats, and there is reliable information on the spatial extent of interaction and on the timing and	The physical impacts of the gear on all habitats have been quantified fully.

		OR **If CSA is used to score PI 2.4.1 for the UoA:** Qualitative information is adequate to estimate the consequence and spatial attributes of the main habitats.	location of use of the fishing gear. OR **If CSA is used to score PI 2.4.1 for the UoA:** Some quantitative information is available and is adequate to estimate the consequence and spatial attributes of the main habitats.	
	Met?	**Yes**	**Yes**	**No**
Rationale				

As stated before (see PI 2.4.1), mid-water trawls are not designed (and therefore it is avoided by the operators) to fish on the seabed and, and only when it accidentally contacts the seabed, could have a very low or marginal ecological impact on benthic habitats. Moreover, from the information available, it is considered to have no effect on the pelagic habitat (i.e., the main habitat). Sufficient and adequate information exists on the fishing operations, i.e., effort, time and area fished trough VMS and catch data, to determine the impacts of the fishery on the habitat, and to reliably know the spatial extent of interaction and the timing and location of use of the fishing gear. Therefore, **SG60 and SG80 are met**.

However, there is not enough detailed information to fully quantify the physical impacts of the mid-water trawl on all habitats (i.e. water and benthic habitats within the UoA), therefore **SG100 is not met**.

	Monitoring			
c	Guide post		Adequate information continues to be collected to detect any increase in risk to the main habitats.	Changes in all habitat distributions over time are measured.
	Met?		**Yes**	**No**
Rationale				

Sufficient and adequate information continues to be collected through the Data Collection Framework and through regular scientific monitoring and research, to detect any increase in risk to the main habitats. As well as through the VMS to electronically monitor vessel's movements. **SG80 requirement is, therefore, met**.

However, although detailed habitat maps are available (see SIa), there is no systematic programme in place to monitor changes in habitat distributions over time. In fact, HELCOM has already identified this deficiency and in its Monitoring Manual states (http://www.helcom.fi/action-areas/monitoring-and-assessment/monitoring-manual/introduction#Background): "Currently there is no monitoring in place which targets seabed habitat distribution", and gives a solution. But, for now, **SG100 requirement is not met**.

References

BENTHIS project https://www.benthis.eu/en/benthis/About-us.htm
EMODnet seabed habitats https://www.emodnet.eu/seabed-habitats
European Environment Agency. European protected sites. https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/european-protected-areas-1

European Environment Agency. Natura 2000 Network Viewer. http://natura2000.eea.europa.eu/# HELCOM Underwater Biotope and Habitat Classification System (HELCOM Hub). https://helcom.fi/baltic-sea-trends/biodiversity/helcom-hub/

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

PI 2.5.1 – Ecosystem outcome

PI 2.5.1		The UoA does not cause serious or irreversible harm to the key elements of ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
a	Ecosystem status			
	Guide post	The UoA is **unlikely** to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	The UoA is **highly unlikely** to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	There is **evidence** that the UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
	Met?	**Yes**	**Yes**	**Partial**
Rationale				

According to SA3.16.3 of the MSC Fisheries Standard v2.01, the Assessment Team should consider "key" ecosystem elements as, "*the features of an ecosystem considered as being most crucial to giving the ecosystem its characteristic nature and dynamics and are considered relative to the scale and intensity of the UoA. They are features most crucial to maintaining the integrity of its structure and functions and the key determinants of the ecosystem resilience and productivity*."

"Serious or irreversible" harm to ecosystem structure and function means changes caused by the UoAs that fundamentally alter the capacity of the ecosystem to maintain its structure and function. This is the, "*reduction of key features most crucial to maintaining the integrity of its structure and functions and ensuring that ecosystem resilience and productivity is not adversely impacted. This includes, but is not limited to, permanent changes in the biological diversity of the ecological community and the ecosystem's capacity to deliver ecosystem services*".

The key characteristic of the ecosystem supporting the fishery is the oceanographic regime in the Baltic Sea which provides conditions that are favourable for pelagic ecosystem species ranging from phytoplankton and their consumers through to higher predators. The Baltic Sea is characterised as a large brackish water ecosystem where the main impacts on ecosystem components are saline inputs from the North Sea, eutrophication from freshwater impacts, the effect of fishery removals, and climate change.

The effects of these influences on the Baltic Sea ecosystem have been studied in **section 7.3.5** of this report. The most significant potential ecosystem impact of the sprat fisheries is the removal of herring or sprat biomass. Both species are a potential source of food for demersal fish (cod), for birds and for sea mammals.

The physical activity of trawling is not considered likely to disrupt the large-scale physical oceanographic processes in the Baltic Sea or to prevent these processes for providing ecosystem services (Jennings and Kaiser 1998, Donaldson et al. 2010). The main influences on physical oceanography in the Baltic Sea are the saline incursions from the North Sea and climate change (Margonski et al., 2010; Lessin et al., 2014; Pekcan-Hekim et al., 2016). For the UoC in the Baltic Sea it is considered that the evidence of little physical impact on ecosystem processes from either fishing gear; modelling of multi-species interactions; and the evidence from stock assessments that sprat is being harvested sustainably in this geographic area demonstrates that the sprat fishery is highly unlikely to disrupt the underlying ecosystem function to a point where there would be serious or irreversible harm, **meeting the SG60 and 80 requirements.**

However, there are studies see Tomczak et al (2022) for references. Tomczak et al (2022) find that fishing in general has been important in controlling regime shifts in the Baltic Sea "…analysis shows that for the entire time period, productivity, climate, and hydrography mainly affected the functioning of the food web, whereas fishing became

important more recently." Also Gårdsmark et al (2015) consider fisheries as important factors in regime shifts. While the Latvian sprat fishery on its own is too small to introduce significant effects on an ecosystem scale, the combined effect of the MSC-certified sprat fisheries may not be. SG100 calls for 'serious or irreversible harm', and taking a regime shift at least as a major disruption of the system, this suggests that evidence is not definitely excluding the total sprat fishery from having such effect, therefore, the score **for SG100 is set at 'Partial'**.

References

Jennings and Kaiser 1998;
Donaldson et al. 2010;
Margonski et al. 2010;
Lessin et al. 2014

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**90**
Condition number (if relevant)	**NA**

PI 2.5.2 – Ecosystem management strategy

PI 2.5.2		There are measures in place to ensure the UoA does not pose a risk of serious or irreversible harm to ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are **measures** in place, if necessary which take into account the **potential impacts** of the UoA on key elements of the ecosystem.	There is a **partial strategy** in place, if necessary, which takes into account **available information and is expected to restrain impacts** of the UoA on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.	There is a **strategy** that consists of a **plan**, in place which contains measures to **address all main impacts of the UoA** on the ecosystem, and at least some of these measures are in place.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

The strategy in place for managing the impacts of the UoAs on the Baltic Sea ecosystem comprises of both an overall international agreement for managing anthropogenic impacts on the Baltic Sea, set out in the Baltic Sea Action Plan (BSAP) and the EU Marine Strategy Framework Directive (2008/56/EC); and a strategic approach to fisheries management in the Baltic Sea, set out in the EU Common Fisheries Policy (CFP) and the Baltic Sea Multi Annual Plan (MAP) that was made in accordance with the CFP, implemented in 2016 and amended in 2019 (Regulations EU 2016/1139 and 2019/472). These are each considered briefly here. The Baltic Sea MAP sets out a strategy for managing the main commercial fisheries in the Baltic Sea, including the herring and sprat fisheries.

The objective of the Baltic MAP is set out in Article 3(3) of the MAP which states:- “The plan shall implement the ecosystem-based approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised. It shall be coherent with Union environmental legislation, in particular with the objective of achieving good environmental status by 2020 as set out in Article 1(1) of Directive 2008/56/EC.” This objective links the management of Baltic Sea fisheries to the overall attainment of “good environmental status” in the Baltic Sea under the EU Marine Strategy Framework Directive.

The Baltic Sea MAP sets reference points for Central Baltic herring and sprat fisheries that are consistent with ICES advice on the multispecies ecosystem requirements in this geographic area. The HELCOM Baltic Sea Action Plan sets out both a strategy and a plan that are based on the ecosystem approach and are structured around a set of ecological objectives that define indicators and targets. Whilst most of these are concerned with managing nutrient inputs to the Baltic Sea, some are relevant to fishing activities: for instance the BSAP calls for national management plans for Baltic seal populations to be produce by 2012 ; and it calls for fisheries to be managed according to the ecosystem approach, and asks for immediate action to develop long-term management plans for commercially exploited fish stocks (the EU Baltic Sea MAP is a response to this element of the BSAP).

The HELCOM BSAP and the EU Marine Strategy Framework Directive are complementary: both seek to attain “good environmental status” of the marine environment (the MSFD deadline for this is 2020; BSAP is 2021). Like the BSAP, the MSFD sets out some broad objectives and specific targets for actions that will form a plan to achieve this goal. The key difference between the BSAP and MSFD is that Russia is a signatory to the BSAP, which ensures that all coastal states around the Baltic Sea, and not just EU Member States, are engaged in the implementation of this plan.

In summary, the Baltic Sea Action Plan, EU Marine Strategy Framework Directive and EU Common Fisheries Policy provide a strategic framework for managing the impact of all fishery UoAs on marine ecosystems in the Baltic Sea. This **meets the SG60 and SG80 requirements**.

These strategies set out plans for attaining ecosystem objectives (such as attaining good environmental status under the MSFD and BSAP by 2020 and 2021 respectively; and attaining MSY for commercial fish stock by 2015 or 2020 at the latest under the CFP), and there is evidence that plans for managing specific activities have been generated by these strategies (such as EU Baltic Sea Multi-Annual Plan). The evidence that there are plans which contain measures to address UoA impacts and that these are in place **meets the SG100 requirements.**

	Management strategy evaluation			
b	Guide post	The **measures** are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar UoAs/ ecosystems).	There is **some objective basis for confidence** that the measures/ partial strategy will work, based on some information directly about the UoA and/or the ecosystem involved.	**Testing** supports **high confidence** that the partial strategy/ strategy will work, based on information directly about the UoA and/or ecosystem involved.
	Met?	**Yes**	**Yes**	**No**
Rationale				

There are measures to protect, for example, key habitats (see PI 2.4.2) or ETP species (see PI 2.3.2) and are considered to be likely to work based on plausible argument and comparing them with similar fisheries/ecosystems. Therefore, **SG60 is met**.

The information on the status of the Baltic ecosystem suggests that anthropogenic influence is a major factor but also that the more important components are eutrophication and bottom trawl fishing (for cod in particular). Information on the effects of the sprat fishery suggests that this activity is not causing structural or functional disruption supported by that the fishing gear is pelagic (no habitat effects), that the coastal zone is not affected and that the direct effect (fishing pressure) is below the standard impact defined by MSC (biomass > 80% of virgin biomass based on equilibrium considerations). **SG 80 is met**.

Direct testing of the lack of impact can only be done through theoretical ecosystem modelling. There are a number of publications that summarize the status and identify the threats to the Baltic ecosystem (e.g., BALTICStern network or HELCOM HOLAS projects). There is substantial literature on theoretical modelling studies for the fisheries compartment in the Baltic Sea (e.g., Tomczak et al., 2012).

However, Eastern Baltic cod stock is currently in poor status, and this is thought to be due to the lack of spatial overlap with its clupeid prey. It is therefore possible that the UoA fisheries may be exacerbating this problem. This area of uncertainty means it is not possible to determine that testing supports high confidence that the strategy will work. **SG100 is not met**.

	Management strategy implementation			
c	Guide post		There is **some evidence** that the measures/partial strategy is being **implemented successfully**.	There is **clear evidence** that the partial strategy/strategy is being **implemented successfully and is achieving its objective as set out in scoring issue (a).**
	Met?		**Yes**	**No**
Rationale				

The most important measures in place for constraining the impact of the UoAs on the Baltic Sea ecosystem are the harvest controls (TACs) which limit the quantity of fish removed and ensure that the target fish populations are maintained at a level that is compatible with MSY and ecosystem requirements. For the UoA, there is evidence from the fishery that fishery removals by the UoA are within the limits imposed by the TAC. The other measures that are important to the Baltic Sea ecosystem are those that limit the mortality of ETP species. Again, there is some evidence from the fishery that ETP impacts are low. Quantitative evidence from monitoring of these populations of ETP species shows that their abundance is increasing. Moreover, Latvia is clearly following the CFP and is managing its national fisheries accordingly, with the aim to achieve good environmental status by 2021 at the latest. The information available provides some evidence that the strategy for managing ecosystem impacts is being implemented successfully, **meeting the SG80 requirements**.

The Baltic Sea ecosystem is currently heavily modified and has been subject to at least two substantial regime changes in the past century. The dynamic nature of the ecosystem is under the influence of a wide range of anthropogenic and natural factors. Each of these may affect that objective of attaining “good environmental status”. Although there is considered to be clear evidence that the elements of the strategy that relate to managing fishery impacts are being successfully implemented, the complexity of the impacts on “good environmental status” in the Baltic Sea mean that there is not presently clear evidence that the overall objectives of the strategy are being achieved, so **SG100 is not considered to be met.**

References

Tomczak et al., 2012; Directive 2008/56/EC; Regulations EU 2016/1139 and 2019/472.

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

PI 2.5.3 – Ecosystem information

PI 2.5.3		There is adequate knowledge of the impacts of the UoA on the ecosystem		
Scoring Issue		SG 60	SG 80	SG 100
a	Information quality			
	Guide post	Information is adequate to **identify** the key elements of the ecosystem.	Information is adequate to **broadly understand** the key elements of the ecosystem.	
	Met?	**Yes**	**Yes**	
Rationale				

Information available is adequate to identify the key elements of the ecosystem. Publications by the BALTICStern network (https://www.stockholmresilience.org/research/research-programmes-and-projects/balticstern/publications.html), the HELCOM HOLAS projects (HELCOM, 2010 and 2018h) and other studies (e.g. HELCOM, 2009; Niiranen, 2013; Tomczak et al., 2012) provide thorough information on the fish compartment of the Baltic Sea and on the assessment of the key elements of the Baltic ecosystem. The most significant potential ecosystem impact is considered to be the removal of sprat and herring biomass which is a source of food for other fish in particular cod, seabirds and marine mammals. Information is also available on the predator populations feeding on the clupeids in particular cod, seabirds and marine mammals. Consequently, information is adequate to broadly understand the key elements of the ecosystem. Thus, **SG60 and SG80 are met.**

b	Investigation of UoA impacts			
	Guide post	Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, but **have not been investigated** in detail.	Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, and **some have been investigated in detail**.	Main interactions between the UoA and these ecosystem elements can be inferred from existing information, and **have been investigated in detail**.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The main potential ecosystem impact is considered to be the removal of sprat and herring biomass which is a source of food for other fish in particular cod, seabirds and marine mammals. The main impacts of fisheries removals on the ecosystem elements have been investigated in detail through the foodweb models (Ecopath with Ecosim) which enable multi-species interactions to be taken into account, and the Baltic sprat stock assessment use multi-species models in fishery assessment and estimation of reference points (see PI1.1.1A). This demonstrates that this impact has been investigated in detail, **meeting the SG60 and SG80** requirements for both scoring elements.

As noted in PI 2.5.1, the Eastern Baltic cod stock is currently in poor status, a factor in which is thought to be the lack of spatial overlap with its clupeid prey. It is therefore possible that the UoA fisheries may be exacerbating this problem. This is an area that is subject to investigation (e.g., Casini et al., 2016) but given the current uncertainty it cannot be said to have been investigated in detail. **SG100 is not met**.

c	Understanding of component functions			
	Guide post		The main functions of the components (i.e., P1 target	The impacts of the UoA on P1 target species, primary,

			species, primary, secondary and ETP species and Habitats) in the ecosystem are **known**.	secondary and ETP species and Habitats are identified and the main functions of these components in the ecosystem are **understood**.
	Met?		**Yes**	**No**
Rationale				

The ecosystem of the Baltic Proper is well studied , see e.g. HELCOM holistic assessments the most recent is HOLAS 3, HELCOM (2018h) and Holistic Assessments – HELCOM. The main functions of the components are known. **SG80 is met.**
The eastern Baltic cod stock is currently in poor status, a factor in which is thought to be the lack of spatial overlap with its clupeid prey. It is possible that the UoA fisheries may be exacerbating this problem. This is an area that is subject to investigation (e.g. Casini et al., 2016). Given the current uncertainty around the factors behind current poor condition of this cod stock and the potential interaction with the UoA fisheries, it cannot be said that the main functions of these components in the ecosystem are understood. **SG100 is not met**.

d	Information relevance			
	Guide post		Adequate information is available on the impacts of the UoA on these components to allow some of the main consequences for the ecosystem to be inferred.	Adequate information is available on the impacts of the UoA on the components **and elements** to allow the main consequences for the ecosystem to be inferred.
	Met?		**Yes**	**Yes**
Rationale				

The impacts of the UoA on the components and elements of the Baltic Sea ecosystem can be understood from monitoring of fishery removals and the studies of the status of the Baltic Sea environment and its habitats and species carried out under HELCOM. More detailed information about these interactions is provided by the food web models for the western Baltic Sea and Baltic Sea proper and is sufficient to allow the main consequences for the ecosystem to be inferred. **SG80 and SG100 are met**.

e	Monitoring			
	Guide post		Adequate data continue to be collected to detect any increase in risk level.	Information is adequate to support the development of strategies to manage ecosystem impacts.
	Met?		**Yes**	**No**
Rationale				

For the Central Baltic Sea sprat stock, more detailed investigations have been carried out to examine the interaction between the UoA and specific ecosystem elements (herring, sprat and cod). This work has allowed ICES to identify ranges for stock biomass and fishing mortality for each species that are compatible with the ecosystem needs of the Central Baltic. In general, adequate data continue to be collected through programs coordinated under ICES and HELCOM (acoustic surveys, environmental mapping programs, coastal mapping of fish stocks, sea bird observer programs), or through initiatives such as the BalticSTERN network, to detect any increase in risk level, therefore **SG80 is met**.

HELCOM's recent evaluation of the BSAP found that actions related to data and monitoring of by-caught marine mammals and birds and increasing knowledge on measures to reduce by-catch of harbour porpoise had so far not been accomplished (HELCOM, 2018j). Also as noted previously there is uncertainty around the factors behind the current poor condition of cod that may be limiting the development of strategies to manage ecosystem impacts related to this stock and fisheries that may exacerbate the problem such as the herring and sprat fisheries in the Baltic Sea proper. **SG100 is not met**.

References

HELCOM, 2009; HELCOM, 2010; HELCOM, 2018h; HELCOM, 2018; Niiranen, 2013; Ojaveer, 1997; Szaniawska, 2018; Tomczak et al., 2012; Casini et al., 2016

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

7.4 Principle 3

7.4.1 Principle 3 background

7.4.1.1 Regulatory framework

The assessed Latvian fleet targeting sprat operates within the Latvian EEZ (SD 28.2 and northern part of SD26). However, the sprat stock in the Baltic is defined as a single stock for the whole Baltic (SD 22-32). Therefore, the sprat stock in the Baltic shall be considered as a **straddling stock**[3].

Baltic fisheries are managed by EU Member States and the Russian Federation. The EU fisheries, including the Latvian Sprat fishery, are regulated under the **EU Common Fisheries Policy**, while the Russian Federation regulates fisheries within its EEZ under the Russian Fisheries Law. The Parties cooperate on fisheries management under the **EU-Russian fisheries agreement** of 2009 (Council Regulation (EC) No 439/2009 and EU-Russian Agreement, 2009). This agreement sets out a set of arrangements on joint management measures, licensing, scientific cooperation and other relevant issues.

European fisheries are managed through the **European Union Common Fisheries Policy (CFP)**. The CFP started in 1983 and is reviewed every 10 years, with the most recent review coming into force in 1 January 2014 (Regulation (EU) No 1380/2013). This Regulation sets out the strategic aims of the CFP and includes the application of ecosystem-based management in fisheries implemented, for example, through the introduction of multispecies management plans, banning discards and reducing unwanted bycatches of mammals, birds and untargeted/undersized fish. The CFP is further executed under a number of Regulations covering a wide variety of issues such as monitoring, control and surveillance, fleet structure, overarching technical conservation measures, and TACs, among others. Below other relevant fisheries regulations and recommendations applicable to LFPO sprat fishery are listed (it is not intended to be an exhaustive list):

- **Annual Council Regulations fixing the fishing opportunities** for certain fish stocks and groups of fish stock applicable to the Baltic. Through these regulations TACs applicable to Union fishing vessels are set by species and quotas are allocated to the Member States involved in that fishery. Council Regulations 2015/2072, 2016/1903, 2017/1970, 2018/1628, 2019/1838 and 2020/1579 set the TACs and national quotas for 2016 – 2021, respectively.
- **Baltic Sea Technical Measures for the conservation of the fishery resources in the Baltic Sea, the Belts and the Sound** as established in the Council Regulation 2187/2005. Before this regulation anyone wishing to consult all the many different rules applicable to fishing activity in the Baltic had to consult a complex body of European regulations and ISBFC recommendations. This Regulation sought to summarise all this legislation in a single legislative text, from measures on gears to those on target species, by-catches, minimum landing sizes and geographical and seasonal restrictions. This Regulation has been later amended by other Regulations (landing obligation, Baltic Sea multiannual plans established, etc.), but some of the technical measures included in this Regulation are still in place for the whole region. This regulation has been repealed by Regulation (EU) 2019/1241 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures.
- **The Landing Obligation** (Regulation EU 2015/812). The Regulation (EU) No 1380/2013 established as one of its objectives the gradual elimination of discards through the introduction of a landing obligation for catches of species subject to catch limits (Article 15). Certain provisions of previous regulations establishing technical and

[3] Straddling stocks: Stock which occurs both within the EEZ and in an area beyond and adjacent to EEZ. Source: MSC-MSCI Vocabulary v1.2.

control measures were contradictory to the landing obligation and obliged fishermen to discard fish, as was the case of the above-mentioned Regulation 2187/2005 for the Baltic Sea. In order to remove the incompatibilities and to make landing obligation operational, Regulation 2187/2005 was amended by requiring that all unintended catches of marine organisms of species subject to the landing obligation in the Baltic Sea and caught in excess of catch composition limits be landed and counted against quotas; and by replacing minimum landing sizes for marine organisms of species subject to the landing obligation with minimum conservation reference sizes (also other amendments were made for salmon and trout fisheries but are not relevant here). These amendments have also been kept in Regulation 2019/1241 that repealed Regulation 2187/2005.

- The **Multiannual Plan for cod, herring and sprat** (Regulation EU 2016/1139 and Regulation 2019/472). More details on this Regulation are provided under **section 0**. This Regulation repealed a management plan for the cod stocks in place since 2007 (Council Regulation EC 1098/2007) and amended the Council Regulation 2187/2005 (see above).
- **General Control Requirements for fisheries and specific control requirements for multiannual plans** as set out in Council Regulation (EC) 1224/2009. More details on this Regulation are provided under **section 7.4.1.6**
- In order to preserve fishery resources and their sustainable exploitation, Regulation 199/2008 establishes a **Data Collection Framework** for the collection, management and use of fisheries sector data and support for scientific advice, in line with the objectives of the CFP. This Regulation was developed by Commission Regulation 665/2008 and by Decision 2010/93/EU which establish the contents and methodology to be followed. This regulation was repealed by Regulation (EU) 2017/1004. Pursuant to this regulation, Decision (EU) 2018/1283 was adopted which lays down detailed rules on the format and timetables for the submission by Member States of annual data collection reports in the fisheries and aquaculture sectors.
- **Recommendation on the monitoring and management of the presence of dioxins and PCBs** in fish and fishery products from the Baltic region (Commission Recommendation EU 2016/688). Provides information on the presence of dioxins, dioxin-like PCBs and non-dioxin-like PCBs in certain fish species (including herring and sprat) from a certain age, size and geographical region (ICES zone) and in particular as regards their compliance with the maximum level established in Regulation (EC) No 1881/2006. Sprat from SD 22-28 are assumed to be compliant, while sprat sorting from SD 29-32 is mandatory and individuals ≥12.5 cm cannot be marketed or processed for human consumption unless analysis of the individual lot has demonstrated compliance.

Other EU environmental legislation and international agreements that are applicable to habitats and species protection, but which are also relevant to fisheries activities are:

- The **Marine Strategy Framework Directive** (Directive 2008/56/EC) came into force on 15 June 2008. This Directive aims to protect more effectively the marine environment across Europe and requires good environmental status to be achieved by 2020 for several descriptors, including biodiversity (with indicators on species, habitat and community level) and the integrity of the sea floor. It is the first EU legislative instrument related to the protection of marine biodiversity, enshrines in a legislative framework the ecosystem approach to the management of human activities having an impact on the marine environment, integrating the concepts of environmental protection and sustainable use.
- The **Birds Directive** (Council Directive 2009/147/EC on the conservation of wild birds) and the **Habitats Directive** (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). These Directives (as explained in **section 7.3.3.5** are the basis of the creation of the Natura 2000 network of protected areas. The network is the major EU instrument to fulfil global commitments of the Convention on Biological Diversity (CBD). It is legally enforceable and has strong legal protection.

- The Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, CMS - https://www.cms.int/en/legalinstrument/cms) is an intergovernmental treaty focusing on the protection of migratory species. It has been concluded under the United Nations Environmental Programme (CMS 2003). All Baltic Sea countries, except Russia, are parties in the convention. CMS agreements that have direct relevance in the Baltic Sea area are the **Agreement on Conservation of Small Cetaceans in Baltic Sea and in North Sea (ASCOBANS)** and the African-Eurasian Migratory Water Bird Agreement (AEWA). These agreements are legally binding treaties which are being executed under Action Plans. For example, three different Recovery Plans for the harbour porpoise have been signed within the ASCOBANS Agreement (North Sea, Western Baltic-Belt Sea-Kattegat, Baltic Sea). The Recovery Plan for Baltic Sea porpoises (known as the **Jastarnia Plan)** was adopted by the Contracting Parties in 2009 and reviewed in 2016. However, so far Latvia is a non-party range State.
- The **Regulation (EC) 812/2004** laying down measures concerning incidental catches of cetaceans. This Regulation established technical measures on the use of acoustic deterring devices (pingers) and also the standards for monitoring systems on incidental catches of cetaceans in European waters, including specific regulations in the Baltic Sea. In June 2019, Regulation (EC) 812/2004 was repealed by Regulation (EU) 2019/1241 and new technical measures were established at regional level. Annex XIII of this regulation sets out such technical measures for sensitive species. Within Annex XIII of this regulation, it is stated that Member States shall take the necessary steps to collect scientific data on incidental catches of sensitive species; and it requires member states to undertake monitoring of cetacean by-catches for pelagic trawl fisheries in ICES divisions 3a-d (i.e., all of the Baltic Sea).
- The Convention on the Protection of the Marine Environment of the Baltic Sea Area, known as the **Helsinki Convention** (**HELCOM,** https://ec.europa.eu/environment/marine/international-cooperation/regional-sea-conventions/helcom/index_en.htm). The Contracting Parties are Denmark, Estonia, the European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden. HELCOM was established about four decades ago to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation. HELCOM's vision for the future is a healthy Baltic Sea environment with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable economic and social activities.

At a national level, individual Member States are responsible for implementing the CFP and other EU legislation and agreements. EU fisheries legislation is transposed directly to national legislation, while environmental and other agreements are transposed by primary and secondary national legislation, enacted in accordance with the EU legislation. In addition, countries can have national conservation legislation that goes beyond the international 38 treaties or the EU Directives.

Member States national fisheries administrations are responsible for a range of management and regulatory duties, including: fleet activity management; national quota management; the monitoring and control of all fisheries working within their national jurisdiction; the collection, collation, and communication of key fishery data; and finally undertaking a range of scientific monitoring and development work. Further, fisheries management within 12 NM of its baselines falls under the responsibility of Member States (measures to conserve and manage coastal resources must be at least as stringent as the measures under Union law).

In conformity with the EU Pre-accession Agreement, the Latvian fisheries are controlled on the basis of the fishing quota distribution principle that was into force before EU accession. Latvia joined the EU in 2004 and accepted the provisions of the EU Common Fisheries Policy (CFP) since its entry. Latvian vessels may fish all over the Baltic Sea Proper (ICES 25-29) but outside the Russian fishing zone, the Gulf of Bothnia and the Gulf of Finland. Based on historical fishing rights, Latvia and Estonia have fishing rights in the Gulf of Riga. The overarching national legal instrument on fisheries is the 1995 **'Fishing Law'** (12.04.1995), see the following link for the consolidated text: http://likumi.lv/doc.php?id=34871

(English translation without the latest amendment (from 16.09.2021) available at: https://likumi.lv/ta/en/en/id/34871). The Fishing Law sets the basis for fisheries legislation in Latvia and institutions responsible for fisheries management and control, as well as rules on fish resources management.

Other main Latvian fisheries regulations are listed below:

- **Cabinet Regulation No. 296 of 2 May 2007**. Provisions to industrial fishing in territorial waters and waters of the exclusive economic zone, in force since 2007. This regulation sets out different provisions on both off-shore and coastal fisheries, including technical requirements and duties of the fishermen. http://likumi.lv/doc.php?id=156709 (English translation without amendments since August 2013 available at: https://likumi.lv/ta/en/en/id/156709)
- **Law on Latvian Administrative Violations Code**. https://likumi.lv/ta/en/id/89648-latvian-administrative-violations-code (English translation without amendments since June 2010 available at: https://likumi.lv/ta/en/id/89648-latvian-administrative-violations-code)
- **Cabinet of Ministers 808/2014**. Latvian Regulation on penalties. https://likumi.lv/doc.php?id=145113
- **Cabinet of Ministers 94/2018.** This Regulation prescribes the procedures for the control of fish landing and inspection of fish marketing and transport facilities, as well as warehouses and processing premises. https://likumi.lv/ta/en/en/id/297288
- **Cabinet of Ministers 433/2010**. Regulation on hygiene and freshness and size criteria for the production and placing on the market of fishery products, in force since 2010, lays down common marketing standards (size and freshness categories), as well as hygiene requirements on board vessels and for fish processing enterprises. https://likumi.lv/ta/en/en/id/210012
- **Cabinet of Ministers 918/2009**. Regulation on the lease of water bodies and commercial fishing rights, in force since 2009, sets down the lease conditions for public water bodies, and rules on fish resources and management. http://likumi.lv/doc.php?id=196472

The LFPO sprat fishery is consistent with EU and national legislation as affirmed in national and European fisheries policies and plans, and the monitoring and evaluation of data returns and management performance.

7.4.1.2 Institutions involved in the LFPO sprat fishery management

Roles and responsibilities

The main institutions involved in management of the LFPO sprat fisheries are:

Global and European institutions:

- **International Council for the Exploration of the Sea (ICES)** (http://www.ices.dk) – ICES is a global organization that develops science and advice to support the sustainable use of the oceans. This institution integrates a network of more than 4000 scientists from over 350 marine institutes in 20 member countries (Latvia included). ICES provides the forum for consolidation of scientific work undertaken by scientists in participating national institutions (through relevant Expert Groups), and the delivery of advice on how best to manage fish stocks.

- **Directorate General for Maritime Affairs and Fisheries (DG MARE)** of the European Commission (https://ec.europa.eu/info/departments/maritime-affairs-and-fisheries_en) - is the Commission department responsible for the implementation of the Common Fisheries Policy and of the Integrated Maritime Policy. DG MARE is made up of 6 Directorates dealing with all aspects of both policies, including among others conservation, control, market measures, structural actions and international relations relating to fisheries.
- **Scientific, Technical and Economic Committee for Fisheries (STECF)** of the European Commission (https://stecf.jrc.ec.europa.eu/web/stecf/) - the fisheries scientific committee of the European Commission providing advice to the Commission on all aspects of fisheries science and economics. The STECF may set up working groups to examine specific questions on the basis of the terms of reference define. The STECF is the body in charge of complying and analyzing data from national research institutes (see **Figure 7.4.1**).
- **Baltic Sea Advisory Council (BSAC)** (http://www.bsac.dk/)**,** former Baltic Sea Regional Advisory Council (BSRAC) established in the 2002. The Advisory Councils were created in the previous CFP reform to increase stakeholders' participation in the fisheries management. The BSAC brings together different stakeholders involved in the Baltic fisheries management (fisheries administrations, representatives from the fisheries sector and other interest groups affected by the CFP) from EU Member States. The LFPO is member of the BSAC Executive Committee.
- **Baltic Sea Fisheries Forum (BALTFISH)** (https://helcom.fi/action-areas/fisheries/management/baltfish-forum/). BALTFISH was initiated in 2009 and constitutes (the same as the BSAC) a regional body providing a platform for discussion on important fisheries issues in the Baltic Sea. The BALTFISH forum involves all the eight EU member states bordering the Baltic Sea and functions on two levels: (i) a high-level group (HLG) level consisting of fisheries directors and representatives of the European Commission; (ii) the BALTFISH forum seminar level consisting of officials of the EU Member States and European Commission, as well as representatives from organisations such as BSRAC, ICES and HELCOM.

National institutions:

- **Fisheries Department of the Ministry of the Agriculture** (https://www.zm.gov.lv/en/). This is the institution responsible for overall management of the fisheries sector, quota management, sector development, strategies and legislation. The Fisheries Department deals with issues related to fisheries science and restocking of fish resources, fish processing and trading issues, and represents Latvian fisheries interests in the various EU institutions and international organizations (Baltfish, FAO, NAFO, etc.).
- **The State Environmental Service (SES)** (https://www.varam.gov.lv/en)**.** It is a state institution under the supervision of the Ministry of Environmental Protection and Regional Development of the Republic of Latvia (https://www.vvd.gov.lv/), include in the Maritime Control Division of the Fisheries Control Department (https://www.vvd.gov.lv/lv/strukturvieniba/zvejas-kontroles-departamenta-juras-kontroles-dala). This institution carries out fishing control in marine waters under Latvian jurisdiction, issues fishing licences, operates a vessel monitoring satellite centre and monitors fish landing at ports.
- **Latvia's Institute of Food Safety, Animal Health and Environment (BIOR)** (https://www.bior.lv/en) is responsible for the scientific assessment of fish stock, and for analysing biological and fishing data on catch levels for key commercial species. BIOR undertakes specific research on fish resources, and participates in internationally coordinated surveys, provides scientific background for the protection and rational use of fish resources in Latvian waters, and ensures implementation of the fisheries data collection within the DCF. It is also responsible for analysing the sector's economic situation, and for data collection.
- **Latvian Fishermen`s Association (LFA)** and **Latvian Fishermen's Producer Organization (LFPO)**. The LFA was created in 1996 to represent the interests of 22 Latvian fishing companies targeting cod and pelagic

species. In 2004, 13 of those 22 fishing companies decided to further create a Producer's Organization, the LFPO.

- At the national level the Fishing Law provides for the **Fishery Advisory Council (FAC)**, where government authorities regularly consult with fishermen organizations and other stakeholders (BIOR, NGOs) on fisheries regulations. It is an advisory body comprising between 15 and 23 members (it is not a fixed composition). FAC meetings are held by the Ministry 3-4 times a year, depending on the issues to deal with. The LFA has 3 votes on the FAC, and LFPO has 1 vote.

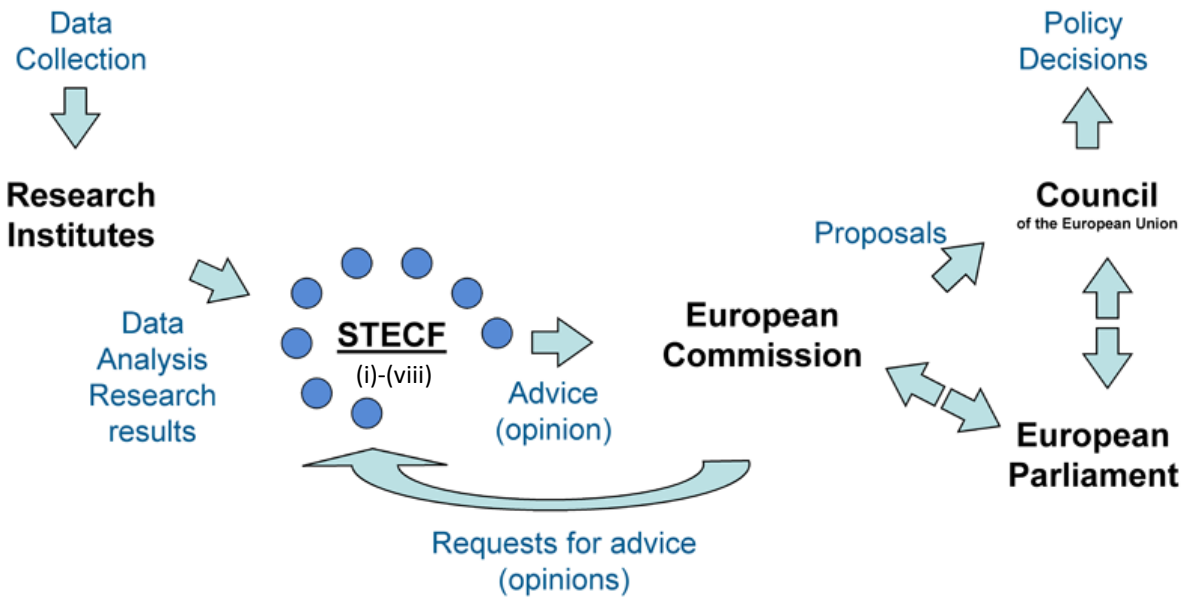


Figure 7.4.1. Workflow of the STECF advice to the Commission. The blue circles surrounding the STECF are for the different steps: (i) Commission request; (ii) Terms of reference; (iii) Selection of experts; (iv) Expert Working Group meeting; (v) Data analysis; (vi) Finalisation of the report; (vii) discussion by the STECF; (viii) STECF opinion and public report. Source: www.stecf.jrc.es.europa.eu

Consultation and dispute-resolution mechanisms

Extensive consultative processes are in place at national (FAC) and European levels to debate policy, plans and management, and recent years have seen the introduction of more formal procedures to incorporate a wider stakeholder community within such consultations (mainly through the Advisory Councils such as the BSAC, and other forum such as BALTFISH).

All member states have signed up to CFP and are bound by European legislation. Disputes between Member States and the Commission are resolved in the Council of Ministers. Where appropriate, European legislation is enacted at the national level through relevant primary and secondary legislation. Formal procedures apply for the resolution of disputes through the national court systems. Ultimately, any European citizen or organisation can take legal action against the Council of Ministers in the European Court of Justice. This is a system that is widely known and has been used when considered necessary.

7.4.1.3 Fishing rights and opportunities: mechanisms for allocation

The European Council establishes TACs for the most important commercial species through annual Regulation. This TAC is based on ICES advice and allocated in quotas between the Member States targeting those species. The quota allocation is made according to the “Relative Stability” allocation key established at the time of the foundation of the CFP. The commercial species managed through TACs in the Baltic Sea are: sprat, Atlantic salmon, plaice, cod, and herring.

The Fisheries Department splits first the Latvian quotas between offshore and coastal fisheries, with offshore companies retaining most of it. The UoA is comprised exclusively of offshore companies. Off-shore quotas are allocated to companies on a 5-year leasehold basis with annual agreements on the exact quota allocation and lease fee. The companies are entitled to decide themselves which vessels to use and have to pay for use of a fishing allocation (the fee for fishing rights lease). The allocation is based on historic records of quota utilization and tends to be stable. However, companies are compelled to make use of at least 80% of their quota, otherwise they would lose part of it for the next year. Quotas may be transferred between fishing companies on a temporary (annual) basis. At the end of the year unused coastal fisheries herring quota in the Gulf of Riga may be reallocated to the offshore companies.

In 2016 there were a total of 40 offshore companies in Latvia holding quotas for different species and areas. A total of 70 of vessels held licences for the different offshore fisheries. There were 22 offshore companies entitled to catch sprat. From these, less than half are currently included in the UoA (i.e., 9 companies comprising a fleet of 18 vessels) (see latest vessel list in **Section 9.2.4** which was published on 6th May 2022 at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

7.4.1.4 Scientific monitoring of the sprat fishery

The monitoring of the Latvian fisheries includes data collection on vessels (vessel register), fleet activity (days at sea, VMS), landings, catches (through observers see below), and operating economics (costs and earnings surveys). BIOR is responsible for the implementation of the Latvian National Programme for the collection of data in the fisheries sector. This contributes to the EC DCF which evaluates the fisheries sector. For establishing the monitoring plan all Latvian fisheries are divided in *metiers* according to information on fishing gear and landings composition from the logbooks. The sprat fishery in sampled both on-board and onshore. The sampling data is submitted to FishFrame database. The data collected on sprat, herring and cod fisheries are prepared by the ICES Baltic Fisheries Assessment Working Group (WGBFAS). The collected biological parameters from the chosen units (fishing vessels) contain enough information to refer it to quarterly catches on certain fishing ground of the whole *metier*.

BIOR also implements an observer program on board pelagic trawlers as a result of the implementation of the Regulation (EC) 812/2004 on the conservation of cetaceans. These observers get on board pelagic trawlers targeting sprat (in the Baltic proper) and herring (in the Gulf of Riga) and record any interaction with cetaceans, see **scoring tables on ETPs** for more details. Since the beginning of 2017, Member States are obliged to record all protected species when monitoring for the DCF. Currently, other EU countries are not implementing a specific observer program for cetaceans since they decided to fulfil their requirements under Regulation (EU) 8212/2004 through a combined monitoring within the DCF (this is the case of, for instance, Denmark, Germany and Sweden). However, the DCF currently focuses on *metiers* targeting commercial species, over-representing monitoring in these *metiers* and using observation coverage that are sufficient to look at target species for which the probability of capture must be 1 (STECF, 2019). To facilitate the implementation of protected species bycatch monitoring in the DCF started in January 2017, different ICES WGs (WBBYC, WGCATCH and RDBES) are currently working together.

7.4.1.5 Fishery-specific objectives: the Baltic Sea MAP (Regulation (EU) 2016/1139 and Regulation (EU) 2019/472)

The CFP obliges to apply precautionary approach to fisheries management, ensuring that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield (MSY). Furthermore, the CFP shall implement the ecosystem-based approach to fisheries management so as to ensure that negative impacts of fishing activities on the marine ecosystem are minimized. The CFP aims to gradually eliminate discards, promote the best use of unwanted catches, and provide for measures to adjust the fishing capacity of the fleets to levels of fishing opportunities, among other measures.

The EU Marine Strategy Framework Directive (Directive 2008/56/EC) also commits Members States to further foster the integration of environmental concerns into other relevant policies, such as the CFP, in order to achieve 'good environmental status' in the marine environment, through the development and implementation of national level policies based on an ecosystem approach, in order to meet the following targets by 2020. Annex I provides qualitive descriptors for determining good environmental status, among them we list the following as relevant for fisheries:

- Populations of all commercially exploited fish and shellfish must be within safe biological limits, exhibiting an age and size distribution that is indicative of a healthy stock;
- All elements of the marine food web must occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity;
- Biological diversity must be maintained and the quality and occurrence of habitats, and the distribution and abundance of species, are to be kept in line with prevailing conditions; and
- Sea floor integrity is maintained at a level that ensures the safeguarding of structure and functions of the ecosystems.

In July 2016 a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea (Regulation 2016/1139) entered into force. This Plan was drafted by the European Commission in view of the strong influence that biological interactions and environmental effects have on the Baltic stocks of cod, herring and sprat. In 2015 ICES advised the implementation of a spatial management plan for the clupeid stocks in Subdivisions 25-26 in order to help improving cod condition. The Commission considered that to incorporate all relevant stocks into a single management plan would be a desirable first step towards an adaptive fisheries management in the Region consistent with the ecosystem approach to fisheries laid out within the CFP. In its Article 3 the Regulation establishes that the Plan shall contribute to the achievement of objectives laid out within the CFP by applying precautionary approach, ensuring exploitation levels are appropriate to MSY, and contributing by avoiding and reducing unwanted catches. Also, it establishes that the Plan shall implement the ecosystem-based approach to fisheries management in a coherent manner with the Marine Strategy Framework Directive (Directive 2008/56/EC), in particular ensuring that the first descriptor mentioned above is fulfilled, and also contributing to the fulfilment of the all the others.

In order to achieve these objectives, the Plan sets out ranges of fishing mortalities (targets) and conservation reference points for SSB (safeguards) for most of the cod, herring and sprat stocks in the Baltic (with the exception of the Eastern Baltic cod). The target values to be used for fixing fishing opportunities for a stock will depend on both intra- and inter-species stock dynamics. Besides, the Plan determines that fishing opportunities shall in any event be fixed in such a way as to ensure that there is less than a 5 % probability of the SSB falling below Blim.

Among other technical measures, the plan also establishes a seasonal closure (1st May – 31st October) in 3 areas (see **Figure 7.4.2**).

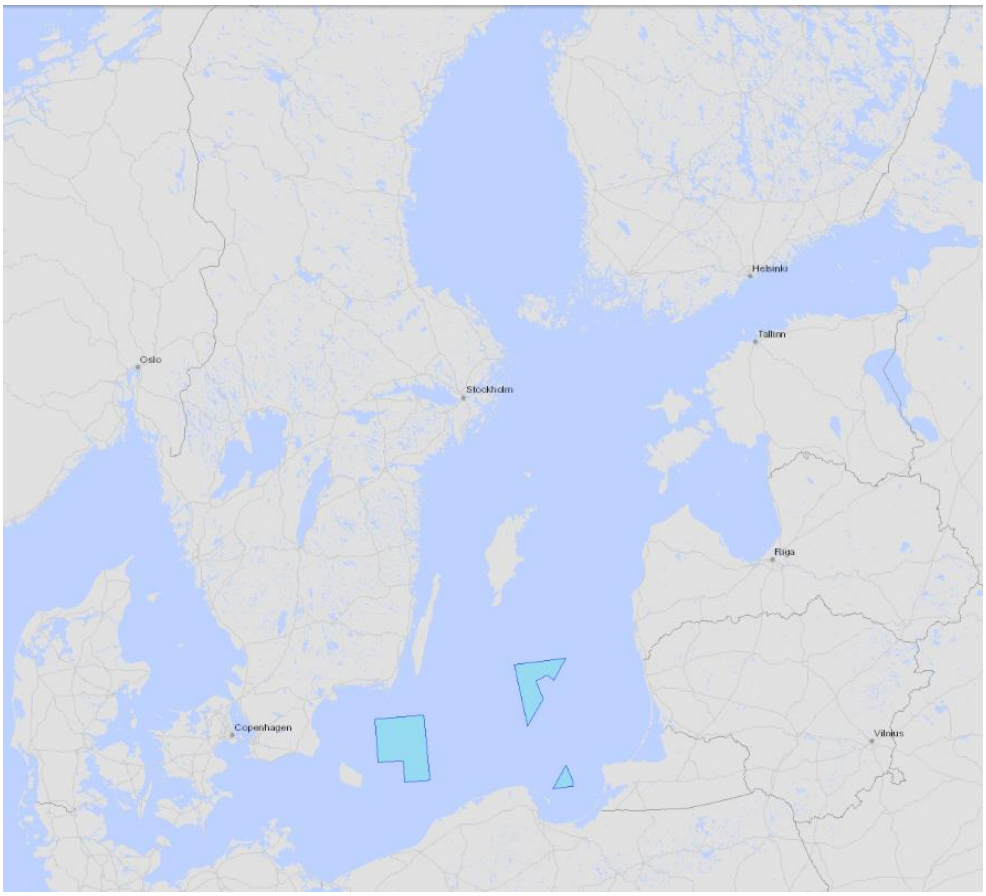


Figure 7.4.2. Marked in blue the areas closed for fishing from 1 May to 31 October according to Regulation (EU) 2016/1139.

Article 15 of the Baltic Sea MAP (2016/1139) states that by 21 July 2019, and every five years thereafter, the Commission shall report to the European Parliament and to the Council on the results and impact of the plan on the stocks to which this Regulation applies and on the fisheries exploiting those stocks, in particular as regards the achievement of the objectives set out in Article 3. However, provision is also made to report at an earlier date if this is deemed necessary by all Member States concerned or by the Commission itself. Following these provisions, the first report on the implementation of the Multiannual Plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks was published in 2020 (EC, 2020).

Besides, in the case the Commission considers that the fishing mortality ranges or conservation reference points set out in the Regulation no longer correctly express the objectives of the plan, the Commission may as a matter of urgency submit a proposal for revision of those ranges. Since its entry into force, the following has been amended to Regulation (EU) 2016/1139:

- 2018: Regulation (EU) 2018/976 as regards fishing mortality ranges and safeguard levels for certain herring stocks in the Baltic Sea, thus, amending Article 1 - Subject-matter and scope.
- 2019:
    - Regulation (EU) 2019/472 to apply dynamic references to ranges of FMSY and to conservation reference points to ensure that those parameters, which are essential for setting fishing opportunities,

do not become outdated and that the Council is always able to use the best available scientific advice. Moreover, the approach consisting of providing dynamic references to the best available scientific advice should be followed for managing stocks in the Baltic Sea. Therefore, Article 2 – Definitions, Article 4 – Targets, Article 4a – Conservation reference points, and Article 5 – Safeguards were amended.

- Regulation (EU) 2019/1241 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, thus, Article 8 – Technical measures was amended.

- 2020: Regulation (EU) 2020/1781 as regards fishing capacity reduction in the Baltic Sea. Due to the serious condition of the Eastern Baltic cod, Western Baltic cod and Western Baltic herring, Chapter VI A – Fishing Capacity Reduction has been amended by adding a new article, i.e., Article 8a - Fishing capacity reduction for Eastern Baltic cod, Western Baltic cod and Western Baltic herring. Moreover, Article 11 – Prior notifications, and Article 14 – Designated ports have also been amended to deal with this issue.

Overall, Articles 3 (Objectives), 4 (Targets) and 5 (Conservation Reference Points) are particularly crucial for the ongoing management of the Baltic sprat, cod and herring stocks and are quoted below:

Article 3: Objectives

1. *The plan shall contribute to the achievement of the objectives of the Common Fisheries Policy (CFP) listed in Article 2 of Regulation (EU) No 1380/2013, in particular by applying the precautionary approach to fisheries management, and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce MSY.*
2. *The plan shall contribute to the elimination of discards by avoiding and reducing, as far as possible, unwanted catches, and to the implementation of the landing obligation established in Article 15 of Regulation (EU) No 1380/2013 for the species which are subject to catch limits and to which this Regulation applies.*
3. *The plan shall implement the ecosystem-based approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised. It shall be coherent with Union environmental legislation, in particular with the objective of achieving good environmental status by 2020 as set out in Article 1(1) of Directive 2008/56/EC.*

In particular the plan shall aim to: (a) ensure that the conditions described in descriptor 3 contained in Annex I to Directive 2008/56/EC are fulfilled; and (b) contribute to the fulfilment of other relevant descriptors contained in Annex I to that Directive in proportion to the role played by fisheries in their fulfilment. 4.Measures under the plan shall be taken in accordance with the best available scientific advice.

Article 4: Targets

1. *The target fishing mortality shall be achieved as soon as possible and, on a progressive, incremental basis, by 2020 for the stocks concerned, and it shall be maintained thereafter within the ranges set out in Annex I and in line with the objectives laid down in Article 3(1).*
2. *In accordance with Article 16(4) of Regulation (EU) No 1380/2013, fishing opportunities shall be fixed in accordance with the objectives and targets of the plan and shall comply with the target fishing mortality ranges set out in Annex I, column A, to this Regulation.*
3. *Notwithstanding paragraphs 1 and 2, fishing opportunities may be fixed at levels corresponding to lower levels of fishing mortality than those set out in Annex I, column A.*

4. *Notwithstanding paragraphs 2 and 3, fishing opportunities for a stock may be fixed in accordance with the fishing mortality ranges set out in Annex I, column B, provided that the stock concerned is above the minimum spawning stock biomass reference point set out in Annex II, column A:*

    a) *if, on the basis of scientific advice or evidence, it is necessary for the achievement of the objectives laid down in Article 3 in the case of mixed fisheries;*

    b) *if, on the basis of scientific advice or evidence, it is necessary to avoid serious harm to a stock caused by intra- or inter-species stock dynamics; or*

    c) *in order to limit variations in fishing opportunities between consecutive years to not more than 20 %.*

    The application of this paragraph shall be explained by a reference to one or more of the conditions set out in points (a) to (c) of the first subparagraph.

5. *Where, according to scientific advice, the MSY exploitation rate is achieved for the stock concerned by 2020, fishing opportunities for that stock may be fixed in accordance with paragraph 4 thereafter.*

6. *Where, on the basis of scientific advice, the Commission considers that the fishing mortality ranges set out in Annex I no longer correctly express the objectives of the plan, the Commission may as a matter of urgency submit a proposal for revision of those ranges.*

7. *Fishing opportunities shall in any event be fixed in such a way as to ensure that there is less than a 5 % probability of the spawning stock biomass falling below the limit spawning stock biomass reference point (Blim) set out in particular in Annex II, column B.*

Article 5: Conservation Reference Points

1. *The conservation reference points expressed as minimum and limit spawning stock biomass levels that are to be applied in order to safeguard the full reproductive capacity of the stocks concerned are set out in Annex II. 15.7.2016 L 191/6 Official Journal of the European Union EN*

2. *When scientific advice indicates that the spawning stock biomass of any of the stocks concerned is below the minimum spawning stock biomass reference point as set out in Annex II, column A, to this Regulation, all appropriate remedial measures shall be adopted to ensure rapid return of the stock concerned to levels above the level capable of producing MSY. In particular, by way of derogation from Article 4(2) and (4) of this Regulation and in accordance with Article 16(4) of Regulation (EU) No 1380/2013, to achieve such levels, fishing opportunities for the stock concerned shall be fixed at a level consistent with a fishing mortality that is reduced below the range set out in Annex I, column B, to this Regulation, taking into account the decrease in biomass of that stock.*

3. *When scientific advice indicates that the spawning stock biomass of any of the stocks concerned is below the limit spawning stock biomass reference point as set out in Annex II, column B, to this Regulation, further remedial measures shall be taken to ensure the rapid return of the stock concerned to levels above the level capable of producing MSY, which may include, by way of derogation from Article 4(2) and (4) of this Regulation and in accordance with Article 16(4) of Regulation (EU) No 1380/2013, suspending the targeted fishery for the stock concerned and the adequate reduction of fishing opportunities.*

4. *Remedial measures referred to in this Article may include:*

    a) *Commission measures in case of a serious threat to marine biological resources in accordance with Article 12 of Regulation (EU) No 1380/2013;*

    b) *Member State emergency measures in accordance with Article 13 of Regulation (EU) No 1380/2013;*

    c) *measures pursuant to Articles 7 and 8 of this Regulation.*

5. *The choice of measures referred to in this Article shall be made in accordance with the nature, seriousness, duration and repetition of the situation where the spawning stock biomass is below the levels referred to in paragraph 1.*

6. *Where, on the basis of scientific advice, the Commission considers that the conservation reference points set out in Annex II no longer correctly express the objectives of the plan, the Commission may, as a matter of urgency, submit a proposal for the revision of those conservation reference points.*

7.4.1.6 Control, enforcement, and compliance

Fisheries rules and control systems are agreed at EU level but implemented and carried out by the national authorities and inspectors of EU Member States.

To enforce the EU's Common Fisheries Policy rules, there is a European control system in place, designed to ensure that only the allowed quantities of fish are caught, to collect the necessary data for managing fishing opportunities, and to ensure the rules are applied to fishermen across the EU in the same manner. The system is set out in the EU's Control Regulation (Council Regulation (EC) No 1224/2009) which entered into force on 1 January 2010 and which thoroughly modernised the EU's approach to fisheries control. This Regulation provides for a series of instruments to assist Member States in implementing the agreed rules, including system auditing and action plans. Data is shared between the Member States of the European Union. Elements of Member State compliance with EC Regulations are captured in the annual EC fisheries compliance scoreboard[4].

The multiannual management plan for cod, herring and sprat in the Baltic (Regulation 2016/1139) includes some specific requirements for MCS in the case of the sprat and herring fisheries. Below are listed two of the main requirements affecting the LFPO sprat fishery in terms of inspection:

- **Prior notification**: Vessels of an overall length of 8 meters or more retaining on board at least 300 kg of cod or 2 tonnes of pelagic stocks are obliged to send a notification at least 1 hour before the estimated time of arrival at port (to allow inspection).
- **Margin of tolerance in the logbook**: for catches which are landed unsorted (e.g., sprat and herring) the permitted margin of tolerance in estimates recorded in the fishing logbook of the quantities in kilograms of fish retained on board shall be 10 % of the total quantity retained on board.

The activities of the Latvian fisheries (both offshore and coastal fisheries) are comprehensively monitored by the Fisheries Control Department (FCD), under the State of Environmental Service (SES). The SES supervises the work done by the control Units of the 4 environmental Regional Boards existing along the Latvian coast (Liepaja, Ventspils, Riga, and Salacgriva,). Besides, there is a mobile Marine Control Unit which can also perform inspections (they normally tackle the more complicated cases since its movements are less predictable for the fishers). Moreover, the SES has access to the LZIKIS (see **Section 6.2.1**). The notifications sent by the vessels and the information of non-compliances are also uploaded to the LZIKIS. Catch records from the coastal fisheries are also entered manually into the LZIKIS.

The SES also receives the VMS data from the offshore fishing fleet. The VMS installed are transmitting with a high frequency (every 2 minutes).

According to the Latvian Administrative Violations Code (https://likumi.lv/ta/en/id/89648-latvian-administrative-violations-code) in case of violation of the rules of fishing in the territorial waters, the economic zone waters or in international waters legal persons can be fined from 140 € up to 4,300 € (depending on the severity of the infringement). Also, confiscation of fishing gear and suspension of the fishing license up to one year can be applied. In case of repeated

4 *http://ec.europa.eu/competition/state_aid/studies_reports/studies_reports.html*

violation of fishing regulations during the year (i.e., fishing without authorization, in prohibited places, or with prohibited gear), legal persons can be fined from 700 € up to 14,000 €.

Inspections in the sprat fishery are focused in controlling that the quota allocated to each company is not exceeded, and in verifying total landings and sprat/herring estimates. Inspections are performed both onshore and at sea.

7.4.2 Principle 3 Performance Indicator scores and rationales

PI 3.1.1 – Legal and/or customary framework

PI 3.1.1		**The management system exists within an appropriate legal and/or customary framework which ensures that it:** - **Is capable of delivering sustainability in the UoA(s);** - **Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and** - **Incorporates an appropriate dispute resolution framework**		
Scoring Issue		SG 60	SG 80	SG 100
a	Compatibility of laws or standards with effective management			
	Guide post	There is an effective national legal system **and a framework for cooperation** with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	There is an effective national legal system and **organised and effective cooperation** with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.	There is an effective national legal system and **binding procedures governing cooperation with other parties** which delivers management outcomes consistent with MSC Principles 1 and 2.
	Met?	**Yes**	**Yes**	**No**
Rationale				

At level of international law, Latvia ratified the United Nations Convention on the Law of the Sea (UNCLOS) in 2004. The principle legislative instrument for fisheries management in the EU is the Common Fisheries Policy, CFP, which aims at achieving sustainable fisheries management across the EU. This clearly aims to achieve both P1 (stock management) and P2 (wider ecosystem impacts). *Inter alia* the regulation states:

1) "The CFP shall ensure that fishing and aquaculture activities are environmentally sustainable in the long-term and are managed in a way that is consistent with the objectives of achieving economic, social and employment benefits, and of contributing to the availability of food supplies".

2) "The CFP shall apply the precautionary approach to fisheries management and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield".

3) "The CFP shall implement the ecosystem-based approach to fisheries management so as to ensure that negative impacts of fishing activities on the marine ecosystem are minimised, and shall endeavour to ensure that aquaculture and fisheries activities avoid the degradation of the marine environment."

Underneath the umbrella of the EU CFP, there are many binding regulations covering all aspects of fisheries, which are amended and updated as required. A list of the most relevant fisheries Regulations and Recommendations applicable to Baltic fisheries are listed in section 7.4.1.1.

In addition, the EU Marine Strategy Framework Directive (Directive 2008/56/EC) commits Members States to further foster the integration of environmental concerns into other relevant policies, such as the CFP, in order to achieve 'good environmental status' in the marine environment, through the development and implementation of national level policies based on an ecosystem approach.

In Latvia the EU CFP is enacted in the "Fishing Law" (12.04.1995 with later amendments) which sets the basis for fisheries legislation and institutions responsible for fisheries management and control, as well as national rules on fish resources management. The Fishing Law states that the Ministry of Agriculture in accordance with the procedures laid down in the Laws and Regulations governing the fisheries (including coastal fisheries) shall organize the exercising of the fishing rights owned by the State in territorial waters and EEZ.

In the case of the Baltic fisheries, the EU cooperates with the Russian Federation under the EU-Russian fisheries agreement signed in 2009 (Council Regulation (EC) No 439/2009 and EU-Russian Agreement, 2009). The agreement lays down the principles and procedures to ensure that "*the exploitation of the straddling, associated and dependent stocks in the Baltic Sea provides sustainable economic, environmental and social conditions*", and it also establishes that "*the Parties shall base their cooperation on the best scientific advice available and on any relevant data, shall apply the precautionary approach and shall agree to develop an ecosystem-based approach to fisheries management*". Both parties to this agreement participate in the Joint Baltic Sea Fisheries Committee's (JBSFC) annual meetings, and in ICES working groups that assess the status of Baltic Sea fish stocks (such as WGBFAS). The overall objective of the EU-Russia agreement (Article 4) is compatible with UNFSA Article 10(a). The account of the most recent EU-Russia JBSFC demonstrates that both Russia and the EU take account of Baltic sprat stock status and wider environmental issues when setting annual TAC, meeting the requirements of UNFSA Article 10(j). The meeting also showed that there is currently no agreement on setting an overall TAC and that the Russian fleet is currently not permitted to fish within the EU EEZ. The Russian Government provides data on the catch of Central Baltic herring and Baltic sprat which informs annual ICES advice (meeting UNFSA Article 10(h)).

Based on the above, through Latvian implementation of the CFP, there is an effective national legal system, cooperation with other parties through various international commissions which deliver outcomes consistent with MSC Principles 1 and 3, thus, the assessment team concludes that **SG80 is met**.

Even though there is agreement between the EU and Russia on the shares for certain stocks, such as the Baltic sprat, and despite the EU CFP sets out binding procedures for allocating fishing opportunities between EU Member States, there is no binding agreement in place to determine the allocation of the TAC between the EU and Russia as required by UNFSA Article 10(b). Thus, **SG100 is not met**.

	Resolution of disputes			
b	Guide post	The management system incorporates or is subject by law to a **mechanism** for the resolution of legal disputes arising within the system.	The management system incorporates or is subject by law to a **transparent mechanism** for the resolution of legal disputes which is **considered to be effective** in dealing with most issues and that is appropriate to the context of the UoA.	The management system incorporates or is subject by law to a **transparent mechanism** for the resolution of legal disputes that is appropriate to the context of the fishery and has been **tested and proven to be effective**.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

There is a potential for legal disputes to arise at three different levels: national, EU and between EU and Russia Federation.

National disputes are resolved using two mechanisms: political through the Ministry and through, potentially, court cases. Where appropriate, European legislation is enacted at the national level through relevant primary and secondary legislation. Formal procedures apply for the resolution of disputes through the national court systems. In practice disputes are resolved through discussions with stakeholders at the Fisheries Advisory Council (FAC) and at the political level. During the four-surveillance site visits the Ministry of Agriculture confirmed that there is no disputes regarding this fishery. Fines and other punishments based on fisheries infringement can appeal to the full judicial process by fishermen, or industry representatives representing a transparent mechanism for the resolution of legal disputes which is considered to be effective and that is appropriate to the context of the UoA.

At the EU level conflict resolutions are through the European legislation, i.e., the CFP in this case. Disputes between Member States and the Commission are resolved in the Council of Ministers (Fishery Council). Ultimately, any European citizen or organisation can take legal action against the Council of Ministers in the European Court of Justice. At European level there is also the possibility of appealing to the Ombudsman, which investigates complaints about maladministration in the institutions and bodies of the European Union. There are also a wide range of organisations which provide alternative non-statutory avenues for raising concerns and seeking the resolution of disputes, such as trade organisations, professional associations, and advisory bodies (such as the multi-stakeholder Baltic Sea Advisory Council, the intergovernmental Baltfish, or the scientific/technical STECF).

The Court of Justice of the European Communities (CJEC) rules on cases brought before it concerning, amongst others, the application of Community legislation. All EU Member States are bound by the EU Treaty to comply with the requirements of the CFP, and any transgressions or disputes can be addressed by the CJEC. Although some cases are referred to the Court from national courts, most cases are brought by the Commission because Member States have failed to transpose and/or implement EU legislation. Individuals have very limited possibility to bring cases directly to the Court but must rely instead on complaining to the Commission or bringing cases at the national level. Although the role of the CJEC is less visible, it is far from insignificant in the development of the CFP. For example, the Court has been called to judge on catch quotas, free circulation of capital, and the EC's authority regarding relations with third countries.

In case of disputes between Russia Federation and EU member states the EU-Russian fisheries agreement signed in 2009 (Council Regulation (EC) No 439/2009 and EU-Russian Agreement, 2009) established a Joint Baltic Sea fisheries Committee which shall "*serve as a forum for the resolution of disputes which might arise regarding the interpretation or application of this Agreement*". There are no major outstanding conflicts indicating that the mechanism cannot be considered effective.

Hence the management system incorporates transparent mechanisms for the resolution of legal disputes at all levels: national, EU, EU-Russia. The few court cases suggest that the existing mechanisms for the resolution of legal disputes (discussions with stakeholders and at the political level) is effective. **SG60 and SG80 are met**.

Both Russian-EU, European and national systems have been tested. The EU legal system has been activated in several court cases. For example, infractions procedures have been made in the past by the EC against several member States for quota overshooting or lack to provide required fisheries data. Occasionally national court cases mainly over punishment related to fisheries regulations infringement occur. Therefore**, SG100 is met**.

	Respect for rights			
c	Guide post	The management system has a mechanism to **generally respect** the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the	The management system has a mechanism to **observe** the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the	The management system has a mechanism to **formally commit** to the legal rights created explicitly or established by custom of people dependent on fishing for food and livelihood in a manner consistent with the

		objectives of MSC Principles 1 and 2.	objectives of MSC Principles 1 and 2.	objectives of MSC Principles 1 and 2.
	Met?	**Yes**	**Yes**	**Yes**

Rationale

The EU CFP sets out a formal commitment to the legal and customary rights of people dependent on fishing, through a commitment to relative stability (meaning Member States are consistently allocated the same proportion of particular stocks): "*In view of the precarious economic state of the fishing industry and the dependence of certain coastal communities on fishing, it is necessary to ensure relative stability of fishing activities by allocating fishing opportunities among Member States, based upon a predictable share of the stocks for each Member State*."

Objectives of the CFP include:

(f) contribute to a fair standard of living for those who depend on fishing activities, bearing in mind coastal fisheries and socio-economic aspects;

(i) promote coastal fishing activities, taking into account socio- economic aspects;

These objectives apply throughout the EU EEZ, including Latvian waters.

In order to facilitate the engagement of people dependent on fishing for their food and livelihood in the management system, the EU has established and provides funding for regional "Advisory Councils" such as the Baltic Sea Advisory Council.

Quota allocation at national level falls under the responsibility of each Member State. In Latvia the Fishing Law prescribes a default ratio for quota allocation between off-shore and coastal fisheries, with off-shore fisheries taking 97% of the quota and coastal fisheries taking the remaining 3%.

Based on the above the assessment team concludes that the management system has a mechanism to formally commit to the legal rights created explicitly or established by custom of people dependent on fishing for food and livelihood in a manner consistent with the objectives of MSC Principles 1 and 2, thus that **SG60, SG80 and SG100 are met**.

References

Council Regulation (EC) No 439/2009
EU-Russian Agreement, 2009
Latvian Fishing Law (https://likumi.lv/ta/en/en/id/34871)
Regulation (EU) No 1380/2013

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**95**
Condition number (if relevant)	**NA**

PI 3.1.2 – Consultation, roles and responsibilities

PI 3.1.2		The management system has effective consultation processes that are open to interested and affected parties The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties		
Scoring Issue		SG 60	SG 80	SG 100
a	Roles and responsibilities			
	Guide post	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are **generally understood**.	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are **explicitly defined and well understood for key areas** of responsibility and interaction.	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are **explicitly defined and well understood for all areas** of responsibility and interaction.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

The fishery operates under a flag of an EU Member State within which the organisations and roles associated with the fisheries management process are well defined and understood. Exploitation of the Baltic sprat and the central Baltic herring also depend on the management regime established by the EU-Russia Joint Baltic Sea Fisheries Commission.

The Baltic Sea region also features active international organisations, such as HELCOM and ASCOBANS, each of which provides fora for discussion and to develop the agenda to improve environmental protection and ecosystem management of the Baltic Sea.

In **Section 7.4.1.2** a list of the main Regional and National institutions involved in fisheries management in the Baltic is provided, including a description of their functions, roles and responsibilities. They are summarized in the table below (see **section 7.4.1.2** for more details):

Table 3.1.2.1. Institutions involved in the management of the Baltic fisheries.

Institution	Scope	Roles and Responsibilities	Web site
HELCOM	Global	Foster intergovernmental cooperation to protect the Baltic Sea	http://www.helcom.fi/
BALTFISH		Inter-Government organization under HELCOM Framework Multi-stakeholders' advisory observers	http://www.helcom.fi/action-areas/fisheries/management/baltfish

ICES		Fisheries scientific research and advice	http://www.ices.dk
EU-RUSSIA fisheries Committee		To reach agreements on management actions between EU and Russia	
DGMARE	EU	Implementation of the CFP	https://ec.europa.eu/info/departments/maritime-affairs-and-fisheries_en
STECF		Technical advice to the EC	https://stecf.jrc.ec.europa.eu/web/stecf/
BSAC		Multi-stakeholders' advisory body to the EC	http://www.bsac.dk/
Fisheries Dept. of the Ministry of Agriculture	Latvia	Legislation and fisheries Management	https://www.zm.gov.lv/en/
State Environmental Service		Licencing, Control and Inspection	https://www.varam.gov.lv/en
BIOR		Scientific assessment and advice	http://www.bior.gov.lv/en/
FAC		Multi-stakeholders' fisheries advisory body	

All of these institutions have well established protocols covering their purpose, roles, operation, representation, consultation, and decision-making process, as well as for communicating dissemination of policy, decisions and other information. Their roles are well understood and the interaction between them works effectively. Thus, **SG60, SG80 and SG100 are met.**

b	Consultation processes			
	Guide post	The management system includes consultation processes that **obtain relevant information** from the main affected parties, including local knowledge, to inform the management system.	The management system includes consultation processes that **regularly seek and accept** relevant information, including local knowledge. The management system demonstrates consideration of the information obtained.	The management system includes consultation processes that **regularly seek and accept** relevant information, including local knowledge. The management system demonstrates consideration of the information and **explains how it is used or not used**.
	Met?	**Yes**	**Yes**	**No**
Rationale				

When drafting and proposing legislation, the DGMARE shall consult a wide range of stakeholders from public online consultations to meetings with the ACs, MSs, fishing industry representatives and environmental NGOs. As seen on previous SI there are 3 multi-stakeholders' consultations bodies involved in Baltic and Latvian fisheries: 2 at an European level (BSAC and BALTFISH) and 1 at a National level (FAC).

BSAC: The creation of Advisory Councils (ACs, BSAC is one of them) was one of the outcomes of the 2002 reform of the Common Fisheries Policy in response to the EU and stakeholders' desire to increase the latter's participation in the CFP process. The ACs prepare recommendations and suggestions on fisheries aspects in the area they cover and transmit them to the Commission or to the relevant national authorities. Submissions may be in response to a request from these bodies or on the ACs own initiative. The ACs are made up of representatives of the fisheries sector and other groups affected by the CFP. There are 11 ACs: Aquaculture, Black Sea, Long Distance, Market, Mediterranean Sea, North Sea, North-western waters, Outermost regions, Pelagic Stocks, South-western waters and Baltic Sea (BSAC). The BSAC was created in 2006. Its main function is to advise the European Commission and Member States on matters relating to management of the fisheries in the Baltic Sea. The BSAC actively develops policy and advises the European Commission and is an integral part of the EC's management system. The EU provides financial support to the BSAC to ensure it can fulfil this role. At this moment there are 38 BSAC members, 60% of its Executive Committee is comprised by representatives of the fisheries sector, ensuring that their knowledge, interestests and concerns are taken into account. (LFPO being a member of the Executive Committee). The BSAC meets regularly. The Statutes and rules of procedure, WG procedures, the current annual work programme, and the Annual Reports since 2007 can be found at their website. The consultation process to be followed with the ACs is stated in the CFP, and they perform an important role in debating fisheries policy, plans and management measures.

BALTFISH constitutes a MS forum for exchange of ideas, views and information to facilitate joint actions and various concrete projects aiming at achieving sustainable fisheries in the Baltic Region. BALTFISH works at two levels (High-level group –HLG-, and Forum Seminar).

The **Latvian Fishery Advisory Council (FAC)** is recognized by the Latvian 'Fishing Law' as an advisory body of the Fisheries Department. FAC is the forum for the managers to consult with fisheries representatives and also other stakeholders (BIOR, NGOs) on fisheries regulations. It is an advisory body comprising between 15 and 23 members (it is not a fixed composition). FAC meetings are held by the Ministry 3-4 times a year, depending on the issues to deal with. The LFA (Latvian Fishermen`s Association) has 3 votes on the FAC, and LFPO has 1 vote.

These 3 bodies have regular meetings and constitute an effective conduit for incorporating local knowledge into the management system (in particular BSAC and FAC). Therefore, **SG60 and SG80 are met**.

However, although consultation is intense there is not always a clear explanation provided on how the information received from the stakeholders is used or not used and therefore **SG100 is not met**.

	Participation			
c	Guide post		The consultation process **provides opportunity** for all interested and affected parties to be involved.	The consultation process provides **opportunity and encouragement** for all interested and affected parties to be involved, and **facilitates** their effective engagement.
	Met?		**Yes**	**No**
Rationale				

As explained in previous SIs, extensive consultative processes are in place at European level to debate fisheries policy, plans and management measures. The introduction of the BSAC in 2006 provided a structure and formal procedures to incorporate a wider stakeholder community within a regular consultation process. 40% of the seats at the BSAC Executive Committee and General Assembly are allotted to representatives of interest groups affected by the CFP other than the fisheries sector. In the BSAC Executive Committee for the period 2021-2024 are included the following environmental NGOs: Coalition Clean Baltic, Finnish Association for Nature Conservation and World Wide Fund (WWF). Also, there are other stakeholders representing other interests apart from fishers and environmental NGOs, such as recreational fishers (i.e., Danish Recreational Fishermen, European Anglers Alliance and German Angling Association)

or the Swedish Fisheries Secretariat. The EU provides financial support to the BSAC to enable it to provide these opportunities for stakeholder engagement in the management process, facilitating their engagement.

Also, the BALTFISH forum seminar level allows representatives from organisations such as ICES and HELCOM to discuss relevant fisheries issues with officials of the MS and EC.

At a National level the FAC also provides opportunity for all interested and affected parties to be involved. However, the participation and involvement of other stakeholders than the fisheries sector seems to be low and they have no statutory role.

All these consultation processes have informed the development of the Baltic Sea MAP and its revision.

Based on the information presented above, **SG80 is met**.

At a European level, it is clear that BSAC provides opportunity and encouragement for all interested and affected parties to be involved in the Baltic Sea fisheries management, and facilitates their effective engagement. However, it is less clear how other maritime and marine organisations are brought into more routine fisheries management consultation. For example, the degree to which marine recreation, aquaculture, aggregate extraction and offshore industries are actively facilitated (perhaps as part of an ICZM or marine spatial planning forum) is not obvious. This together with the lack of involvement of environmental NGOs in the national FAC consultations are reasons for considering that **SG100 is not met**.

References

Latvian Fishing Law (https://likumi.lv/ta/en/en/id/34871)

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

PI 3.1.3 – Long term objectives

PI 3.1.3		The management policy has clear long-term objectives to guide decision-making that are consistent with MSC Fisheries Standard, and incorporates the precautionary approach		
Scoring Issue		SG 60	SG 80	SG 100
a	Objectives			
	Guide post	Long-term objectives to guide decision-making, consistent with the MSC Fisheries Standard and the precautionary approach, are **implicit** within management policy.	**Clear** long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach are **explicit** within management policy.	**Clear** long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach, are **explicit** within **and required by** management policy.
	Met?	**Yes**	**Yes**	**No**
Rationale				

As stated in PI 3.1.1SIa, the CFP has in its Article 2 specific precautionary and MSY objectives to reach sustainable fisheries: “The CFP shall apply the precautionary approach to fisheries management, and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield (MSY)”. Furthermore, the CFP shall implement the ecosystem-based approach to fisheries management so as to ensure that negative impacts of fishing activities on the marine ecosystem are minimised and shall endeavour to ensure that aquaculture and fisheries activities avoid the degradation of the marine environment. In particular it shall, among other objectives: “(….) gradually eliminate discards; make the best use of unwanted catches; provide for measures to adjust the fishing capacity of the fleets to levels of fishing opportunities; take into account the interests of both consumers and producers; and be coherent with the Union environmental legislation”; while it states that “in order to reach the objective of progressively restoring and maintaining populations of fish stocks above biomass levels capable of producing maximum sustainable yield, the maximum sustainable yield exploitation rate shall be achieved by 2015 where possible and, on a progressive, incremental basis at the latest by 2020 for all stocks”. These long-term objectives are clear and explicitly defined and entirely consistent with MSC fisheries standard. Besides, the 2013 reform of the CFP also embraced a long-term approach to fisheries management, involving the establishment of multi-annual recovery plans for stocks outside safe biological limits and of multi-annual management plans for other stocks.

The EU Marine Strategy Framework Directive (Directive 2008/56/EC) also commits Members States to further foster the integration of environmental concerns into other relevant policies, such as the CFP, in order to achieve ‘good environmental status’ in the marine environment, through the development and implementation of national level policies based on an ecosystem approach, in order to meet the following targets by 2020. In Annex I provides qualitive descriptors for determining good environmental status, among them we list the following as relevant for fisheries:

- Populations of all commercially exploited fish and shellfish must be within safe biological limits, exhibiting an age and size distribution that is indicative of a healthy stock;
- All elements of the marine food web must occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity;
- Biological diversity must be maintained and the quality and occurrence of habitats, and the distribution and abundance of species, are to be kept in line with prevailing conditions; and
- Sea floor integrity is maintained at a level that ensures the safeguarding of structure and functions of the ecosystems.

It is apparent that there are clear long-term objectives in place for guiding decision making at the international, EU and national level that **meet SG60 and SG80**.

However, there is no binding agreement in place to determine the allocation of the TAC between the EU and Russia as required by UNFSA Article 10(b). Therefore, **SG100 is not met.**

References

Directive 2008/56/EC
Regulation (EU) No 1380/2013

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**80**
Condition number (if relevant)	**NA**

PI 3.2.1 – Fishery-specific objectives

PI 3.2.1		The fishery-specific management system has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2		
Scoring Issue		SG 60	SG 80	SG 100
a	Objectives			
	Guide post	**Objectives**, which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are **implicit** within the fishery-specific management system.	**Short and long-term objectives**, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are **explicit** within the fishery-specific management system.	**Well defined and measurable short and long-term objectives**, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are **explicit** within the fishery-specific management system.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

The fishery-specific management system is defined as the EU CFP, the Baltic Sea MAP and the national management regimes established by EU Member States.

A multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea (Regulation (EU) 2016/1139) entered into force in July 2016. In its Article 3 the Regulation establishes the following long-term objectives for the Plan:

1. "The plan shall contribute to the achievement of the objectives of the common fisheries policy (CFP) listed in Article 2 of Regulation (EU) No 1380/2013, in particular by applying the precautionary approach to fisheries management, and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce MSY".

2. "The plan shall contribute to the elimination of discards by avoiding and reducing, as far as possible, unwanted catches, and to the implementation of the landing obligation established in Article 15 of Regulation (EU) No 1380/2013 for the species which are subject to catch limits and to which this Regulation applies".

3. "The plan shall implement the ecosystem-based approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised. It shall be coherent with Union environmental legislation, in particular with the objective of achieving good environmental status by 2020 as set out in Article 1(1) of Directive 2008/56/EC". Regarding this objective the Plan shall ensure that the conditions described in descriptor 3 contained in Annex I to Directive 2008/56/EC are fulfilled, and also contributing to the fulfilment of all the other relevant descriptors.

4. Measures under the plan shall be taken in accordance with the best available scientific advice.

In order to achieve these long-term objectives, the Regulation establishes target fishing mortalities (FMSY) to be achieved as soon as possible and, on a progressive, incremental basis, by 2020 for the stocks concerned (including the sprat stock in the Baltic Sea – i.e., the target stock in the current assessed fishery -, and Central Baltic herring and the eastern Baltic cod assessed against P2 in the current assessment). Once FMSY has been achieved "it shall be maintained thereafter" within the ranges set out in the Regulation (see **Section 7.4.1.5** for a description of the plan and PI 3.2.2 for more details on decision making processes derived from the MAP). Furthermore, since this is a multi-species MAP, target values to be used for fixing fishing opportunities for a particular stock will depend on both intra- and inter-species stock dynamics.

Since the initial assessment of the sprat fishery, amendments to the Baltic Sea MAP have been made by the EU (see **Section 7.4.1.5** for further details). The key changes, in particular through Regulation (EU) 2019/472, introduced have been to remove the reference points for fishing mortality and biomass set out in the MAP and instead to make an explicit link to the current ICES (or a similar independent scientific body recognised at Union or international level) reference points for the Baltic Sea fish stocks addressed by the MAP. This change has addressed the problems that arise when, for instance, the perception of stock identity changes; or when there is a change in perception of stock status that might result in new reference points for F and B.

The reference of the Baltic Sea MAP to the EU Directive 2008/56/EC (the Marine Strategy Framework Directive) represents an explicit commitment to achieve good environmental status. The evaluation of Good Environmental Status under this Directive is rigorous and comprehensive and follows pre-determined and objective criteria that apply throughout Europe.

Therefore, the multiannual management plan regulating the sprat fishery in the Baltic Sea has well defined and measurable short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2.

Hence, **SG60, SG80 and SG100 are met**.

References

EU Directive 2008/56/EC
Regulation (EU) No 1380/2013
Regulation (EU) 2016/1139
Regulation (EU) 2019/472

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**100**
Condition number (if relevant)	**NA**

PI 3.2.2 – Decision-making processes

PI 3.2.2		The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery		
Scoring Issue		SG 60	SG 80	SG 100
a	Decision-making processes			
	Guide post	There are **some** decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives.	There are **established** decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.	
	Met?	**Yes**	**Yes**	
Rationale				

The Baltic Sea Multi-Annual Plan (MAP) (Regulation 2016/1139) sets out fishery-specific objectives and also provides the overall strategy for achieving these objectives. This plan was introduced in 2016 by the EU and has been amended in 2018, 2019 and 2020 (see **Section 7.4.1.5**).

The decision-making process for agreeing the MAP and its subsequent amendment is set out in the Treaty on the Functioning of the European Union (EU, 2012). Very briefly, the European Commission prepares a proposal for new legislation which is presented to the European Parliament and to the European Council for approval. After several iterations and not reaching an agreement, the Council must act unanimously rather than by majority.

Regulation 2016/1139, adopted in July 2016, introduced new decision-making processes for fisheries targeting cod, herring and sprat in the Baltic. In its Articles 4, 4a and 5 (and Annexes I and II) the Plan sets out ranges of fishing mortalities (targets) and conservation reference points for SSB (safeguards) for most of the cod, herring and sprat stocks in the Baltic (with the exception of the Eastern Baltic cod) and details a decision-making process for fixing fishing opportunities of the concerned stocks (sprat, herring and cod) depending on both intra- and inter-specific stock dynamics.

The process is detailed in the following points quoted from its Article 4:

2. *The ranges of FMSY based on the plan shall be requested in particular from ICES or a similar independent scientific body recognised at Union or international level.*
3. *In accordance with Article 16(4) of Regulation (EU) No 1380/2013, when the Council fixes fishing opportunities for a stock, it shall establish those opportunities within the lower range of FMSY available at that time for that stock.*
4. *Notwithstanding paragraphs 1 and 3, fishing opportunities may be fixed at levels that are lower than the ranges of FMSY.*
5. *Notwithstanding paragraphs 3 and 4, fishing opportunities for a stock may be fixed in accordance with the upper range of FMSY available at that time for that stock, provided that the stock referred to in Article 1(1) is above MSY Btrigger:*
    a. *if, on the basis of scientific advice or evidence, it is necessary for the achievement of the objectives laid down in Article 3 in the case of mixed fisheries;*
    b. *if, on the basis of scientific advice or evidence, it is necessary to avoid serious harm to a stock caused by intra- or inter-species stock dynamics; or*

c. in order to limit variations in fishing opportunities between consecutive years to not more than 20 %.

6. *Fishing opportunities shall in any event be fixed in such a way as to ensure that there is less than a 5 % probability of the spawning stock biomass falling below Blim.*

Furthermore, it continues in Article 5, where the following process is detailed:

1. *When scientific advice indicates that for a given year the spawning biomass of any of the stocks referred to in Article 1(1) is below the MSY Btrigger, all appropriate remedial measures shall be adopted to ensure rapid return of the stock concerned to levels above those capable of producing MSY. In particular, notwithstanding Article 4(3), fishing opportunities shall be set at levels consistent with a fishing mortality that is reduced below the upper range of FMSY, taking into account the decrease in biomass.*
2. *When scientific advice indicates that the spawning stock biomass of any of the stocks referred to in Article 1(1) is below the Blim, further remedial measures shall be taken to ensure rapid return of the stock concerned to levels above the level capable of producing MSY. In particular, those remedial measures may include, notwithstanding Article 4(3), suspending the targeted fishery for the stock and the adequate reduction of fishing opportunities.*
3. *Remedial measures referred to in this Article may include:*
    a. *emergency measures in accordance with Articles 12 and 13 of Regulation (EU) No 1380/2013;*
    b. *measures pursuant to Articles 7 and 8 of this Regulation;*
4. *The choice of measures referred to in this Article shall be made in accordance with the nature, seriousness, duration and repetition of the situation where the spawning stock biomass is below the levels referred to in Article 4a.*

And Article 4a (which was included in 2019 amendment through Regulation (EU) 2019/472) states the following:

The following conservation reference points to safeguard the full reproductive capacity of the stocks referred to in Article 1(1) shall, based on the plan, be requested in particular from ICES or a similar independent scientific body recognised at Union or international level:

(a) MSY Btrigger for stocks referred to in Article 1(1);

(b) Blim for stocks referred to in Article 1(1).

This set of procedures constitutes an established decision-making process resulting in measures and strategies to achieve the fishery-specific objectives. Therefore, **SG60 and SG80 are met**.

	Responsiveness of decision-making processes			
b	Guide post	Decision-making processes respond to **serious issues** identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take some account of the wider implications of decisions.	Decision-making processes respond to **serious and other important issues** identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	Decision-making processes respond to **all issues** identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The ICES working group structure (annual stock assessments and advices), and the consultative structure built into the decision-making process at the EU-level (STECF / ACFA / AC / DG MARE working groups / DG Environment), and the consultation requirements at the regional/national levels does mean that serious and other important issues are considered. Certainly, latest scientific advice, and industry and social implications play key roles in shaping decisions. Decision making processes respond to intra- and inter-species stock dynamics in the case of the Baltic Sea MAP.

Furthermore, the CFP has also in the past served as the basis for introducing regulations to protect marine mammals from the impact of fishing activity (Regulation (EC) 812/2004) in response to concerns about cetacean bycatch in salmon drift nets.

Outside the EU CFP, the EU has several strategies in place to respond to other management in the Baltic Sea. The Natura 2000 (EC, 1992) programme establishes a management framework, including decision making processes, for the protection of species of wildlife and for natural habitats. There are links between this Natura 2000 programme and the CFP which allow for the protection of areas of seabed outside a Member State's area.

The EU Marine Strategy Framework Directive (MSFD) (Directive 2008/56/EC) established a programme for delivering the "good environmental status" (GES) of regional seas in the EU, including the Baltic Sea. The MSFD is based upon an objective assessment of impacts on the marine environment by all human activities that forms the decision base for management actions by the EU and Member States that are intended to achieve GES by 2020.

In the Baltic Sea, the work of the MSFD is complementary to the work of HELCOM (https://ec.europa.eu/environment/marine/international-cooperation/regional-sea-conventions/helcom/index_en.htm) and the signatories to this convention (which includes all of the EU Member States and Russia) to achieve the objectives of this convention (also "good environmental status") by 2021. As with the MSFD process, HELCOM responds to all management issues in the Baltic Sea. Evidence of the success of HELCOM can be seen in the reduction of pollution inputs to the Baltic Sea and the recovery of marine mammal populations.

Hence, **SG60 and SG80 are met**.

A recommendation was issued by ICES in 2014 about the need to develop a spatial management plan for the sprat fishery with the aim of improving cod condition. This recommendation was reiterated in 2018 (ICES 2018g) and again in 2019 (ICES 2019i). In 2020 (i.e., six years after the first recommendation was issued), ICES stated the following (ICES, 2020g): *"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)"*; and in 2021 (ICES, 2021b): "*Sprat are an important forage species for Baltic cod, and multispecies interactions should be considered when managing the sprat fishery (ICES, 2020h; 2020i)*".

Moreover, in 2018 the EU asked ICES for advice on mixed fisheries and biological interactions in the Baltic Sea (ICES 2018h), which ICES was investigating through its Working Group on Mixed Fisheries (ICES, 2019j)). However, at the time of writing this report there is no evidence that the decision-making processes have responded to this aspect of managing the sprat stock.

The Plan makes provision to establish some closed areas between 1 May to 31 October but there is no clear decision-making process established for achieving a responsive and adaptive spatial management. Although in its Article 8 establishes that: "*The Commission is empowered to adopt delegated acts (…) regarding the following technical measures: (…) (c) limitations or prohibitions on the use of certain fishing gears and on fishing activities, in certain areas or periods to protect spawning fish, fish below the minimum conservation reference size or non-target fish species, or to minimise the negative impact on the ecosystem*".

Based on the information presented above the team considers that **SG100 is not met**.

c	Use of precautionary approach	
	Guide post	Decision-making processes use the precautionary

			approach and are based on best available information.	
	Met?		**Yes**	
Rationale				

Both targets, F (and safeguards) and SSB have been above their respective targets for at least the past 15 years and have been calculated using precautionary and MSY approach, and they are based on ICES assessments and advice. Removals from European fisheries is verified by the EU Data Collection Framework, and ICES bases its advice on the most up-to-date information available. The TAC is determined on an annual basis and this decision is informed by advice from ICES, STECF and the BSAC. The basis for taking these decisions is set out in the Baltic Sea MAP and the EU-Russian fisheries agreement, which are founded on precautionary advice provided by ICES. Hence, **SG 80 is met**.

	Accountability and transparency of management system and decision-making process			
d	Guide post	Some information on the fishery's performance and management action is generally available on request to stakeholders.	**Information on the fishery's performance and management action is available on request**, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.	Formal reporting to all interested stakeholders **provides comprehensive information on the fishery's performance and management actions** and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.
	Met?	**Yes**	**Yes**	**No**
Rationale				

ICES reports and advice are publicly accessible, as well as STECF recommendations. It is also possible to see the outputs of the EU-Commissions' deliberations (Agreed Records /Communications / Regulations), while a Regulation fixing the fishing opportunities for different fish stocks in the Baltic Sea is published on an annual basis. Any interested stakeholder can check whether ICES advice on appropriate levels of exploitation have been transposed into appropriate TACs. All these records describe how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation, and review activity. **SG60 and SG80 are met**.

Although there is very clear formal reporting of both management and scientific actions from those two processes there is little 'non-technical' reporting to the public or industry, making difficult to derive clear explanation of the decisions that take place during the process. Therefore, **SG100 is not met**.

	Approach to disputes			
e	Guide post	Although the management authority or fishery may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability for the fishery.	The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges.	The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.

	Met?	**Yes**	**Yes**	**Yes**

Rationale

There is no evidence that either the management authority (the EU and its Member States) or the vessels and fishing companies included in the UoA are subject to any court challenges or breaching any of the other legal requirements listed in SG60. **SG60 is**, therefore, **met**.

The Agreement between the EC and the Russian federation on cooperation in fisheries in the Baltic Sea establishes a Joint Baltic Sea Fisheries Committee. The Agreement establishes that the Committee shall: "*Serve as a forum for the amicable resolution of disputes which might arise regarding the interpretation or application of this Agreement*", and so far, even if concerns have been raised in the annual bilateral consultations between EU and Russia on TACs, this has not impeded reaching consensus in terms of fishing and MCS actions and upholding the ongoing collaboration of the members.

There are a number of mechanisms in EU and Latvian fisheries management which act proactively to avoid legal disputes, and these have been much improved in recent years. Following the review of the CFP in 2012, an increased emphasis was placed on stakeholder engagement in the management process as a means of proactively avoiding disputes. Stakeholder consultation through Advisory Councils (AC) is with the CFP reform in 2013 an integral part of the functioning of this system. The BSAC plays an important role in bringing parties together (industry – across all sectors -, science, NGOs) early in the management process, thereby reducing the likelihood of management measures which trigger dispute.

In addition, in Latvia, the Ministry of Agriculture through the FAC acts proactively with the industry to discuss management proposals, address industry concerns, and inform of up-coming regulations. There are regular meetings between the industry and the Ministry which have done much to foster proactive dialogue.

Based on the above, it is clear that there is evidence that the international, EU and national management systems are working proactively to avoid legal disputes**,** thus, **meeting SG80** and **SG100**.

References

Directive 2008/56/EC
EC, 1992
EU, 2012
Regulation (EC) No 812/2004
Regulation (EU) 2016/1139
ICES, 2018g; 2018h; 2019a; 2019i; 2019j; 2020g; 2020h; 2020i; 2021b

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**More information sought** *Any update on the EU request to ICES for advice on mixed fisheries and biological interactions in the Baltic Sea?*

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**85**
Condition number (if relevant)	**NA**

PI 3.2.3 – Compliance and enforcement

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with		
Scoring Issue		SG 60	SG 80	SG 100
a	MCS implementation			
	Guide post	Monitoring, control and surveillance **mechanisms** exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.	A monitoring, control and surveillance **system** has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	A **comprehensive** monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

Fisheries rules and control systems are agreed at EU level but implemented and carried out by the national authorities and inspectors of EU Member States.

The basis for enforcement of fisheries control in EU waters is the Control Regulation (Council Regulation (EC) No 1224/2009), which entered into force on 1 January 2010. This regulation requires, *inter alia*, that member states operate a vessel monitoring system (VMS) and an automatic identification system (AIS), to be generally applied by vessels above 12 and 15 meters, respectively (Art. 9, 10), and that they make the use of fishing logbooks mandatory for all vessels above 10 meters (Art. 14) and electronic logbook for all vessels above 12 meters (Art. 15).

The key fisheries rules and regulations in place for the Baltic Sea sprat fisheries are the catch constraints imposed by the annually agreed TACs, the technical measures included in Baltic Sea MAP (Regulation 2016/1139) and also in Regulation 2187/2005 (now repealed by Regulation (EU) 2019/1241). These technical measures are mainly: more restrictive measures for prior reporting and the use of logbooks and establishing a margin of tolerance for catches landed unsorted (see SIc for more details).

In addition, the EU "Landing Obligation" (Regulation EU 2015/812) applies also to Baltic Sea fisheries. However, Baltic sprat fisheries are not subject to any Minimum Conservation Reference Sizes (MCRS), therefore, there has been no incentive to discard undersized fish (in contrast to demersal fisheries in other parts of the EU).

The European Fisheries Control Agency (EFCA) was established in 2007 to strengthen and coordinate controls across all national enforcement authorities to bring about improved uniformity and effectiveness of enforcement. This was further reinforced by the EU control regulation (Reg 1224/2009) which came into force on 1st January 2010.

In July 2013, the EU adopted an Action Plan to reinforce the Latvian monitoring, control and surveillance system. This plan made possible for Latvia to set up an effective administrative structure, with appropriate IT systems and enough resources. The Action Plan was designed jointly with the Latvian authorities following the results of the Commission's audits, and it has been publicly acknowledged by the EU (https://ec.europa.eu/fisheries/latvia-ahead-schedule-improving-fisheries-control_en) that Latvian's MCS system has improved as a result of its adoption.

For each surveillance site visit carried out since the initial certification, the SES prepared an ad-hoc reports for the assessment team detailing the inspections, infringements and sanctions imposed to the fishery annually. Details

presented below are based on those pieces of information (together with the information shared during the meetings held with the SES representative as part of the site visits).

The activities of the Latvian fisheries are comprehensively monitored by the Fisheries Control Department (FCD), under the State of Environmental Service (SES). The SES supervises the work done by the control Units of the 4 environmental Regional Boards existing along the Latvian coast (Liepaja, Ventspils, Riga, and Salacgriva,). Besides, there is a mobile Marine Control Unit which can also perform inspections (they normally tackle the more complicated cases since its movements are less predictable for the fishers). There is also an ecologist included in the mobile unit. The FCD has 1 vessel, but they also work in close cooperation with the Coast Guard and the Border Guard to carry out the inspections at sea. No plane is available for these tasks. The SES has access to the LZIKIS and during the latest site visits it was recognised that the recent implementation of this traceability system has improved their capacity to inspect processing plants and detect problems of underreporting certain species using the 10% margin of tolerance. The LZIKIS system (see 2nd surveillance report for more details) allows the fishermen to include MSC data in the system and competent Authorities to crosscheck the information at all steps, ensuring and improving the traceability of fish products from landing at a Latvian port until the product is consumed in Latvia or exported. The notifications sent by the vessels and the information of non-compliances are also uploaded to the LZIKIS.

The SES also receives the VMS data from the fishing fleet. The VMS installed are transmitting with a high frequency (every 2 minutes). In Riga there is a person 24h checking the signs. They mainly verify that all VMS are working properly and the fleet respect closed areas and seasons.

Inspections in the sprat fishery are focused in controlling that the quota allocated to each company is not exceeded, and in verifying total landings and sprat/herring estimates. Inspections are performed both at quay side and at sea. The inspections are scheduled by the SES based on the risk-based assessment (see below) and the monitoring of the quota consumption. When a company reaches a point where only 3-4 tonnes of the quota are left it is not allowed to go fishing again, the remaining quota must be sold or it can also be transferred to the following fishing year.

According to the reports prepared by the SES during the surveillances (from 2017-2020) and the updates prepared for 2019-2021 (see tables below), only between 1 to 6 infringements (and usually minor) have corresponded to the assessed sprat fishery. In fact, the number of infringements has been reduced to only 1-3 during 2019-2021 (and all minor). Moreover, the SES has never raised any concerns in relation to the client's fleet.

Summary of the inspection statistics for 2019-2021 for Latvia (a), and for the assessed sprat fishery at sea (b) and at port (c). Source: SES (pers. comm.) and SES (2020, 2021, 2022):

(a)

Year	Latvian inspections at sea	Latvian Port inspections	No of total suspected serious infringements at sea	No of total suspected serious infringements ashore	Serious infringement rate* average (total) at sea	Serious infringement rate* average (total) ashore
2019	120	660	1	4	0.008	0.006
2020	99	551	0	5	0	0.006
2021	96	563	0	6	0	0.01

(b)

Year	Sprat fishery inspections at sea	No. Serious infractions	No. Minor infractions	Serious infringement rate	Penalties (euros)
2019	26	0	0	0%	0 EUR
2020	20	0	0	0%	0 EUR
2021	20	0	0	0%	0 EUR

(c)

Year	Sprat fishery Port inspections	No. Serious infractions	No. Minor infractions	Serious infringement rate	Penalties (euros)
2019	207	0	3	0%	3049 EUR
2020	106	0	0	0%	0 EUR
2021	126	0	1	0%	160 EUR

In addition, the overall Latvian rate of serious infringements reported to the EFCA in 2019, 2020 and 2021 has been 0.008 and 0.006, 0 and 0.006, and 0 and 0.01 at sea and ashore, respectively. These values are very similar to those reported for 2018, i.e., 0.006% and 0.001% at sea and ashore, respectively.

A risk-based framework was developed for the MCS system where fishing vessels are divided in three levels according to risk points: low risk vessels (from 0 to 10 risk points), high risk vessels (from 11 to 15 risk points), and very high-risk vessels (from 16 and more risk points). Levels are determined using the following criteria: 1) gear type (OTB, OTM, TBS, GNS, LLS, LLD and PTM), 2) if the fisherman is also a first buyer, 3) if the fisherman is also a producer of fish products, and 4) penalty points. An updated list of vessels graded by risk level is produced monthly.

The level of achievement of predefined benchmarks was higher in the case of ashore inspections to high risk and very high-risk vessels, and also in the case of inspections at sea for high risk vessels. Only in the case of the inspections at sea for very high-risk vessels the percentage achieved was below the predefined benchmark. According to the EFCA standards the level of achievement is within the acceptable range and there was no need for the SES to include any proposal for improving effectiveness of the control, inspection and enforcement activities carried out by Latvia.

Different training and capacity building activities were implemented by the SES during 2019-2021, as reported to the EFCA (SES, 2020; 2021; 2022).

Based on the information presented above, the team concludes that **SG60, SG80 and SG100 are met**.

b	Sanctions			
	Guide post	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Sanctions to deal with non-compliance exist, **are consistently applied** and thought to provide effective deterrence.	Sanctions to deal with non-compliance exist, are consistently applied and **demonstrably** provide effective deterrence.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

According to the Latvian Administrative Violations Code (https://likumi.lv/ta/en/id/89648-latvian-administrative-violations-code) in case of violation of the rules of fishing in the territorial waters, the economic zone waters or in international waters legal persons can be fined from 140 € up to 4,300 € (depending on the severity of the infringement). Also, confiscation of fishing gear and suspension of the fishing license up to one year can be applied. In case of repeated violation of fishing regulations during the year (i.e., fishing without authorization, in prohibited places, or with prohibited gear), legal persons can be fined from 700 € up to 14,000 €.

According to the reports prepared by the SES during the surveillances (from 2017-2020) and the updates prepared for 2019-2021 (see tables in PI 3.2.3 SIa), only between 1 to 6 infringements (and usually minor) have corresponded to the

assessed sprat fishery. In fact, the number of infringements has been reduced to only 1-3 during 2019-2021 (and all minor). Moreover, the SES has never raised any concerns in relation to the client's fleet.

Based on the information discussed above, the team considers that **SG60, SG80 and SG100 are met.**

	Compliance			
c	Guide post	Fishers are **generally thought** to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the fishery.	**Some evidence exists** to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.	There is a **high degree of confidence** that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

During the surveillance audits SES confirmed that compliance has improved in Latvian fisheries during the last 7 years, and no concerns were raised in relation to the LFPO fleet. This was also confirmed by the representatives of the Ministry of Agriculture interviewed during the surveillance audits.

During the surveillance audits BIOR representatives interviewed confirmed good understanding with the fleet both in relation to the port sampling procedure implemented for this fishery as part of the EU-DCF and in relation the necessary collaboration to get observers on board as part of the implementation of Regulation (EC) 812/2004 (now repealed by Regulation (EU) 2019/1241) on cetaceans (see **Section 7.4.1.4** for further details).

From all the inspections carried out by the SES to the pelagic trawl fleet targeting sprat in the Baltic Sea between 2017-2019, only from 3 to 6 infringements annually (and usually minor) have corresponded to the assessed sprat fishery. Moreover, this value has been reduced recently to 1-3 from 2019-2021 and all being minor (see tables in PI 3.2.3 SIa).

Based on the above, the team concludes that **SG60 and SG80 are met**.

Article 13 of the Baltic Sea MAP establishes that: "*for catches which are landed unsorted the permitted margin of tolerance in estimates recorded in the fishing logbook of the quantities in kilograms of fish retained on board shall be 10 % of the total quantity retained on board*". This means that the margin of tolerance applies to all species together, while previously the Latvian authorities applied this margin to each of the species (more restrictive). Therefore, since Regulation 2016/1139 entered into force there are more chances that misreporting between species caught might take place. This loophole in the legislation is not yet filled. However, the SES representative interviewed during the site visit in 2022, acknowledged that the recent implementation of the LZIKIS system has improved the SES capacity to inspect processing plants and detect problems of underreporting certain species using the 10% margin of tolerance and the representative found that problems with misreporting by species is not an issue today in the assessed sprat fishery. **SG100 is met**.

Nevertheless, and based on the concern expressed by WWF, the team decided to **set a non-binding recommendation** to the fishery. See **Section 5.2.4** for more details.

	Systematic non-compliance			
d	Guide post		There is no evidence of systematic non-compliance.	
	Met?		**Yes**	

Rationale

The Latvian authorities confirmed during the four surveillance audits that they have no specific concerns in relation to the compliance of the pelagic trawl fleet targeting sprat in the Baltic. From all the inspections carried out by the SES to the pelagic trawl fleet targeting sprat in the Baltic Sea between 2017-2020, only from 3 to 6 infringements annually (and usually minor) have corresponded to the assessed sprat fishery. These data are in accordance with the total figures presented by the SES in their 2018 annual report to the EFCA. The assessment team concludes that there is no evidence of systematic non-compliance with rules and regulations for the Latvian pelagic trawl fleet targeting herring in the gulf of Riga.

ICES has raised concerns in recent advice about species misreporting (herring/sprat) in the Central Baltic fisheries, while the SES expressed some concerns in relation to a regulatory gap which may facilitate species misreporting in the pelagic trawl fisheries targeting sprat and herring (see previous SI). However, the assessment team has not found any direct evidence that would indicate that there is a systematic non-compliance in relation to reporting an accurate estimation of the species composition of the catches. **SG80 is met**.

References

Council Regulation (EC) No 812/2004
Council Regulation (EC) No 2187/2005
Council Regulation (EC) No 1224/2009
Regulation (EU) 2015/812
Regulation (EU) 2016/1139
Regulation (EU) 2019/1241
SES, 2020
SES, 2021
SES, 2022

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**More information sought** *The assessment team would like to have the EFCA reports from 2019-2021.* *Updates on the initiatives by the SES to close the legal loophole on the 10% margin of tolerance (see **Section 5.2.4 - Recommendations**).*

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**100**
Condition number (if relevant)	**NA**

PI 3.2.4 – Monitoring and management performance evaluation

PI 3.2.4		There is a system of monitoring and evaluating the performance of the fishery-specific management system against its objectives There is effective and timely review of the fishery-specific management system		
Scoring Issue		SG 60	SG 80	SG 100
a	Evaluation coverage			
	Guide post	There are mechanisms in place to evaluate **some** parts of the fishery-specific management system.	There are mechanisms in place to evaluate **key** parts of the fishery-specific management system.	There are mechanisms in place to evaluate **all** parts of the fishery-specific management system.
	Met?	**Yes**	**Yes**	**Yes**
Rationale				

ICES performs regular internal reviews and benchmarks of its stock assessments and advices.

The EU – Russian fisheries agreement is reviewed at the annual consultations. There is no explicit quota sharing agreement included in the EU-Russian fisheries agreement. There is an understanding between the Parties of how the resources are shared.

At the EU level, the CFP is reviewed every decade (with the most recent review coming into force in 1 January 2014 - Regulation (EU) No 1380/2013). Furthermore, the EU Commission regularly consult the STECF on any matter relating to marine and fisheries biology, fishing gear technology, fisheries economics, fisheries governance, ecosystem effects of fisheries, aquaculture or similar disciplines (click here). At the STECF website can be found the reports elaborated by the STECF and its Working Groups assessing all parts of the EU fishery management system, such as:

- Data Collection Framework (DCF/DCR) (reports related to the DCR/DCF): the reports refer to topics such as evaluation of national programmes, indicators, review of surveys, data quality aspects, etc.
- Economic analysis (fleet, processing, aquaculture): reports referring to topics such as the economic reports on the profitability of EU fleets, the fish processing sector, etc.
- Evaluation of Effort Regimes: reports referring to the evaluations of fishing effort regimes regarding e.g., Annex IIA of TAC & Quota Regulations, Celtic Sea, Deep Seas, etc.
- Management Plans (impacts and evaluations): reports referring to topics such as multi-annual management plan evaluations, impact assessments, harvest control rules (HCRs), etc.
- Review of Scientific Advice for Stocks: reports referring to the advice on stocks and fisheries provided by the STECF.
- Balance between capacity and fishing opportunities: reports referring to STECF's reviews of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities.
- Environmental Impacts: reports referring to topics such as by-catches of cetaceans, sensitive habitats, etc.
- Landing obligation: reports referring to topics such as evaluation and reduction of discarding practices, including annual evaluations of joint recommendations on LO.
- Technical measures: reports referring to topics such as net selectivity, etc.
- Strategic issues: reports referring to topics such as how to implement an ecosystem approach to fisheries, etc...
- CFP monitoring: reports referring to monitoring the performance of the Common Fisheries Policy (CFP).

Article 15 of the Baltic Sea MAP (2016/1139) states that by 21 July 2019, and every five years thereafter, the Commission shall report to the European Parliament and to the Council on the results and impact of the plan on the stocks to which this Regulation applies and on the fisheries exploiting those stocks, in particular as regards the achievement of the objectives set out in Article 3. The Commission may report at an earlier date if this is deemed necessary by all Member States concerned or by the Commission itself. Following these provisions, the first report on the implementation of the Multiannual Plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks was published in 2020 (EC, 2020).

Besides, in the case the Commission considers that the fishing mortality ranges or conservation reference points set out in the Regulation no longer correctly express the objectives of the plan, the Commission may as a matter of urgency submit a proposal for revision of those ranges. Since its entry into force, amendments to the Baltic Sea MAP have been made by the EU through Regulations (EU) 2018/976, 2019/472, 2019/1241, and 2020/1781 (see **Section 7.4.1.5** for further details).

In 2016, the European Commission elaborated a proposal for a Regulation on the conservation of fishery resources and the protection of marine ecosystems through technical measures. This new regulation would repeal Council Regulation (EC) establishing technical measures for the Baltic Sea fisheries (Council Regulation 2187/2005). This proposal aimed to improve the performance of the different regulations establishing technical regulations and their consistency with existing EU-CFP and other Union policies. This process was subject to ex-post evaluations, stakeholder consultation and impact assessments, in accordance with the EU regulation. The proposal is available here: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:134:FIN. Council Regulation (EC) 2187/2005 was repealed by Regulation (EU) 2019/1241, which entered into force in August 2019.

The Latvian fishery management institutions have amended the fisheries legislation in place to ensure that it remains relevant. In the context of the assessed fishery, the purpose of the national legislation and management systems outlined here is to ensure that there are appropriate institutional and legal mechanisms in place to enforce the EU-CFP and the Baltic Sea MAP.

The fishery-specific management systems (defined as the EU CFP, the Baltic Sea MAP and relevant technical regulations and the Latvian management system) are regularly evaluated through established mechanisms which are described above. Hence, **SG60, SG80 and SG100 are met**.

b	Internal and/or external review			
	Guide post	The fishery-specific management system is subject to **occasional internal** review.	The fishery-specific management system is subject to **regular internal** and **occasional external** review.	The fishery-specific management system is subject to **regular internal and external** review.
	Met?	**Yes**	**Yes**	**No**
Rationale				

The Latvian parliament reviews the fishing law at irregular intervals.

The CFP is revised every 10 years (with the most recent review coming into force in 1 January 2014 - Regulation (EU) No 1380/2013). Between 2012 and 2015, the Commission performed a review aimed to improve the performance of the different regulations establishing technical regulations (including Regulation 2187/2005, which is now repealed by Regulation (EU) 2019/1241) and their consistency with existing EU-CFP and other Union policies. These processes are subject to ex-post evaluations, stakeholder consultation and impact assessments, in accordance with the EU regulation.

The EU Commission regularly consult the STECF on any matter relating to marine and fisheries biology, fishing gear technology, fisheries economics, fisheries governance, ecosystem effects of fisheries, aquaculture or similar disciplines. The reports elaborated by the STECF and Working Groups referred to many topics can be found at the STECF website

(click here): DCF, Economic analysis, MAPs, scientific advice, landing obligation, technical measures, CFP monitoring. Just as an example of how regular the evaluation is done: the STECF evaluates the DCF reports received every year, and the joint recommendations on landing obligations has been evaluated on an annual basis since 2016.

Regulation 2016/1139 makes provision in its Article 15 for an internal review of the results achieved by the Plan every 5 years, as stated above in SI(a). However, the possibility for an earlier review is also considered: "*The Commission may report at an earlier date if this is deemed necessary by all Member States concerned or by the Commission itself*". The European Parliament agreed a proposal for a revised Baltic Sea MAP in late 2018, and based on this provision, Regulation 2016/1139 has been amended by Regulations (EU) 2018/976, 2019/472, 2019/1241, and 2020/1781 (see **Section 7.4.1.5** for further details)

ICES performs regular internal reviews and benchmarks of its stock assessments and advices. Besides, ICES work brings together a wide range of national scientists, and in so doing builds external perspectives into the assessments and advice, in particular during benchmarking evaluations exercises.

Overall, it is clear that the management system and the scientific advice are subject to regular internal and occasional external review. Therefore, **SG60 and SG80 are met**.

However, it cannot be claimed that the fishery management system is subject to regular external review, and therefore **SG100 is not met**.

References

Council Regulation (EC) 2187/2005
Regulation (EU) No 1380/2013
Regulation (EU) 2016/1139
Regulation (EU) 2018/976
Regulation (EU) 2019/472
Regulation (EU) 2019/1241
Regulation (EU) 2020/1781

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	**≥80**
Information gap indicator	**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	**90**
Condition number (if relevant)	**NA**

8 References

8.1 General References

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Commission Regulation (EC) No 1639/2001 of 25 July 2001 establishing the minimum and extended Community programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) No 1543/2000

Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs (Text with EEA relevance). Available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32006R1881

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Council Regulation (EC) No 812/2004 of 26.4.2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98. Available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32004R0812

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Council Regulation (EC) No 1098/2007 of 18 September 2007 establishing a multiannual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 779/97. Available at: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32007R1098

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Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966/2006 – Consolidated text. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009R1224-20190814

Council Regulation (EU) No 1221/2014 of 10 November 2014 fixing for 2015 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulations (EU) No 43/2014 and (EU) No 1180/2013. Available at: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32014R1221

Council Regulation (EU) 2015/2072 of 17 November 2015 fixing for 2016 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulations (EU) No 1221/2014 and (EU) 2015/104. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015R2072

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Regulation (EU) No 227/2013 of the European Parliament and of the Council of 13 March 2013 amending Council Regulation (EC) No 850/98 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms and Council Regulation (EC) No 1434/98 specifying conditions under which herring may be landed for industrial purposes other than direct human consumption. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R0227

Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1380

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811/2004, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007 and (EC) No 1300/2008. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019R0472

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9 Appendices

9.1 Assessment information

9.1.1 Previous assessments

The current fishery is being re-assessed for the second certificate cycle. The initial assessment was carried out and published in 2017 (PCR available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

Three conditions were raised during the first certificate cycle (see Table **Table 5.2.3** for a summary), none of which has been closed.

9.1.2 Small-scale fisheries

This is not a small-scale fishery (see Table 9.1)

Table 9.1 – Small-scale fisheries

Unit of Assessment (UoA)	Percentage of vessels with length <15m	Percentage of fishing activity completed within 12 nautical miles of shore
UoA1	0%	0%

9.2 Evaluation processes and techniques

9.2.1 Site visits

The site visit was carried out between 7th and 10th of March 2022 in Riga and Ventspils (Latvia). The lead auditor (Gemma Quílez) and the expert (Carmen Morant) travelled to Latvia to join the local member (Sarmite Zoltnere) and participate in all meetings listed in **Table 9.2.1**. The P1 expert, Hans Lassen, due to a health issue and a medical last-minute recommendation had to join all the meetings remotely.

As explained in **Section 9.8** (Harmonisation activities), the team performed the assessments for two overlapping fisheries for the same client: (i) the second surveillance of the NZRO Gulf of Riga herring and; (ii) the recertification audit of the Baltic sprat fishery. Since all other relevant stakeholders are the same for the two fisheries (e.g., BIOR, Fishery Department in the Latvian Ministry of Agriculture, Control Unit of the State Environmental Service, WWF), it was decided to perform both visits (i.e., the site visit for the reassessment and the one for the surveillance audit) at the same time. This decision (using the same team and perform a single site visit) was planned by BV to promote consistent outcomes for the two fisheries.

Apart from meeting with the client, managing authorities, the research institution and WWF based in Riga, the team also visited Ventspils and checked the landing and the grading facility at that port. This port is used by fishing vessels targeting sprat and has grading facilities which are sometimes hired by the fishing companies included in the UoA. During the visit to the port of Venstpils, the team had the chance to visit one of the fishing vessels (i.e., Bravo from the fishing company “Kursas jura”), and interview representatives of the fishing companies included in the UoA (i.e., BraDava, SIA, Kursas jura, SIA and the sister company regarding technical maintenance Sarkana baka KRC, SIA).

Table 9.2.1. Details of the meetings held during the on-site visit for the reassessment of the sprat fishery.

Date	Participation*	Local Time UTC+3	Topic	In person/remote
4 March (Friday)	Assessment team only	09:00-10:00h	Assessment team initial meeting	Remote
7 March (Monday)	Client	10:00-12:00h	Topics to be discussed sent as attachment	In person
	WWF	12-13h	Topics to be discussed sent as attachment	Remote
	Lunch	13-15h		
	SES	15-17h	Topics to be discussed sent as attachment	Remote
	Assessment team only	09-10h	Team review and last minutes arrangement	In person
8 March (Tuesday)	Ministry	10:00-12:00h	Topics to be discussed sent as attachment	Remote
	BIOR	13-15h	Topics to be discussed sent as attachment	In person
	Lunch	15-16h		
	Assessment team only	TBD	Team review preliminary conclusions	In person
9 March (Wednesday)	Visit to the 2 ports	Full day		In person
10 March (Thursday)	Assessment team only	09:30-10:00	Team review preliminary conclusions	In person
	Client	10:00-11:00h	Closing meeting	Remote

9.2.2 Stakeholder participation

The announcement of the fishery entering the MSC reassessment process was made publicly available at the MSC website on January 19, 2022. This announcement detailed the dates of the scheduled site visit to Latvia, and encouraged those stakeholders interested in scheduling a meeting to get in contact with the assessment team. Furthermore, BV also encouraged stakeholders to share with the team, at any time throughout the process, any information they might consider relevant to the assessment.

A specific email informing about the announcement of the fishery and encouraging participation was sent to a comprehensive list of stakeholders which was elaborated by the CAB with the assistance of the client. Different stakeholders were contacted via e-mail, including the Fishery Department (Ministry of Agriculture), the Rural Support Service (Ministry of Agriculture), the Ministry of Environment, the Control Unit of the State Environmental Service, BIOR (Latvian Fish Resources Agency), the University of Latvia, the LFPO members, other sprat fishermen which are non LFPO members, the Baltic Environmental Forum (BEF), the Fisheries cooperation Network, and NGOs –WWF (Latvia, Poland, Sweden and International),, Hel Marine Station, Latvian Fund for Nature (LDF), Latvian Ornithological Society, etc.).

Furthermore, the team with the assistance of the client elaborated a list of key stakeholders to be interviewed and Sarmite Zoltnere (BV Latvia) contacted them in order to ensure their participation during the site visit and arranged the meetings. The list of institutions and people finally interviewed during the site visit is detailed in **Table 9.2.1.**

The stakeholder input was restricted to the information collected during the meetings held at the site visit and the documents sent by the stakeholders as a result of the requests made by the team during those meetings. No other stakeholder inputs were received by email using the template provided by MSC.

Table 9.2.2 presents the main topics discussed with the different stakeholders during the different meetings. Feedback obtained from all the interviewed stakeholders allowed the team to collect information on different details of the fishing operations at sea (data recording and reporting, handling, storage), offloading and grading, selling (sales notes, invoices), MCS system and activities, scientific monitoring, and other relevant issues. Information collected was used to elaborate **Section 5.1.3** (Overview of the fishery) and **Section 6** (Traceability), and also to evaluate and score the assessed fishery using the default tree (Annex SA). All documents used for the reassessment are listed in **Section 8** (References).

Table 9.2.2. Details of the main topics discussed with the different stakeholders during the site visit for reassessment of the LFPO sprat fishery.

Stakeholder	Topics discussed
LFPO	- Changes in function, role, organisational structure and responsibility of the client group. - Is the fishery conducted under a controversial unilateral exemption to an international agreement? - Are destructive fishing practices such as fishing with poisons or explosives used within the fishery? - Provide updated operators and vessel list. Provide data on current size and structure of the LFPO fleet. - Current situation of the LFPO, major changes in the latest years. - Update Latvian catches (t), landings (t) and number of licences issued in 2021 for the sprat and herring fisheries. - Details on the data collection and reporting (electronic logbook, VMS, observers on board…). - Technical characteristics of the fishing gear used, details of the fishing operations - Recording requirements of non-target species. Statutory requirements to record interactions (fatal or otherwise) with seabirds or marine mammals. Have they been implemented? - What is the observer coverage on board the UoC vessels? - List all retained species. - Any incidental catches of cetaceans in 2021? And any records of seabirds interacting with the UoC vessels? - Monitoring program on incidental catches. - Discarding practices. Impact of EU Landing Obligation. Feedback on the Implementation of the landing obligation. - Measures in place to minimize the catch of small fish and non-commercial species by commercial fishing vessels. - Closed areas for any active gear in the UoA fishing area. - Updates on species misreporting of herring and sprat. - Are the Latvian vessels fishing within the waters of Lithuania, Poland or Sweden (and viceversa)? Is there any shared management with Lithuania, Poland, or Sweden? - Are the Latvian vessels offloading in other countries apart from Latvia? - Any incidents of loss of fishing gear, and if relevant, its recovery. Average of loss gear per year (from 2017-2021)? - Changes to the relevant legislation, regulations or objectives for the fishery. - Changes to the Management regime at local, national or international level. - Details of any internal audits of the management system in 2020-2021. - Sanctions and penalties (or cautions/warnings) in the most recent fishing years. - Changes to control, surveillance and monitoring procedures/regulations affecting the fishery.

	- Disputes with national and/or international authorities during the last year? - Latest catch composition data. - Feedback on the amendment and efficiency of the multi-species management plan. - Changes in Client's participation in consultation bodies (e.g., Baltic Sea Advisory Council, …) - Relationship/differences with coastal fisheries within the GoR.
Ministry of Agriculture (Fishery Department)	- Potential or actual changes in management personnel that could affect the fishery. - Changes to the Management regime at local, national or international level. - Details of any internal audits of the management system in 2020-2021. - Changes in the fishing rights of fishermen. - Update Latvian catches and number of licences issued in 2021 for the main fisheries. - Are the Latvian vessels fishing within the waters of Lithuania, Poland or Sweden (and viceversa)? Is there any shared management with Lithuania, Poland, or Sweden? - When has the latest EU-Russia JBSFC (Joint Baltic Sea Fisheries Committee) taken place? Any meeting more recent that the one in 2019? - Are the Latvian vessels offloading in other countries apart from Latvia? - Sprat quota allocation between offshore fisheries and coastal fisheries. - The sprat quota in Latvia is allocated as main quota for the sprat fishery and a remaining quota as bycatch in the herring fishery in the GoR. Is this correct? - Is there a quota swap between sprat and herring? And if so, is it possible to perform interannual quota swaps? - Updates/concerns on species misreporting of herring and sprat. - Changes / updates on the Fishing Law. - Has the client group been involved in any disputes with national and/or international authorities during the last year? - Feedback on the amendment and efficiency of the multi-species management plan. - In 2018 the EU asked ICES for advice on mixed fisheries and biological interactions in the Baltic Sea. Have the decision-making processes responded to this aspect of managing the sprat stock? - Updates on the consultation mechanisms in place for this fishery (FAC, BSAC, Baltfish). - Mechanisms for dispute resolution provided within the Latvian Fisheries legal framework. - Has the sampling program changed? - Feedback on the Integrated Control Information for Latvian Fisheries Systems (LZIKIS). - Feedback on the Implementation of the landing obligation. - Are there any closed areas for any active gear in the UoA fishing area
Ministry of Environment (Control Unit)	- Any changes in the MCS system in place in Latvia. - Any changes to the Latvian Administrative Penalty Code? - Feedback on the effectiveness of the Latvian Administrative Penalty Code. - Feedback on the effectiveness of the LZIKIS system. - Transparency of the process. - Mechanisms for dispute resolution. - Feedback on the Implementation of the landing obligation. Are there any discards? - Specify if the fishery has been subject to sanctions and penalties (or cautions/warnings) in the most recent fishing years. - Specific updates on species misreporting of herring and sprat.
BIOR	- Potential or actual changes in science personnel that could affect the fishery. - VMS maps for the last and current fishing season (2020-2021). - Any closed areas for any active gear in the UoA fishing area? - Details on the data collection and reporting (electronic logbook, VMS, observers on board…).

	- Recording requirements of non-target species. Statutory requirements to record interactions (fatal or otherwise) with seabirds or marine mammals. Have they been implemented? - Observer coverage on board the UoC vessels. - Details of the sampling program implemented on the sprat fishery in the Baltic. - Confirm that recent changes in the EU-DCF affected the observer program in Latvia. - Retained species. - Any incidental catches of cetaceans in 2021? - Has the sampling program changed? - Is the monitoring program on incidental catches of cetaceans still on? - Discarding practices. Impact of EU Landing Obligation. - Measures in place to minimize the catch of small fish and non-commercial species by commercial fishing vessels. - Are there any changes in the fishery's impact on ecosystem? - Any changes to the relevant legislation, regulations or objectives for the fishery? - Updates on species misreporting of herring and sprat. - SAMBAH II project – Reason for Latvia not participating in. - The joint annual acoustic survey between Latvia and Estonia is only for the GoR? - MSFD GES / objectives at the latest by 2020 – Any concerns?
WWF Latvia	-The spatial management of the eastern Baltic cod: NGOs position paper on this issue. - Concerns on species misreporting of herring and sprat. - MSFD GES / objectives at the latest by 2020 – Any concerns?

In particular, Elza Ozolina (WWF) met with the assessment team on 8 March 2022 and submitted material on 8 April 2022, this material is copied below.

The material raises two issues:

- The role of sprat on the cod stock status; and

- Reporting accuracy of the species composition in the sprat/herring fisheries in the Baltic Sea.

From Elza Ozolina:

Pasaules Dabas Fonds (associated partner to WWF) would like to provide the following in regards to the following fisheries

(1) NZRO GULF OF RIGA HERRING (CLUPEA HARENGUS MEMBRAS) AND SPRAT (SPRATTUS SPRATTUS) TRAWL FISHERY

CLIENT: LATVIAN FISHERMEN'S PRODUCERS ORGANIZATION –LFPO

and

(2) LFPO Pelagic Trawl Sprat (Sprattus sprattus) fishery

Additional references and reports on multispecies interactions and environmental NGO positions:

(1) Environmental NGO joint position on the TAC process: https://our.fish/wp-content/uploads/2021/10/FINAL-Joint-NGO-recommendations-Baltic-TACs-2022-2021-10-08.pdf on sprat:

This recommendation takes into account an ecosystem-based approach to fisheries management, considering dynamics between the stocks of eastern Baltic cod and sprat as noted in the ICES advice. In its Ecosystem Overview – Baltic Sea Ecoregion, ICES explains: "Many species and habitats of the Baltic Sea are not in good condition, according to recent assessments. This affects food web functionality, reduces the resilience and resistance against further environmental changes, and diminishes prospects for socioeconomic benefits, including fishing opportunities."47 More precaution is needed while managing pelagic stocks in a disturbed Baltic Sea ecosystem, thus using the lower range of FMSY 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 states: "Sprat are an important forage species for Baltic cod, and multispecies interactions should be considered when managing the sprat fishery". In addition, we note that there is evidence that Baltic pelagic fisheries misreported official catches, with sprat catches regularly recorded as herring in 201949,50. This means catches of sprat might be higher than those officially reported. When data are uncertain even more precaution is needed in fisheries management – 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.

(2) Recently published report on Baltic cod (incl. food web and availability and recommendations on multispecies interactions: https://www.fishsec.org/app/uploads/2022/03/FishSec-Report-Decline-Baltic-Cod-March2022.pdf

Misreporting

(1) Pasaules Dabas Fonds (associated partner to WWF) would like to draw attention to the need of implementation of the ecosystem- based approach to fisheries management when managing Baltic sprat fisheries. The interactions and dynamics between the stocks of eastern Baltic cod and Baltic sprat are well described in the PCDR report showing the importance of sprat as key prey - food base for the depleted Eastern Baltic cod stock. The new ICES advice from May 2021 also confirms that: "Sprat are an important forage species for Baltic cod, and multispecies interactions should be considered when managing the sprat fishery". In addition in its Ecosystem Overview – Baltic Sea Ecoregion, ICES explains: "Many species and habitats of the Baltic Sea are not in good condition, according to recent assessments. This affects food web functionality, reduces the resilience and resistance against further environmental changes, and diminishes prospects for socioeconomic benefits, including fishing opportunities." More precaution is needed while managing pelagic stocks in a disturbed Baltic Sea ecosystem, thus using the lower range of FMSY (fishing mortality range under Baltic Sea multi-annual plan) is justified and only the lower FMSY range should be considered as sustainable fishing mortality in regards to the Baltic sprat.

References:

*ICES. 2020. Baltic Sea Ecoregion – Ecosystem overview. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, Section 4.1, https://doi.org/10.17895/ices.advice.7635

** ICES. 2021. Sprat (Sprattus sprattus) in Subdivisions 22-32 (Baltic Sea). In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, spr.27.22-32. https://doi.org/10.17895/ices.advice.7867

***Joint NGO recommendations on Baltic Sea fishing opportunities for 2022: https://wwwwwfbalticorg.cdn.triggerfish.cloud/uploads/2021/06/final-joint-ngo-recommendations-baltic-tacs-2022.pdf

(2) Pasaules Dabas Fonds (associated partner to WWF) notes that there is evidence that Baltic pelagic fisheries misreported official catches, with sprat catches regularly recorded as herring in the recent years. This means catches of sprat might be higher than those officially reported. When data is uncertain even more precaution is needed in fisheries management – following the precautionary approach as defined in the Common Fisheries Policy. We note that significant increase in control, enforcement, onboard monitoring and sampling of landings is required to ensure that misreporting ceases. The effective control including Remote Electronic Monitoring on board vessles could contribute to secure that the Baltic sprat fisheries are sustainable. We suggest that all efforts are made to minimise herring by-catch in the Baltic sprat fisheries.

References:

* ICES. 2021. Sprat (Sprattus sprattus) in Subdivisions 22-32 (Baltic Sea). In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, spr.27.22-32. https://doi.org/10.17895/ices.advice.7867 (page 3)

**REGULATION (EU) No 1380/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC Article 4.1. (8)

(3) Taking into account colleagues from Finland, Estonia, Denmark, Poland, Sweden and Germany have previously highlighted the same issues over the past few years regarding pelagic fisheries, that should be taken into account during the assessment period for the pelagic fisheries:

Furthermore, taking into account the CFP requirement of implementation of the ecosystem-based approach to fisheries management and the dynamics between the stocks of endangered eastern Baltic cod stock and sprat as noted in the ICES advice (2020) for Baltic sprat there is enough of scientific and legal justification to fish even less than the Fmsy point value. ((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 *).*

In its Ecosystem Overview – Baltic Sea Ecoregion, ICES (2019) explains: "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." It can thus be concluded that more precaution is needed when managing pelagic stocks in a disturbed Baltic Sea ecosystem, thus using the lower range of FMSY is justified. (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*.)*

*We note that there is evidence that Baltic pelagic fisheries misreported official catches, with sprat catches regularly recorded as herring in 2019. This brings means catches of sprat might be higher than those officially reported. (*https://www.fishsec.org/2019/09/17/pelagic-trawlers-report-false-catch-figures-and-undermine-sustainable-management/ *; 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.)*

We highlight that further investigation of potential misreporting in the industrial fisheries is needed and should be made into a condition. We also highlight that it should be evaluated whether the current derogation in the Baltic Sea MAP from the EU Control Regulation for margin of tolerance between vessel catch estimates and actual landings composition landings of unsorted catch is in line with the MSC principles.

(4) Additionally, governmental report "Estonian Fisheries 2020" (in Estonian at the moment (it will be translated in coming months) notes on page 46. The first paragraph says: "Bay of Riga Herring (28.1): Bay of Riga is been fished only by Estonian and Latvian fishers. 60-70% of the fisheries account for Latvian fisheries. According to Latvian fisheries scientists up to 10-20% is misreported in the official statistics." They refer to ICES 2021 Baltic Fisheries Assessment Working Group report.

Assessment team response:

Both these issues relate to the situation in fisheries in the Open Sea. Cod is not caught in significant amounts by the Latvian sprat fishery and there are specific Latvian regulations for its fisheries that aim at protecting cod. The misreporting issue is related to some fisheries in the open sea and the Latvian sprat fishery is not on this list because the Latvian fishery is aimed at providing a specific catch of sprat and therefore close observation of the species compositions are maintained in this fishery.

9.2.3 Evaluation techniques

This reassessment follows the MSC Fisheries Certification Process v2.2 and used the default assessment tree (Annex SA) of the MSC Fisheries Standard, v2.01. All public announcements will comply with FCP v2.2.

The assessment team has completed the ACDR using the information provided in the Client Document Checklist, all previous reports from the first certificate cycle, public documents elaborated by the competent authorities and research institutes, and related scientific literature. This information was contrasted and discussed with relevant stakeholders during the site visit performed and some updated reports were also collected at this stage.

For the preparation of the ACDR, each assessor drafted his/her own background and scoring sections. These drafts were exchanged through email, so all team members had the chance to provide feedback on other sections. Specific meetings were held in case of disagreement on particular issues. All scores in the ACDR were adopted by consensus among all the team members. Once all background and scoring sections were agreed, the Team Leader compiled all documents in a single draft report which was shared among all team members for a final review and feedback.

During the site visit, different team member meetings were held to comment on findings raised during the meetings and potential implication in the scoring. After the site visit, each assessor revised his/her own sections in light of the information exchanged and discussed during the visit. Several calls between team leader and the team members were held to agree on the modifications to the ACDR. Again, drafts of the CPRDR were exchange and agreed among the team members and compiled by the team leader. The final version of the CPRDR was shared by the team leader with the team members before sending it to the client and peer reviewers.

9.2.4 LFPO fishing companies targeting sprat in 2022

Updated vessel list (18) for the **LFPO PELAGIC TRAWL SPRAT (*Sprattus sprattus*) FISHERY** that are entitled to use the certificate. The validity of this list is linked to the validity of the certificate ES081416-v2.

Table 9.2.3 LFPO fishing companies targeting sprat in 2022. These are the fishing companies and vessels included in the UoC.

No	Vessel	Vessel No	"Special fishing permit for Baltic Sea"	Fishing Companies
1	Bravo	LVR0813	Yes	Kursas jura, SIA
2	Vergi	LVR 0829	Yes	VERGI, SIA
3	Urga	LVR 0786	Yes	VERGI, SIA
4	Ulrika	LVR 0814	Yes	VERGI, SIA
5	Unions	LVR 0805	Yes	VERGI, SIA
6	Stella	LVR 0841	Yes	VERGI, SIA
7	Marita	LVL 2122	Yes	VERGI, SIA
8	Grifs	LVR 0697	Yes	ZVEJNIEKU KOMPĀNIJA "GRIFS", SIA
9	Sirius	LVR 0842	Yes	ZVEJNIEKU KOMPĀNIJA "GRIFS", SIA
10	Zane	LVR 0518	Yes	A.I. UN KO, SIA
11	Sencis	LVR 0662	Yes	A.I. UN KO, SIA

12	Ilona	LVL 2148	Yes	SANDA-B, SIA
13	Plienciems	LVL 0658	Yes	SANDA-B, SIA
14	Harengus	LVV 1551	Yes	BraDava, SIA
15	Glenrose	LVV 1555	Yes	BraDava, SIA
16	Valderoy	LVR 1504	Yes	Gamma-A, SIA
17	Renate	LVV 2121	Yes	HANTERS, SIA
18	Ako	LVR 0798	Yes	SIBILLA, SIA

9.2.5 First Buyers

Updated on 11.01.2022. See:
https://www.zm.gov.lv/zivsaimnieciba/statiskas-lapas/zvejnieciba/zm-registretie-zivju-pirmie-pirceji?nid=704#jump

9.3 Peer Review reports

Report from Peer Review A

General comments

Question	Yes/No	Peer Reviewer Justification (as given at initial Peer Review stage). Peer Reviewers should provide brief explanations for their 'Yes' or 'No' answers in this table, summarising the detailed comments made in the PI and RBF tables.	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)
Is the scoring of the fishery consistent with the MSC standard, and clearly based on the evidence presented in the assessment report?	No	The scoring does not take in to account the fact that Russia - an active fisher of sprat in the Baltic - is presently not engaged with ICES. Regrettably, as a consequence, data on that component of the stock are missing.	Thank you for your comment. The data are from the latest available ICES advice during the site visit (4-9 March 2022) and prior to the publication of the 2022 assessment (28 May 2022) which was after the 30 days period for collecting additional information. The suspension of the Russian Federation within ICES is dated 30 March 2022 after the site visit. With respect to the 2022 assessment and advice, for this work data for 2021 were provided to the ICES WG WGBFAS prior to this date. The stock assessment and the advice dated 28 May 2022 is based on data from all countries fishing for Baltic sprat including Russian fisheries for 2021. Regarding the catch in the 2022 advice is given as 284,890 t (but as explained above could not be taken here into account). The situation in Ukraine will impact on this and many other fisheries in the Baltic Sea and this will be assessed at coming Surveillance audits. The data assessed here cover 2021 and earlier, which was before the war started.
Are the condition(s) raised appropriately written to achieve the SG80 outcome within the specified timeframe? [Reference: FCP v2.2, 7.18.1 and sub-clauses]	Yes	But see above.	Please, see above.

Optional: General Comments on the Peer Review Draft Report (including comments on the adequacy of the background information if necessary). Add extra rows if needed below, including the codes in Columns A-C.	NA	The CPRDR is generally very well written. Terms were clearly stated, and scores set in the contect of the MSC definitions, which I found helpful. It is regrettable that the political situation re Russia renders some of the statements on coordinated management across the Baltic void at this moment. The condition re 1.2.2 (see table on page 16), the absence of Russia from ICES leaves a gap in the data, so it is not possible to judge. There are a few instances of '¡Error! No se encuentra el origen de la referencia': a final check of the reference material would be helpful. Page 16 suggests a condition on 2.3.1, but there is no mention of this in the pages (112-118) of CPRDR on 2.3.1.	Thank you for your comment. Regarding the Russian absence from ICES, please see comment on the Russian suspension within ICES above. Thank you for spotting the '¡Error! No se encuentra el origen de la referencia'. We have now made sure that this is all correct in the final pdf. Regarding Condition against PI 2.3.1, please, have a look at the end of the scoring table for PI 2.3.1 "Condition number (if relevant)", where it is indicated **#1** (and which is the same condition number as in Table 5.2.3 - page 16 of the CPRDR).

PI comments

PI	PI Information	PI Scoring	PI Condition	Peer Reviewer Justification (as given at initial Peer Review stage)	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)	CAB Response Code
1.1.1	No (material score reduction expected to <80)	No (material score reduction expected to <80)	Yes	1.1.1A SIa. There are no catch data provided for 2021 (see page 28). Given the present situation in Ukraine, and the temporary suspension by ICES of Russian involvement (https://www.ices.dk/news-and-events/news-archive/news/Pages/TemporarySuspension.aspx), it is not clear if data will be forthcoming from Russia. Therefore not all relevant information is available.	Thank you for your comment. The data provided in the table in section 7.2.4 (page 28 from the CPRDR) are from the latest available ICES advice during the site visit (4-9 March 2022) and prior to the publication of the 2022 assessment (28 May 2022) which was after the 30 days period for collecting additional information. The suspension of the Russian Federation within ICES is dated 30 March 2022 after the site visit. With respect to the 2022 assessment and advice, for this work data for 2021 were provided to the ICES WG WGBFAS prior to this date. The stock assessment and the advice dated 28 May 2022 is based on data from all countries fishing for Baltic sprat including Russian fisheries for 2021. Regarding the catch in the 2022 advice is given as 284,890 t (but as explained above could not be taken here into account). The situation in Ukraine will impact on this and many other fisheries in the Baltic Sea and this will be assessed at coming Surveillance audits. The data assessed here cover 2021 and earlier, which was before the war started.	Not accepted (no change)
1.1.1	NA (PI not scored)	NA (PI not scored)	NA	1.1.1A SIb. Not scored		NA (No response needed)
1.1.2	NA (PI not scored)	NA (PI not scored)	NA	Not scored		NA (No response needed)

1.2.1	No (scoring implications unknown)	No (scoring implications unknown)	NA	SIa. There are no catch data provided for 2021 (see page 28). Given the present situation in Ukraine, and the temporary suspension by ICES of Russian involvement (https://www.ices.dk/news-and-events/news-archive/news/Pages/TemporarySuspension.aspx), it is not possible to judge if harvest strategy remains responsive to the state of the stock.	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.1	No (scoring implications unknown)	No (scoring implications unknown)	NA	No catch data provided for 2021	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.1	Yes	Yes	NA	SIb. Score agreed	Thank you.	NA (No response needed)
1.2.1	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SIc. No catch data available from 2021. The statement 'There is extensive monitoring of the fishery (logbooks, VMS, landing control, sampling of the catches). This applies both to the Russian as well as the EU fisheries' rings hollow given the present status of Russia in ICES.	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.1	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SId. This meeting 'The current regime is discussed at annual meetings between Russia and EU.' is probably not happening, so situation unknown.	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.1	Yes	Yes	NA	SIe. Score agreed	Thank you.	NA (No response needed)

1.2.1	Yes	Yes	NA	SIf. Score agreed	Thank you.	NA (No response needed)
1.2.2	Yes	Yes	No	SIa. Score agreed, noting that 'there is no evidence that the HCRs are expected to keep the stock at a level consistent with ecosystem needs' No data on 2021 catch are provided, so it is not possible 'to demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced...' (we do not know what Russia caught in 2021). Further, the effectiveness of the condition on 1.2.2 (as per Table on page 16) cannot be evalueated at the present time.	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.2	No (material score reduction expected to <80)	No (material score reduction expected to <80)		SIb. Given the situation with Russia, uncertainties arising form that sector are presently unknown (fishing pressure could be very high; we simply do not know).	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.2	No (material score reduction expected to <80)	No (material score reduction expected to <80)		SIc. Given that at present Russia is not contributing to ICES, current levels of exploitation are not known 'SA2.5.6 of the MSC Fisheries Standard v2.01, states that in scoring issue (c), "'for "evidence' teams shall include consideration of the current levels of exploitation in the UoA, such as measured by the fishing mortality rate or harvest rate, where available".'	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.3	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SIa: Information from Russia is not available. SG100 is not met	See answer to PI 1.1.1A Sia above	Not accepted (no change)

1.2.3	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SIb: Given the situation with Russia, it is not accurate to say 'All fisheries targeting sprat in the Baltic Sea are well monitored'. SG80 is not met	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.3	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SIb: Given the situation with Russia, it is not accurate to say that 'fisheries [by Russia] are well documents'. SG80 is not met	See answer to PI 1.1.1A Sia above	Not accepted (no change)
1.2.4	Yes	Yes	NA	All scores (a to e) agred	Thank you.	NA (No response needed)
2.1.1	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SIa: Figure 7.3.1 shows herring SSB to be precariously low. Similarly 7.3.11 for cod. F for herring is very high, but is low for cod.Given the herring position, and the presently unknown Russian herring F, it is hard to support SG80 being met.	Thank you for the comment. Concerning the the Russian herring F, this component of the fishing mortality is part of the overall assessment. With respect to particular Russian management in the future, see answer to PI 1.1.1A Sia. Concerning the herring, the by-catch is part of the Latvian TAC and as such is regulated under the EU Multiannual Plan. The management for herring follows this Plan. To score SG80, the MSC standard requires that the central Baltic herring as a main primary species has to be **highly likely above the PRI** which it is and hence SG80 is met.	Not accepted (no change)
2.1.1	Yes	Yes	NA	SIb: Score agreed	Thank you.	NA (No response needed)
2.1.2	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)

2.1.2	Yes	Yes	NA	SIb: Score agreed	Thank you.	NA (No response needed)
2.1.2	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
2.1.2	Yes	Yes	NA	SId: Score agreed	Thank you.	NA (No response needed)
2.1.2	Yes	Yes	NA	SIe: Score agreed	Thank you.	NA (No response needed)
2.1.3	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SIa: given the present absence of Russia, it is not possible 'to assess with high degree of certainty the impact of all fishery-related mortality'. SG80 is not met	See answer to PI 1.1.1A Sia above	Not accepted (no change)
2.1.3	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SIb: given the present absence of Russia, there is an absence of some of the required data.	See answer to PI 1.1.1A Sia above	Not accepted (no change)
2.1.3	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	SIc: given the present absence of Russia, there may not be adequate data going forward to evaluate with a high degree of certainty whether the strategy is effectice.	See answer to PI 1.1.1A Sia above	Not accepted (no change)

2.2.1	NA (PI not scored)	NA (PI not scored)	NA	SIa: not scored		NA (No response needed)
2.2.1	Yes	Yes	NA	SIb. Score agreed	Thank you.	NA (No response needed)
2.2.2	Yes	Yes	NA	SIs a & b: Scores agreed	Thank you.	NA (No response needed)
2.2.2	Yes	Yes	NA	SIc: scores agreed.	Thank you.	NA (No response needed)
2.2.2	NA (PI not scored)	NA (PI not scored)	NA	SIs c and d: not scored		NA (No response needed)
2.2.3	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SIa: absence of data from Russian sector means that 'high degree of certainty' not met. SG80 met	See answer to PI 1.1.1A Sia above	Not accepted (no change)
2.2.3	Yes	Yes	NA	SIb: Score agreed	Thank you.	NA (No response needed)
2.2.3	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
2.3.1	Yes	Yes	NA	SIa: Score agreed. **NB Page 16 suggests a condition is in place, but it is not mentioned over pages 112-118.**	Please, have a look at the end of the scoring table for PI 2.3.1 "Condition number (if relevant)", where it is indicated **#1** (and which is the same condition number as in Table 5.2.3 - page 16).	Not accepted (no change)

2.3.1	Yes	Yes	NA	SIb: score agreed	Thank you.	NA (No response needed)
2.3.1	Yes	Yes	NA	SIc: score agreed	Thank you.	NA (No response needed)
2.3.2	Yes	Yes	NA	All scores agreed (SIs a to c)	Thank you.	NA (No response needed)
2.3.3	Yes	Yes	NA	All scores agreed (SIs a & b)	Thank you.	NA (No response needed)
2.4.1	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SIa: given that flounder (a bottom-dwelling species) are caught (see 7.2.4, 7.3.1, 7.3.2) it seems likley that nets do touch the bottom. In that case, damage cannot be discounted. SG100 is not met.	The catch of cod and flounder are rare events (very small by-catch) and are not in themselves indications of bottom contact. As noted, any bottom contact is considered by the skipper as professional blunder and because of the risk to the gear to be avoided. The sprat fishery is pelagic, strengthening the indications that bottom contacts are avoided.	Not accepted (no change)
2.4.1	Yes	Yes	NA	SIb and SIc: Scores agreed	Thank you.	NA (No response needed)
2.4.2	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
2.4.2	Yes	No (material score reduction expected to <80)	NA	SIb: The fact that flounder are caught (see 2.4.1) is some objective basis for concluding that the measure (to avoid bottomimpact) does NOT work. SG80 not met.	Please, see reply to PI 2.4.1 SIa.	Not accepted (no change)

2.4.2	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
2.4.2	Yes	Yes	NA	SId: Score agreed	Thank you.	NA (No response needed)
2.4.3	Yes	Yes	NA	All SI scores agreed	Thank you.	NA (No response needed)
2.5.1	Yes	No (non-material score reduction expected)	NA	SG100 is not met (please delete the 'Partial' score)	PI 2.5.1 can be scored as "Partial", according to the MSC reporting template (v1.2), therefore, and as justified in the rationale, the assessment team will keep the "partial" score.	Not accepted (no change)
2.5.2	Yes	Yes	NA	All SI scores agreed	Thank you.	NA (No response needed)
2.5.3	Yes	Yes	NA	SIa-d: all scores agreed	Thank you.	NA (No response needed)
2.5.3	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SIe: Teable 'e' Monitoring reports 'Yes' to 'Information is adequate to support the development of strategies to manage ecosystem impacts'. This should be 'No'. The Score of 80as reported at the top of page 143 is appropriate.	Thank you for your comment. The mistake has now been ammended.	Accepted (no score change, change to rationale)
3.1.1	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)

3.1.1	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SIb: Although mechanisms to resolve disputes have been tested historically, there mnust be concern going forward (in to the new certification period) that conflict between the EU and Russia may prevent reasonable legal engagement. SG100 may not be met going forward.	See answer to PI 1.1.1A Sia above	Not accepted (no change)
3.1.1	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
3.1.2	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
3.1.2	Yes	No (non-material score reduction expected)	NA	SIb: Given present EU/Russia tension, it is unclear how EU/Russia management will proceed (cf. 'Exploitation of the Baltic sprat and the central Baltic herring also depend on the management regime established by the EU-Russia Joint Baltic Sea Fisheries Commission'). SG100 not met	See answer to PI 1.1.1A Sia above	Not accepted (no change)
3.1.2	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
3.1.3	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
3.2.1	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
3.2.2	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
3.2.2	Yes	Yes	NA	SIb: Score agreed	Thank you.	NA (No response needed)

3.2.2	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
3.2.2	Yes	Yes	NA	SId: Score agreed	Thank you.	NA (No response needed)
3.2.2	Yes	Yes	NA	SIe: Score agreed	Thank you.	NA (No response needed)
3.2.3	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
3.2.3	Yes	Yes	NA	SIb: Score agreed	Thank you.	NA (No response needed)
3.2.3	Yes	Yes	NA	SIc: Score agreed	Thank you.	NA (No response needed)
3.2.3	Yes	Yes	NA	SId: Score agreed	Thank you.	NA (No response needed)
3.2.4	Yes	Yes	NA	SIa: Score agreed	Thank you.	NA (No response needed)
3.2.4	Yes	Yes	NA	SIb: Score agreed	Thank you.	NA (No response needed)

Report from Peer Review B

General comments

Question	Yes/No	Peer Reviewer Justification (as given at initial Peer Review stage). Peer Reviewers should provide brief explanations for their 'Yes' or 'No' answers in this table, summarising the detailed comments made in the PI and RBF tables.	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)
Is the scoring of the fishery consistent with the MSC standard, and clearly based on the evidence presented in the assessment report?	Yes	The report is well written and have to most part clear rationales and justifications consistent with the MSC standard, except for one specific issue. The scoring of sprat (as a target) and herring as (a main primary) Key LTL species is incorrect when it assumes MSC ICES assessed stocks intrepretation guidance regarding the distance between Blim and Bpa for scoring at SG80 level. The MSC ICES intrepretation guidance is not applicable to Key LTL stocks. There are however also a few instances where the rational could be improved, or where conflicting information is given. The P3 scoring needs to be reviewed in general as there are unclear rationals and incorrect statements. One that is most obvious conflicting information is the fact that the gear used is described and shown with a picture in the begining of the report by having a groundrope with plastic bobbins, but troughout P2 it is stated that the trawl has only chains and no plastic bobbins. There is also the issue of where the UoA is fishing, since the descrition of the fishery is mainly done referencing the whole of the Latvian fisheries (demersal and pelagic) and stating that the UoA activity was limited to Latvian EEZ but the maps presented show that the fleet was actually fishing outside Latvian EEZ. These inconsistencies need to be resolved and clarified, particularly for P3 scoring.	Thank you for your comments. There is work ongoing within ICES to improve the basis for scoring PI 1.1.1A (defining ecosystem needs). At the moment the best bet available is included in the Multiannual Management Plan for Baltic fisheries. This is based on a review of the natural mortalities generated in the sprat stock. As noted by the peer reviewer the Russian - Ukraine conflict may well delay also this work inside ICES. The assessment team considered approaches based on B0 as guided in the MSC standard but found that such calculations were highly variable and told more on the model used than on the system that is assessed. The approach could therefore not be used as a basis for a revised approach to scoring PI 1.1.1A leaving the Multiannual Plan as 'best science' at this time. As it can be seen in several of the PI comments, the rationale has been amended and improved in several PIs, including the description of the gear used and where the UoA is fishing, which are both now clarified.

Are the condition(s) raised appropriately written to achieve the SG80 outcome within the specified timeframe? [Reference: FCP v2.2, 7.18.1 and sub-clauses]	Yes	The conditions raised are appropriate to achive the SG80 outcome within the specified timeframe, although further conditions may arise from this review. Nevertheless, condition 3 has a timeframe of 7 years, which is higher than a certification cycle.	Correct. We have explained in the "Milestones" of Condition 3 that exceptional circumstanted are being applied.
Optional: General Comments on the Peer Review Draft Report (including comments on the adequacy of the background information if necessary). Add extra rows if needed below, including the codes in Columns A-C.	NA	Several comments: how may vessels belong to the UoA? because there are several places where a description of the whole of Latvian fisheries is provided (eg. page 24), but no number of vessels is given regarding the specifc fishery being certified, except when reaching page 154 where the statement "There were 22 offshore companies entitled to catch sprat. From these, less than half are currently included in the UoA (i.e., 9 companies comprising a fleet of 18 vessels)" page 12 "Baltic fisheries are managed by EU Member States and the Russian Federation". Baltic fisheries are managed by the EU under the Common Fisheries Policy as EU fisheries law has direct application to MSs. In addition, to my best knowledge there is no effort management of Baltic fisheries (and particularly for pelagic fisheries). page 14 - "Sprat fishery in Latvia is an offshore trawling fishery restricted to the northern part of the SD 26 and most of the 28.2 (within the Latvian EEZ, Figure 7.2.1)". However, according to the figure, fishing occures outside Latvian EEZ, in SD 25 (Sweddish waters?). This has implications for P3 scoring. And it would really help if the SD would be shown on the figure. page 28 - the TAC in 2020 was not per se above the range, but above advice corresponding to Fmsy and the HCR. the TAC was whithin the range, but the (upper) range is only applicable in certain conditions. Principle 2 section (page 54 -page 56, page 148)-issue with figure legends and references. page 62 & 85 - "As the ground rope is not equipped with rubber bobbins (only chain) any contact with the sea bottom would jeopardize the integrity of the gear." According to the fishery	Thank you for your comments. - Regarding the updated vessel list, on page 154, right after what the PR has stated, it is mentioned the following "(see latest vessel list in Section 9.2.4 which was published on 6th May 2022 at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@Access to the fishery requires a licence from the Latvian authorities and respects a definite effort regulation.assessments)". In any case, additional information has been included in both UoA and UoC tables. - Page 12. - The assessment team believes that what it is written is not incorrect. - Page 14 - This has been amended in sections 5.1.1, 5.1.2 and 5.1.3, also Figure 7.2.1 and and section 7.4.1.1 have now been clarified. This has also been answered in comment for PI 3.1.1. - Page 28. -The range is given as 169 965–233 704 t, while the TAC (EU+Russia) is 268,458 t - Principle 2 section. - Issues with figure legends and references have been amended. - Page 62 & 85 - This has been amended in comment for PI 2.4.1 SIa. - Page 64. - The data shown in Table 7.3.2 are specifically for fishing vessels targeting sprat, even though the observer program covers the Latvian pelagic fleet in general. BIOR confirmed that this is not a trip sampled for the herring fishery. - Page 74. - The Latvian pelagic trawl fishery that targets sprat and herring. - Page 185. - "adopted" has now been modified for "drafted".

		description however the groundrope has plastic bobbins (see figure 5.1.3). So which is it, chains or bobbins? Because different groundropes have implications to the bottom impact of the fishery. page 64 - observer on board data: the only trip sampled in 2021 was a herring fishery, not sprat and although it may be shown in the report, it should not be used to score the fishery page 74 - which vessels/fishery have observers on board for monitoring porpoise bycacth? page 185 - "This Plan was adopted by the European Commission in view of the strong influence that biological interactions and environmental effects have on the Baltic stocks of cod, herring and sprat." The EC does not adopt plans, this is a MS competency. EC drafts plans to be adopted by MSs.	

PI comments

PI	PI Information	PI Scoring	PI Condition	Peer Reviewer Justification (as given at initial Peer Review stage)	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)	CAB Response Code
1.1.1	Yes	No (non-material score reduction expected)	Yes	Sia Although I agree with scoring, I think the rational should be reviewed. The ICES stock interpretation is applicable to stocks assessed in a single species context, and thus Bpa cannot be considered as a point where 5% risk of the stock is below PRI, but also not the argumentation of the distance between Blim and Bpa refered to by the CAB. Yes Blim can be used as PRI but then the stock needs to be considerably above that level. One could argue that because the stock assessment already takes into account ecosystem considerations, such as cod prey, and the Reference Points have been re-estimated (correct?) then they are aplicable to the key LTL stock. but also that the stock is substancially higher than PRI as the CAB has stated, and recruitment has not be shown to be declining and SG80 is reached. However, to have a high degree of certain is debatable, as there is no probability distribution and no estimate of B0 while the stock historically has reached almost 2 million.	Thank you for the comment. The assessment team has reviewed the justification and has scored based on the stock being significantly above Blim (410 kt, SSB (2021) ~1 mill tons), and, on this basis score PI 1.1.1a at SG100 being met. Scoring of PI 1.1.1b is based on the high fishing mortality much above 0.5*FMSY and the team concluded that SG80 is not met. Whether the SG100 is met for PI 1.1.1a or not is therefore irrelevant and the Guidepost is not scored.	Accepted (no score change, change to rationale)
1.1.1	Yes	Yes	Yes	Sib. Agree with scoring.	Thank you	NA (No response needed)
1.1.2	NA (PI not scored)	NA (PI not scored)	NA	Agree with scoring.	Thank you	NA (No response needed)

1.2.1	Yes	No (material score reduction expected to <80)	NA	Sib. If stock biomass is not at MSY level, and fishing mortality is above MSY levels, how can it be stated and concluded that the harvest startegy is achieving its (MSY) objectives? There is evidence of exactly the opposite. SG80 is not reached.	Thank you for the comment. Based on PI 1.1.1A being scored below 80 the assessment tream has scored PI 1.1.2 (stock recovery) and shown that the stock under the current harvest strategy will recover. Hence the strategy is sound and SG80 is met.	Accepted (no score change, additional evidence presented)
1.2.1	No (scoring implications unknown)	No (scoring implications unknown)	NA	Sif. If there are no discards then this SI is NA. However, one need to have data to justify that there are no discards from for example at-sea monitoring or at-sea inspections. In relation to the arguments used, that a discard ban is in place and thus a review of discards has been conduted is not correct. The review needs to be applicable to the UoA and not in general european fisheries, while the LO is not incoorporated in MAPs, but in discard plans. It would be applicable to described what discard plan (if any) is applicable to the UoA and if there are any LO exemptions for the sprat fishery.	Thank you for the comment. The nature of the sprat fishery is such - there is no processing nor sorting at sea - that the discard in this fishery is not occuring. Slippings might be a possibility but has not been observed by any of the observers.	Accepted (no score change, additional evidence presented)
1.2.2	Yes	Yes	Yes	Sia. Agree that there are no HCR in place that take the ecosystem role of sprat into account, although several ecossystem aspects are included in the assessment.	Thank you	NA (No response needed)

1.2.2	No (material score reduction expected to <80)	No (material score reduction expected to <80)	Yes	Sic. As with PI 1.2.1 if fishing mortality is above Fmsy and for a very long time (not to mention that the stock is not at MSY levels), how can one conclude that evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs? The argumentation that current F is whithin the HCR ranges (above Fmsy) ignores the fact that the managers itself decided to not apply the upper range to set the TAC, and actually used the lower range. The 2021 and 2022 TACs were based on or below Fmsy and this should be the value used to compare current F. The Commission proposal refered to in the rational actually argues for the lower range of the F interval for setting the sprat TAC (and not to the upper F range as it is stated in the rational) in order to protect the herring stock, protect cod stock as sprat is food for cod and to lower sprat F. In any case, i argue that current F should be compared to the F of the TACs (2021 TAC which was Fmsy, and for 2022 TAC was below Fmsy) and not what the commission proposed (which was an even lower F). Clearly SG80 is not met.	Thank you for the comment. The evaluation of the effectiveness of the HCR should be based on management **decisions**, i.e., based on EU and Russian legislation while Commission and the Russian administration **proposals** are irrelevant. Moreover, as the PR notes, management decided for 2021 and 2022 to set TACs below the upper range and it may be assumed that these decisions reflect that the Ministers and Parliament share the concerns expressed in the Commission proposals. In addition, the decisions are consistent with the Baltic Sea Multiannual Plan as implied by the Peer Reviewer. The HCR has, therefore, been evaluated as being appropriate, the EU multiannual plan is based on ICES advice.	Not accepted (no change)
1.2.3	Yes	Yes	NA	Sic. And what about recreational fisheries? Do they exist for sprat?	Thank you for the comment. No there is no recreational fishery. Sprat occurs mainly in deep water without easy access for recreational fishery	Accepted (no score change, additional evidence presented)
1.2.4	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)

2.1.1	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	Sia. As argued above, the ICES intrepretation of the distance between Blim and Bpa is not applicable to Key LTL stocks, even if Blim can be considered as a PRI. Therefore the argumentation of proxy reference point "CBH SSB 2021 was estimated to be 365,448 t, above Blim (330 kt) but below the proxy reference point (Blim+(Bpa-Blim)/3 applied because CBH is classified as Key LTL species" is wrong. The other issue is that the argumentation is based on direct herring fisheries TACs, while the UoA is a sprat targeted fishery, where herring catches are bycacth. So has the quota used for the herring bycatch in the sprat fishery be reduced? Are there LO exemptions in place for the sprat fishery where herring can be discarded? these will be some measures where the UoA can reduce catches of a depleted stock, to ensure its not hindering recovery and rebuild. This Sia rational needs signifcant review. SG80 is not met.	Thank you for the comment. The argumentaion for the herring being above PRI level is analogous to the argumentation for the sprat. The UoA is a small fishery on herring compared to the total fishery on the CBH stock and this fishery will not hinder recovery of the herring stock. SG60 is met. The measures established under the EU Multiannual plan and the EU Russian agreement collectively assure that the fishery does not hinder recovery. SG80 is met. Management has followed the advice, i.e., the Multiannual Plan, by-catches of herring in the sprat fishery are part of the Latvian herring quota. Also, please note that there are no discards in this fishery.	Accepted (no score change, change to rationale)
2.1.1	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Sib. Although cod catches may be low, missreporting may happen and the TAC is also low. Furthermore, the fishery was not sampled at sea in 2021 and only 1 trip in 2020, so one does not know if cod catches have increased. So there is no evidence that the UoA does not hinder the recovery and rebuilding of minor primary species, i.e. cod and SG100 is not met.	Thank you for the comment. The distribution of cod is such that only a small proportion overlap with the distribution of the Latvian sprat fishery, the observers in 2021 was low because of the COVID-19 situation but the data series is much longer (please see **Tables 7.3.1** and **7.3.2**). There is therefore ample evidence backed by general knowlegde of current distribution of the cod/sprat stock and the general good compliance in this Latvian sprat fishery that the small cod by-catch is a correct reflection of the impact on the cod stock.	Accepted (no score change, additional evidence presented)

2.1.2	Yes	Yes	NA	Sia. "Other elements to be included in the strategy to manage cod is the scientific research (acoustic surveys together with the Estonian research institute) performed by BIOR," Acoustic surveys for cod is a mistake?	Thank you for the comment. The reference to the acoustic surveys was as indicated by PRB an error, there are trawl surveys that monitor the stock development for cod in the Open Sea. Justification has been corrected	Accepted (no score change, change to rationale)
2.1.2	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Sib. The TAC for cod does not follow the scientifc advice, as the advice is for 0 catches and a TAC is set for the last three years. So there is no objective basis to say the measures will work to rebuild the cod stock. However, as this PI at SG80 referes to main primary species only, SG80 is still reached for cod. The rational needs to be reviewed.	Thank you for the comment. The comment points to the Eastern Baltic cod. Justification has been reviewed. The EU legislation ban directed cod fishery and restrict nby-catch in other fisheries to 10%. Latvian legislation restricts cod by-catch further and the observed by-catches in the Latvian sprat fishery in ICES 28.2 are minimal. See COUNCIL REGULATION (EU) 2021/1888 of 27 October 2021 fixing for 2022 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulation (EU) 2021/92 as regards certain fishing opportunities in other waters. This regulation specifies a TAC of 595 t for 2022 exclusively for by-catches. No directed fisheries are permitted under this quota. Please, note that this SI only refers to "minor" primary species at SG100, that is why we have indicated that SG100 is reached for cod (and have not stated anything regarding SG80).	Accepted (no score change, change to rationale)
2.1.2	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	Sib. For herring however, and although the TAC have followed scientific advice, and have even been set lower, fishing mortality is still very high and the stock is at very low level at Blim. There is also no reference to stock assessment predictions of the stock recovering in the short term. So clearly the measures of the strategy are not working in rebuilding or recovering the central baltic herring stock and SG80 is not reached.	Thank you for the comment. The EU Multiannual Plan for Baltic fisheries implies that depleted stocks will recover if the plan is followed. The Baltic MAP is based on biological knowlegde. There is therefore some basis for the expected recovery.	Accepted (no score change, additional evidence presented)

2.1.2	Yes	Yes	NA	Sic. Although I don't disagree that the measures are being implemented sucessfully (TACs are being respected) and SG80 is reached, the statement "good and the overall objective of a sustainable fishery at MSY level is achieved." is clearly incorrect as the two primary species, one is it at Blim and the other below Blim.	Thank you for the comment. The justification has been updated. There is some evidence (herring) that the strategy (EU Multiannual Plan) works.	Accepted (no score change, change to rationale)
2.1.3	Yes	No (non-material score reduction expected)	NA	Sia. Although the information provided in the rational states that the missreporting of herring and sprat is not significant in Latvian fisheries it does not mean automatically that the information is adequate to assess with a high degree of certainty. Having any level of missreporting and already having a guess estimate of 10% of catches already introduces significant catch uncertainty, and in my opinion is already suficient to not reached a high degree of certainty. Furthermore, and in accordance with PI1.2.3. SIb and PI2.2.2. SIc, species missrecording is still an issue in the fishery that should be improved and a recomendation is issued by the CAB. SG100 is not met.	Thank you for the comment. There is significant information for the UoA (Latvian Sprat fishery in the Open Sea) that there is no misreporting as confirmed by observers on the vessels. Misreporting seems to be in other fisheries. See also section 9.2.2 pointing to that the Latvian sprat fishery is directed for sprat. Herring is not a commercial part of this fishery and is sorted out. The Control unit confirms that there is no significant misreporting.	Not accepted (no change)
2.2.1	Yes	Yes	NA	Sib. There should be a scoring value for each species/element.	Thank you for the comment. The assessment team has assessed the different species separately, however, 5 out of the 6 secondary minor species have the same justification. And all 6 species have the same score. The rationale has been amended.	Accepted (no score change, change to rationale)

2.2.2	Yes	No (non-material score reduction expected)	NA	Sia. The MAP only have the possibility for general measures to be introduced for flounder, but does not specifies specific measures for flounder such as a minimum size or quota etc. So the general bycath species measures in the MAP may be considered as measures or perhaps a partial startegy, but not a strategy to manage flounder and SG100 is not met.	Thank you for the comment. The EU MAP includes a strategy for Flounder with the same regulatory possibilities as for other species listed in the MAP. The MSC standard requirement is that these possibilities are implemented only if required, e.g., based on advice from ICES or based on other indications that regulations are needed. The assessment team maintains that there is a strategy for flounder and maintains the score.	Accepted (no score change, additional evidence presented)
2.2.2	Yes	Yes	NA	Sie. Flounder has no TAC or quotas and salmon is not relevant to this PI. Also how is fishery independent sources confirming the fishery catch composition?	Thank you for the comment. Salmon and flounder have now been deleted from the rationale. The assessment team has been assessing observers's data since 2013 as this is a re-assessment. But in fact, there have been acoustic surveys for Baltic sprat since the 1980s.	Accepted (no score change, change to rationale)
2.2.3	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Sia. Please see justification above for 2.1.3 Sia, as it is also appliacble and SG100 is not met	Thank you for the comment. Please see answer to 2.1.3 Sia above.	Not accepted (no change)

2.3.1	Yes	Yes	Yes	Sia I agree with the scoring for harbour porpoise. As concluded by ICES, even if an event is rare (but either because an event is rare) at-sea monitoring levels need to be very high to be sensitive to record that rare event. Also, a rare event may be perceived as rare because sampling levels are low, and its a catch 22 situation where a sampling programme is stopped because the event is "rare". So a rare event is not a justification to remove an at-sea monitoring programme but it may justify a different, more effective monitoring programme. Other sources of data as it is suggested by BIOR may not be adquate for observing that rare event. These issues should be considered further.	Thank you for the comment. This has no impact on the scoring but the assessment team will bring this issue to the attention of BIOR at future site visits.	NA (No response needed)
2.3.1	No (scoring implications unknown)	No (scoring implications unknown)	Yes	Sib If ringed seals are listed in Annex II and V of EU Habitat Directive as protected species (page 81) they should be considered ETP species also and scored accordingly.	Thank you for the comment. In fact, after your comment, we have realized that grey seals should also be considered and assessed as ETP species. Therefore, several sections of the PCDR have included these amendments (i.e., section 7.3.3.5, section 7.3.3.5b and scoring of PI 2.3.1 SIb and SIc).	Accepted (no score change, additional evidence presented)
2.3.1	No (non-material score reduction expected)	Yes	Yes	Sic. Ghost fishing should be mentioned specifically, and ringe seals should be considered.	Thank you for the comment. Ghost fishing is particular related to gillnets while this is a trawl fishery. Lost trawls are a very rare occurence (Marelitt, 2019). This reference has now been included in the amended rationale for this PI. In addition, lost trawls have not been reported by the observers for a decade the time series for which that are observer dataover, therefore, the assessment team does not consider it as an issue. Regarding the ringed seals (and the grey seals), please see response for PI 2.3.1 SIb.	Accepted (no score change, change to rationale)

2.3.2	Yes	No (change to rationale expected, not to scoring)	NA	Sic. Although i agree with scoring, please see justification above on PI 2.3.1 Sia regarding the statement that "on Latvia reiterates its previous statement that continuation of a cetacean bycatch program is an unnecessary expenditure of financial and human resources" but also the CAB rational that there is no information of the exact levels of at-sea monitoring in the sprat fishery used in PI2.3.1 SIc for seabirds. This rational should be reviewed.	Thank you for the comment. As noted above we will bring this issue to the attention of BIOR in future site visits. Please, be aware that the statement is mentioned in PI 2.3.2 SIc and PI 2.3.3 SIa, but not in PI 2.3.1 SIa. This statement, however, is from a reference (ICES, 2020f), therefore, the assessment team believes that it does not have to be reviewed. We have, however, realized that the reference was missing from PI 2.3.2 SIc and has now been included. In addition, the rationale has been modified for both Sea lamprey and seabirds in PI 2.3.1 SIc to take into account the at-sea monitoring during 2020 and 2021.	Accepted (no score change, change to rationale)
2.3.2	Yes	No (change to rationale expected, not to scoring)	NA	Sie. Ghost fishing should be mentioned specifically.	Thank you for the comment. Ghost fishing is particularly related to gillnets while this is a trawl fishery. Lost trawls are a very rare occurence (Marelitt, 2019). This reference has now been included in the amended rationale for this PI. In addition, lost trawls have not been reported by the observers for a decade for which the time series exist, therefore, the assessment team does not consider it as an issue.	Accepted (no score change, change to rationale)
2.3.3	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Ringed seal should be considered.	Thank you for the comment. As noted above for PI 2.3.1, both ringed seals and grey seals are now considered, although no interactions have ever been recorded from the fishery and both species do not occur in the fishery area. The rationale has now been ammended.	Accepted (no score change, change to rationale)

2.4.1	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Sia. Although I do not disagree with scoring there are two issues with the rational. First, "the ground rope is not equipped with rubber bobbins (only chain) any contact with the sea bottom would jeopardize the integrity of the gear.". The gear has rubber bobbins as indicated by figure 5.1.3. Furthermore, "sprat fishing is conducted in the water column, interacting only with the pelagic community and are not designed to make contact with the seabed" is not necessarely true as the gear catches cod and flounder, two demersal species, one of each lives in the bottom. So there is some degree of contact of the gear with the bottom.	Thanks for pointing out the mistake regarding the rubber bobbins. It has now been ammended in the report accordingly. The catch of cod and flounder are rare events (very small by-catch) and are not in themselves indications of bottom contact. As noted any bottom contact is considered by the skipper as professional blunder and because of the risk to the gear to be avoided. And sprat fishery is pelagic.	Accepted (no score change, change to rationale)
2.4.1	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Sib. In this SI the contact of the gear with bottom needs to be explained as described above, that although not common there is contcat. However, the justification is not that there is no contact, but following what was written in the P2 introduction section and in PI2.4.2 SIb, that the fishery occurs in areas where there are no VMEs.	Thank you for the comment. The justification has been updated.	Accepted (no score change, change to rationale)
2.4.1	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Sic. Minor habitats are encountered when the gear touches the bottom, and since there is no evidence, SG100 is not met.	Thank you for the comment. Evidence from vessel mapping of gear performance indicates that contact with the bottom does only occur as a maloperation of the gear and are very rare events. Justification updated	Accepted (no score change, change to rationale)
2.4.2	Yes	Yes	NA	However the fact that the gear may touch the bottom needs to be mentioned in the rational.	Thank you for the comment. The strategy (operational performance) is to avoid any bottom contact by using pelagic trawls (see SIb). The possibility that the gear may touch the bottom is noted in 2.4.1.	Not accepted (no change)

2.4.3	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)
2.5.1	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)
2.5.2	No (material score reduction expected to <80)	No (material score reduction expected to <80)	NA	Sib. The rational should be reviewed as the target species is not at MSY elevels, nor its primary species, which are actually at Blim and below Blim. If this is the rational for SG80 to be reached, then SG80 is not reached.	Thank you for the comment. What is scored under this PI is the ecosystem impact while the target species is assessed in Principle 1. Here the standard considers the function of the ecosystem and specifically under 2.5.2 the management strategy. As explained for primary species in PI 2.1.2, we believe SG80 is reached. Therefore, the overall management for the ecosystem also reaches SG80.	Not accepted (no change)
2.5.3	Yes	No (change to rationale expected, not to scoring)	NA	Sic. The rational to reach SG80 is lacking.	Thank you for spotting this error. The justification has been updated.	Accepted (no score change, change to rationale)
3.1.1	Yes	Yes	NA	Table 3.1.1. should be together with all P3 scoring tables. My main point is that the fishery management system should be examined and scored, and this means the flag state (Latvia), the coastal state (waters where the fishery is operating, Latvia but maybe Sweden also? see general comments on the UoA definition) and the international management (EU and EU-Russia Agreement). I agree with scoring but if the fishery is operating in another MS, this should be clarified and scored.	Thank you for the comment. Table for PI 3.1.1 has now been moved together with all P3 scoring tables. The Latvian sprat fishery operates under the EU CFP and management such as control, monitoring, enforcement is coordinated under this umbrella. Closed areas, gear regulations are coordinated except within the coastal zone (12 nm). In any case, and as now explained in sections 5.1.1, 5.1.2 and 5.1.3 (and also clarified in Figure 7.2.1 and section 7.4.1.1), even though the whole Latvian sprat fishery operates in SD 25-26 and SD28.2 (as seen in Figure 7.2.1), the assessed fleet is restricted to the northern part of the SD 26 and most of the 28.2, and always within the Latvian EEZ.	Accepted (no score change, additional evidence presented)

3.1.2	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)
3.1.3	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)
3.2.1	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)
3.2.2	No (scoring implications unknown)	No (scoring implications unknown)	NA	Sia. The statement "the European Commission prepares a proposal for new legislation which is presented to the European Parliament where it is discussed and amended. If agreed by the European Parliament, the legislation is then forwarded to the European Council for approval." is if im not mistaken incorrect. The EC send its proposal to both the Council and the Parliament, where both institutions have to agree internally, and then trilogue starts for a common agreement to be reached, mediated by the EC. Regarding the decision making rule, the rational of describing the HCR embedded in the Baltic MAP is not suficient to score this PI.	Thank you for the correction. It has now been amended. Concerning the description of the HCR embedded in the Baltic MAP, regrettably, the assessment team cannot see what is missing in the description and why this is not sufficient to score this PI. We would appreciate if the PR could provide more details for this.	Accepted (no score change, change to rationale)
3.2.2	Yes	No (change to rationale expected, not to scoring)		Sic. The following rational "Both targets, F (and safeguards) and SSB have been above their respective targets for at least the past 15 years and have been calculated using precautionary and MSY approach, and they are based on ICES assessments and advice. Removals from European fisheries is guaranteed by the EU Data Collection Framework, and ICES base their advice on	Thank you for the comment. The team believes that stock status and exploitaiton are not being scored in this SI, we are simply mentioning it. Regarding the word 'garanteed' has been replaced by 'verified'. The EU-Russian fisheries agreement is now also included.	Accepted (no score change, change to rationale)

				the most up-to-date information available." is unclear. Stock status and exploitaion are not to be scored in this SI, while removals are garanteed by the DCF does not make sence (translation issue?). I sugest rational be revised.		
3.2.3	Yes	Yes	NA	Agree with scoring.	Thank you	NA (No response needed)
3.2.4	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	What about the Russian-EU quota sharing agreement? It is part of the fishery management and it is not refered to in this PI.	Thank you for the comment. There is no explicit quota sharing agreement included in the EU-Russian fisheries agreement. There is an understanding between the parties of how the resources are shared. Justification has been updated.	Accepted (no score change, change to rationale)

9.4 Stakeholder input

9.4.1 Input received after the publication of the ACDR

No stakeholder comments were received using the 'MSC Template for Stakeholder Input into Fishery Assessments' during the 30-day public consultation opened after the publication of the ACDR at the MSC website.

9.4.2 Inputs received during the visit.

The result of the discussions maintained with the interviewed stakeholders during the visit and the information shared at this stage were incorporated in the relevant background sections and scoring tables. In general, no material differences with the scores provided at the ACDR were derived from the information exchanged during the visit.

9.5 Conditions

9.5.1 Summary of conditions closed under previous certificate

No conditions were closed during the previous certificate.

9.5.2 Open Conditions at reassessment announcement

a. Condition 1 on PI 2.3.1 (SIa)

Table 9.5.2.1– Open Condition 1

Performance Indicator	**PI 2.3.1 The UoA meets national and international requirements for the protection of ETP species. The UoA does not hinder recovery of ETP species** **SI(a) Effects of the UoA on population/stock within national or international limits, where applicable**
Score	75
Justification	*Midwater/pelagic trawl is considered by the ICES WGBYC to pose a higher risk (category 2) than other mobile gear. ICES Working Group on Marine Mammal Ecology shows no pelagic trawl interaction with harbour porpoise, but does indicate capture of other cetaceans (common dolphins), highlighting potential for risk to other cetacean species (17 common dolphin caught in German pelagic trawl in ICES divisions 6 and 7).* *With regard to cumulative impacts two MSC assessed fisheries overlaps with the LFPO pelagic trawl sprat fishery and have been assessed under MSC FCR v2.0: the Denmark, Estonia, Germany, Sweden Baltic herring & sprat fishery and the Finnish herring and sprat trawl and trap fisheries. The team assessing the Denmark, Estonia, Germany, Sweden Baltic herring and sprat fishery confirmed during harmonisation meetings held during the preparation of the second surveillance audit report (and drafts shared with the BV team) that observer coverage in those fisheries was below 5%. Furthermore, the ICES WGBYC note that while bycatch in pelagic trawls are considered extremely rare, observing 5% of pelagic trawl effort in the Baltic cannot provide estimates of total cetacean bycatch with an acceptable level of uncertainty.* *SG80 level requires justification that cumulatively (across Latvia, Finland, Denmark, Sweden, Germany and Estonia) all MSC fisheries are highly unlikely to have an impact above the acceptable limit of 8.5 harbour porpoise. Across six countries, this equates to 1.5 individual harbour porpoise each.* *On the basis of the available evidence, including frequency / proportion of observer coverage, the combined effects of the UoAs, covering Latvia, Finland, Sweden, Denmark, Germany and Estonia cannot be considered to be highly likely to be within the ASCOBANS limit of 8.5 individuals. SG80 is not met.*
Condition	In accordance with FCR 7.11.1.3a, the CAB considers that the following exceptional circumstances determine that achieving a performance level of 80 may take longer than the period of certification: - Joint effort from at least 16 different UoAs from 6 different countries are required to fulfil this condition. - At the time of preparing this report the remaining certificate period for the LFPO fishery is less than 3 years. - During the harmonisation meetings it was agreed with Lloyd's Register to provide at least until 2023 to the affected UoAs to fulfil this condition **CONDITION**: By 2024 it shall be demonstrated that the combined effects of the MSC UoAs on the population of Baltic proper harbour porpoise are known and highly likely to be within ASCOBANS limits for acceptable anthropogenic removal.

Condition start	2nd Surveillance audit (2019)
Condition deadline	Harmonized Year 4 (2024)
Harmonized Milestones	During the finalization of BV's 2nd Surveillance audit report, the DDES Baltic Herring & Sprat fishery (assessed by Lloyd's Register) was still preparing its action plan for the PCR. It was, therefore, decided that LFPO would join that action plan once approved and the Milestones published on the 2nd Surveillance report would be a draft. As explained in Section 7.4 of the 3rd Surveillance Audit report, after the publication of the 2nd Surveillance Audit report of the LFPO sprat fishery (on 23/07/2019), a harmonization meeting was conducted (on 09/09/2019) to deal with the present condition (PI 2.3.1 SI a). After this harmonization meeting, a couple of emails were also exchanged between both CABs until agreement was reached regarding the new condition and its milestones (on 13/09/2019). However, at that time BV did not update the report to include these milestones. The final harmonized Milestones between the overlapping fisheries are as follows: Year 1 (2021): Each UoA shall develop a plan for recording the occurrence of incidental capture of harbour porpoise at a UoA level. Resulting Score: 75. Year 2 (2022): Each UoA shall implement plan to record occurrence of incidental capture of harbour porpoise at a UoA level. Resulting Score: 75. And; Year 2 (2022): Propose a mechanism by which data are compiled and analysed across all MSC UoAs, that is independently verified and that demonstrates the combined impact of MSC UoAs on the "Baltic proper" harbour porpoise stock. Resulting Score: 75. Year 3 (2023): Provide evidence that the plan to record occurrence of incidental bycatch for each UoA has been implemented, including initial data collected. Resulting Score: 75. And; Year 3 (2023): Agree and adopt the mechanism for compiling and analysing data across all MSC UoAs. Resulting Score: 75. And; Year 3 (2023): Propose strategies to mitigate combined impacts on harbour porpoise, if required. Resulting Score: 75. Year 4 (2024): Provide evidence that compiled data across all MSC UoAs have been analysed and that the combined effects on harbour porpoise are known. Resulting Score: 80. And; Year 4 (2024): Implement strategies if required, such that the combined effects of the UoAs on harbour porpoise are highly likely to be within ASCOBANS limits. Resulting Score: 80

	In addition to the harmonized milestones explained above, the client has to achieve the following milestones (in accordance with the Client Action Plan – see **Section 9.6**): Year 1 (2021). In order to help preparing a proposal for developing a multi-national plan, the client shall gather all relevant information in relation to interactions with harbour porpoises: (i) recorded by the Latvian fishers in compliance with the Article 8.10 of Cabinet Regulation 296/2007; (ii) collected by observers as a result of the implementation of Regulation (EC) 812/2004. Year 2 (2022). The client shall agree a joint action plan with the other overlapping MSC UoAs. Year 3 (2023). At the end of the certificate period (May 2022), the client shall have implemented the joint action plan	
Progress on Condition (Year 2 - 2022)	ICES (2020j) has identified areas and gears which are important in considering fisheries impact on conservation of harbour porpoise (**Figure**). None of the areas proposed overlaps with the Latvian sprat fishery in the open Sea. The observation programme continued as in previous years. No interaction with harbour porpoises were recorded as has been the case since the start of the program. The political process and the ICES advice have not identified a need for special measures for the Latvian trawl fishery. This demonstrates that the Latvian trawl fishery for sprat in the Open Sea does not present a risk to recovery of the Harbour porpoise population in the Baltic Sea. A multi-national plan to collect data on the incidental capture of harbour porpoise, not just across all MSC UoAs, but also at EU and Baltic level is implemented. *Inter alia* due to COVID-19 there has been no progress on an international management plan which concerns gillnets and pound nets. It is demonstrated based on the observer programs that the management plan will not affect the Latvian trawl fishery for sprat. However, PI 2.3.1a SG80 requires that the effects on the harbour porpoise are evaluated based on the **combined MSC UoAs** and for these fisheries the PI 2.3.1a SG80 is not met.	
	Client old Year 1 (2020)	*As explained above, new harmonized milestones were agreed recently (in September 2019). BV has, therefore, decided to assess the progress on this condition based on these new harmonized milestones and not the ones shown in the second surveillance report. According to these harmonized milestones, in Year 1 each UoA shall develop a plan for recording the occurrence of incidental capture of harbour porpoise at a UoA level.* *In the case of Latvia, interactions between Latvian fisheries and harbour porpoises in the Baltic Sea have been (and still are) monitored by BIOR since the implementation of Regulation (EC) 812/2004 (repealed now by Regulation (EU) 2019/1241 – see Section 4.2.3.2 for further details). As a result of this regulation, since 2006 they have observers on board the midwater trawl fishing fleet (including NZRO vessels), both in the Baltic proper and the Gulf of Riga.* *Furthermore, Republic of Latvia Cabinet Regulation No. 296 adopted on 2 May 2007, details the duties of fishers (section II), and Article 8.10 requires that fishers shall inform the State scientific institute (BIOR): "regarding the catching of marked or rare species of fish and birds, as well as marine mammals (for example, harbour porpoises or seals) and to perform the relevant entries in the fishing logbook".* *It is, therefore, mandatory by law to record and report interactions with harbour porpoises since 2006.* *Moreover, specifically in NZRO's organization, the data sheet used by the fishermen to record catches has a special row ('others') where they enter the species of fish and birds, as well as marine mammals.*

		Thus, NZRO fishermen collect information about catches and bycatch of harbour porpoises and seals every month. *In addition, according to the collected information and BIOR's input, no interactions with harbour porpoises have ever been recorded since 2006 (when the domestic monitoring program on incidental catches of cetaceans began).* *Thus, the UoA fleet is already (and has been since 2006) collecting data on any incidental harbour porpoise catches within their fishery, in accordance with the Year 1 milestone of the Client Action Plan (see Section 5.1.5).*
	Client old Year 2 and harmonized milestones Year 1 (2021)	*BIOR continued in 2020 (although due to COVID-19 at a lower level than in previous years), its observer program on board the midwater trawl fishing fleet (including NZRO vessels), both in the Baltic proper and the Gulf of Riga. In the first half of 2021 no observer trips occurred (due to the COVID-19 pandemic). Trips are however planned for the second half of the year.* *No interactions with harbour porpoises were recorded as has been the case since the start of the program in 2006.* *Data collection is coordinated through the EU DCF program and include a mechanism by which data are compiled and analysed across all EU fisheries including all MSC certified Baltic Sprat fisheries. The revised regulation on technical measures EU 2019/1241 Annex XIII defines a set of measures, inter alia, to protect Harbour porpoise. BALTFISH HLG has developed a joint proposal for protection measures for harbour porpoises. These measures focus on the impact of static gears and is built on ICES advice. The proposal is developed as additional measures to those defined in EU 2019/1241 Annex XIII. The process on implementing these proposals is ongoing.* *LPFO have participated in the development of additional measures for the protection of marine mammals in the BALTFISH, these proposals are particularly directed at by-catch in gillnets and pound nets.* *BV received copies of these emails and the BALTFISH proposal. The political process and the ICES advice have not identified a need for special measures for the Latvian trawl fishery.*
	Year 3	*NA*
	Year 4	*NA*
	Insert additional years if relevant	*NA*
Progress status	The condition is ON TARGET.	
Carrying over condition ☒	This condition is being carried into the next certificate as it was set at the 2nd surveillance audit of the first certificate cycle and harmonized with LR's DDES Baltic Herring & Sprat fishery.	
Closing the condition during the reassessment	NA (please see the "Harmonized milestones" and the "Carrying over condition" details above).	

b. Condition 2 for PI1.1.1A (SIb)

Table 9.5.2.2 – Open Condition 2

Performance Indicator	**1.1.1.A Baltic Sprat) UoA 1 SIb SG80: The stock is at or fluctuating around a level consistent with ecosystem needs**
Score	70
Justification	… there is no reliable estimate of B_0 currently available, so the SI cannot be scored using this approach. With regard to SA2.2.15a-c, the F reference points revised by ICES IBPBASH (ICES, 2020b) and given in the most recent ICES Advice (ICES 2020a) are F_{lim} = 0.63, F_{pa}=0.45 and F_{MSY}=0.31 (see Table 5 of ICES 2020a). Current fishing mortality for Baltic sprat F_{2018}= 0.37 and F_{2019}=0.38 (ICES 2020a), are higher than F_{MSY} and therefore do not fulfil SA2.2.15a. The Generation Time (GT) for Baltic sprat stock calculated according to GT= 1/M+Am50 where Am50 is the age at 50% maturity is as follows: GT= 1/M bar 2-7 (M2019= 0,276) + 2 = 5.62 years = 6y (data from ICES, 2020c). Fishing mortality has also been above 0.5F_{MSY} for more than 4 years recently and for much of the past 2 generation time (6 years) Consequently, there is no evidence that the Baltic sprat stock is at or fluctuating around a level consistent with ecosystem needs. **SG80 is not met. SG100 is not scored.**
Condition	Within a year a rebuilding plan should be in place which will result in the stock being at or fluctuating around a level consistent with ecosystem needs:- a) Within a specified timeframe that is the shorter of 20 years or 2 generation times; and b) That there is evidence that the rebuilding strategy is rebuilding stocks or it is likely based on simulation modelling, exploitation rates or previous performance that the strategy will be able to rebuild the stock within the specified timeframe. This condition and its timelines have been harmonized with other overlapping Baltic Sea MSC fisheries.
Condition start	Surveillance Audit 4 (2021)
Condition deadline	At the 4th Surveillance audit report, a 12-month deadline was set (i.e., for October 2022). This was based on the fact that the CABs are required to respond in accordance with SA2.3.2 of the MSC Fisheries Standard and the corresponding MSC Interpretation here: https://mscportal.force.com/interpret/s/article/Scoring-the-rebuilding-Performance-Indicator-during-the-certification-cycle. In accordance with this interpretation (which is not normative), it was determined that in the absence of rebuilding timeframes it was not appropriate to score PI 1.1.2 at present, **and that a condition should be raised for PI1.1.1A which requires that a rebuilding plan is in place within a year**. However, afterwards, the CABs for the overlapping Baltic sprat fisheries (Bureau Veritas, Global Trust and LRQA) noted that the timing of surveillance audits for these fisheries is not synchronized (see table below). The result is that the 12-month deadline applying to this new condition of certification will occur in October 2022 for three of the five overlapping fisheries, and in April 2023 for the other two fisheries.

Item	Fishery				
	DDES Herring Sprat (LR)	Finland Baltic Herring Sprat (LR)	Polish Herring Sprat (Global Trust)	LFPO pelagic trawl Sprat (BV)	NZRO Gulf of Riga Herring Sprat (BV)

Condition raised	SA 1 (published March 2022)	SA 3 (published March 2022)	PCR (published October 2021)	SA 4 (published October 2021)	SA 1 (published October 2021)
12-month deadline	SA2 (April 2023)	SA4 (April 2023)	SA 1 (October 2022)	RA (October 2022)	SA 2 (October 2022)
Proposed harmonised deadlines	August 2023*				

* August 2023 is proposed here to ensure that all of the certified fisheries are given at least 12 months to meet the condition requirements and that there is enough time to get ICES benchmark outcome (see justification in item 3 above).

There are no normative requirements in FCP v2.2 to harmonise condition timescales, but there is Critical Guidance (unnumbered paragraph on "Harmonisation of condition timelines" on page 51 of MSC Guidance to FCP v2.2) which seeks that they are harmonised, and that the earliest closing date in 1 or more of the fisheries should apply to all overlapping fisheries. The CABs consider that in order to avoid a chaotic situation it is important that timelines for resolution of these issues are synchronised. Because the condition in this instance has a mandatory 12-month duration (rather than several years in the case of most conditions), the effect of shortening the timescale for completion is far greater than would normally be the case.

The most equitable solution to achieve this is considered to be harmonising the deadline so the latest, rather than the earliest date that applies to all of the fisheries. The reason for this is that to do otherwise would result in 3 fisheries having 12 months to address the relevant issues, but the other 2 fisheries having just 6 months to address the same issues.

Moreover, due to the fact that, in order to close this condition, all five fisheries will need the outcome from an ICES benchmark of Baltic sprat and Central Baltic Herring, which is unlikely to be available before June/July 2023, an extra 3-months will be required, i.e., until July 2023, instead of April 2023. Experience with the harmonisation process for these fisheries suggests that an extra month, i.e., **until August 2023**, will be necessary.

However, as explained in PI 1.1.1A SIb, a VR asking for this deadline extension has been declined (both available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments), therefore the deadline for this condition is kept as **October 2022**.

Milestones

Year 1 (2022): Evidence shall be presented to show:

a) The magnitude of fishing mortality or stock biomass that represents a level consistent with ecosystem needs for this stock; and
b) That management measures are in place to allow for the stock to rebuild to this level; and
c) That the rebuilding timeframe is the short of 20 years or 2 generation times.

Resulting score (for PI 1.1.2): 80

Progress on Condition (Year 1 – 2022)

As explained in detail in PI 1.1.1A SIb, there is no evidence that the Baltic sprat stock is at or fluctuating around a level consistent with ecosystem needs. Therefore, this condition cannot be closed within the 12 months given by MSC during the 4th Surveillance.

Year 2	*NA*
Year 3	*NA*
Year 4	*NA*

	Insert additional years if relevant	*NA*
Progress status	As explained above, the progress of the condition is inadequate, therefore, the fishery cannot be re-certified.	
Carrying over condition ☐	*As explained in PI 1.1.1A SIb, this condition has not been allowed to be a carrying over condition (see VR and its response at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).*	
Closing the condition during the reassessment	N/A	

c. Condition 3 for PI1.2.2 (SIa)

The condition was formulated against SIa (Well-defined HCR) for the current LFPO sprat fishery, while for its sister fishery (i.e., the Gulf of Riga herring and sprat fishery), an alternative condition was formulated vis-a-vis SIc (HCRs evaluation) for the Baltic sprat (UoC3). The basis for the difference is that in the Gulf of Riga fishery the catch of the sprat is small relative to the total catch of Baltic sprat (<5%) and therefore the status of the Baltic sprat cannot be effectively regulated through sprat management in the Gulf of Riga, therefore HCR for Baltic sprat needs to be formulated based on the major fisheries targeting this stock (such as the current Baltic sprat fishery) and the focus in the Gulf of Riga herring fishery is that there are effective tools that will control the catch of sprat. As a result of this difference, the Milestones and the Client Action Plan, are also different for Condition #3 against PI 1.2.2 (SIa).

Table 9.5.2.3 – Open Condition 3

Performance Indicator	**PI 1.2.2**: Harvest control rules and tools - There are well defined and effective harvest control rules (HCRs) in place. **SIa SG80**: Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.
Score	75
Justification	The HCR defined in the MAP is based on the target fishing mortality ranges set out by ICES IBPBASH (ICES 2020a; ICES 2020b) and is compatible with an MSY approach to fishing leading to no less than 95% of MSY. The HCR is precautionary in the sense that the probability of SSB falling below Blim in any year in long-term simulations with fixed F within the ranges specified in the MAP is ≤5%. As noted in P1.1.1A, the predation pressure on the stock and stock structure is taken into account in the assessment, and in the estimation of reference points by variable natural mortality that reflects the forage nature of the stock. Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the stock fluctuating around a target level consistent with (or above) MSY. Although the HCRs are expected to reduce exploitation as the PRI is approached, they do not fully take account of the ecological role of the stock. The HCR is based on a single species approach (although multi-species aspects are included in the assessment) which does not consider the stock's role in the food-web as a resource for higher trophic level organisms. Considering the key LTL role of Baltic sprat in the ecosystem, there is no evidence that the HCR are expected to keep the stock at a level consistent with ecosystem needs. **Therefore, SG80 is not met**.

Condition	Evidence shall be presented to demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the stock fluctuating around a target level consistent with ecosystem needs. This condition and its timelines have been harmonized with other overlapping Baltic Sea MSC fisheries.
Condition start	Surveillance Audit 4 (2021)
Condition deadline	Year 7 (2028)
Milestones	Note that exceptional circumstances are considered to apply in this case. Under MSC FCP v2.2 §7.18.1.6, exceptional circumstances refer to situations in which, even with perfect implementation, achieving the 80 level of performance may take longer than the certification period. The rationale for employing 'exceptional circumstances' in this instance is that time is required for relevant research to be funded, undertaken and published. The timeframe for achieving this condition depends on scientific progress within the ICES community requiring funding, research undertaken, method testing time, publication as ICES advice and then implementation of the advice. First steps have been undertaken by ICES through the Integrated Ecosystem Assessment Framework and Ecosystem Overviews development. Current activities of ICES Expert Groups (EGs) and workshops (WK) including WKIRISH, WKDEICE, WGSAM, WGBFAS and WGIAB work towards achieving the successful implementation of EBFM and indirectly the condition. However, this might take longer than the current certification cycle due to the testing and implementation process in ICES and management bodies. Therefore, the CABs (BV, LR, Global Trust) has determined that the appropriate period in which performance in this area must improve to at least the 80 level shall be 7 years from the date of certification of the scope-extended fishery. **Year 1 (2022):** The client group shall present evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES), to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Resulting score: 75** **Year 2 (2023):** The client group shall present evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Resulting score: 75** **Year 3 (2024):** The client group shall present evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Resulting score: 75** **Year 4 (2025):** The client group shall present evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Resulting score: 75** **Year 5 (2026):** The client group shall present evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Resulting score: 75** **Year 6 (2027):**

	The client group shall present evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Resulting score: 75** **Year 7 (2028):** Evidence shall be presented that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the key LTL stock fluctuating around a level consistent with ecosystem needs. **Resulting score: 80**	
Progress on Condition (Year 1 – 2022)	The client have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES), to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. ICES has responded by establishing a workshop to work in 2022-2023 to address these issues.	
	Year 2	*NA*
	Year 3	*NA*
	Year 4	*NA*
	Insert additional years if relevant	*NA*
Progress status	ON TARGET	
Carrying over condition ☒	This condition is being carried into the next certificate as it was set just at the 4th surveillance audit of the first certificate cycle and exceptional circumstances apply as per 7.18.1.6.	
Closing the condition during the reassessment	As stated in the Client Action Plan published in the 4th Surveillance audit report (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments), the client (with the support of the Ministry and BIOR, which can also be found in the 4th Surveillance audit report) will carry out the following: **Year 1 (2022) – Year 6 (2027):** The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES), to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 7 (2028):** Evidence is presented that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the key LTL stock fluctuating around a level consistent with ecosystem needs. By achieving the above, the condition will be closed at Year 7 (2028).	

9.5.3 Conditions

There are no new conditions opened during this reassessment, therefore, the existing conditions for this fishery are carried over from the previous certificate, and their progress on condition during this reassessment is detailed in **section 9.5.2.**

9.6 Client Action Plan

The following are the CAPs that were developed by the Client during the first certification cycle (and the Consultation on Condition, when needed). Some of them have been amended (in blue) to be in accordance with the amended milestones (see **Section 9.5.3** for details):

a. Condition 1 for PI2.3.1 (SIa)

Table 9.6.1 – Condition 1 for PI2.3.1 (SIa)

Client Action Plan	Year 1 (2021). The NZRO commits to collect and analyse all data collected in Latvia in relation to interactions between fisheries and harbour porpoises. Further, we will get in contact with the other MSC UoAs and start to work in close collaboration in order to develop a joint action plan Year 2 (2022). A joint action plan shall be adopted Year 3 (2023). The joint action plan shall be implemented.
Consultation on condition	Annual reports prepared by BIOR on the implementation of Regulation (EC) 812/2004 are available under request (as confirmed by the team during current surveillance audit). The client contacted via email on 19/0//2019 with the contact person of the 'Estonia, Germany, Sweden Baltic herring and sprat fishery' to express their interest to work together towards a joint action plan regarding the condition on PI2.3.1. BV. BV got a copy of this email.

b. Condition 2 for PI1.1.1A (SIb)

As explained in PI 1.1.1A SIb, this condition has not been allowed to be a carrying over condition (see VR and its response at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments). Therefore, the Client Action Plan remains the same as in the 4th Surveillance audit (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments).

c. Condition 3 for PI 1.2.2 (SIa)

Table 9.6.2 – Condition 3 for PI 1.2.2 (SIa)

Client Action Plan	**Year 1 (2022):** The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES), to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 2 (2023):** The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 3 (2024):**

	The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 4 (2025):** The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 5 (2026):** The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 6 (2027):** The client presents evidence that they have approached relevant national authorities, EU institutions and advisory bodies (including DG-MARE, the Baltic Sea Advisory Council, ICES) to encourage the development and adoption of well-defined HCRs that are expected to keep the key LTL stock fluctuating around a target level consistent with ecosystem needs. **Year 7 (2028):** Evidence is presented that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached and are expected to keep the key LTL stock fluctuating around a level consistent with ecosystem needs.
Consultation on Condition	This Condition (although for the SIc instead for the SIa – see **Section 9.5.3 Condition 3** for the explanation of the differences) was already raised for the NZRO Gulf of Riga herring and sprat fishery (please, see Condition 3 in the PCR report, available at https://fisheries.msc.org/en/fisheries/nzro-gulf-of-riga-herring-and-sprat-trawl-fishery/@@assessments), thus, the consultation on condition is already covered by the 2020 letter from the Ministry. In addition, this Condition 3 is also partly covered under the 2021 letter (demonstration that the recovery plan is effective – please, see Condition 2 Consultation on Condition of the 4th surveillance report) and the long term perspective is covered under the general policies established for Latvian under the EU legislation. In addition, the Client has informed that there is also support from BIOR.

9.7 Surveillance

Table 9.7.1 – Fishery surveillance program				
Surveillance level	Year 1	Year 2	Year 3	Year 4
Level 6	**On-site**	**On-site**	**On-site**	**On-site**

The anniversary date of the fishery is November. However, as the anniversary of the sister fishery from the same client (i.e., the NZRO Gulf of Riga herring fishery) is the 23rd of July, it is expected that subsequent surveillance audits will take place close to the new anniversary dates of the fisheries (i.e., between July and November).

Table 9.7.2 – Timing of surveillance audit			
Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
1, 2, 3 & 4	Expiry date of the certificate: 21 Nov 2022	July to November	The site visits will take place simultaneously for both harmonized Latvian fisheries with the same client (i.e., LFPO sprat and GoR herring and sprat fisheries)

Table 9.7.3 – Surveillance level justification			
Year	Surveillance activity	Number of auditors	Rationale
1	On-site	3 auditors	The fishery has still 3 conditions opened, and the clients wants his two fisheries site visits, i.e., LFPO sprat and GoR herring and sprat fisheries, to take place simultaneously. All the site visits for the sister fishery are being established as on-site visits.
2	On-site	3 auditors	The fishery has still 3 conditions opened, and the clients wants his two fisheries site visits, i.e., LFPO sprat and GoR herring and sprat fisheries, to take place simultaneously. All the site visits for the sister fishery are being established as on-site visits.
3	On-site	3 auditors	The fishery has still 3 conditions opened, and the clients wants his two fisheries site visits, i.e., LFPO sprat and GoR herring and sprat fisheries, to take place simultaneously. All the site visits for the sister fishery are being established as on-site visits.
4	On-site	3 auditors	The fishery has still 3 conditions opened, and the clients wants his two

			fisheries site visits, i.e., LFPO sprat and GoR herring and sprat fisheries, to take place simultaneously. All the site visits for the sister fishery are being established as on-site visits.

9.8 Harmonised fishery assessments

The MSC Fisheries Certification Process v2.2 (FCP) sets out procedures for ensuring consistency of outcomes in overlapping fisheries (see Annex PB of the FCP). The intention of this process is to maintain the integrity of MSC fishery assessments.

The MSC has issued an interpretation providing directions to CABs concerning the approach to harmonisation for different PIs for overlapping fisheries. This interpretation is reproduced in **Table 9.8.1**.

Table 9.8.1 MSC directions for harmonisation between overlapping MSC fisheries.

PIs / SIs	Harmonise?	Comments
All P1 PIs	Yes	P1 always considers the impacts of all fisheries on a stock, so any fisheries which have the same P1 species (stocks) should be harmonised.
PI 2.1.1a	Partially	For stocks that are 'main' in both UoAs, harmonise status relative to PRI (at SG60, 80 and 100), and if below PRI, harmonise cumulative impacts at SG80 (not at SG60).
PI 2.2.1a	Partially	For stocks that are 'main' in both UoAs, harmonise status relative to BBL (at SG60, 80 and 100), and if below BBL, harmonise cumulative impacts at SG80 (not at SG60).
PI 2.3.1a	Partially	Harmonise recognition of any limits applicable to both UoAs (at SG60, 80 and 100), and cumulative effects of the UoAs at SG80 and SG100 (not at SG60).
PI 2.4.1b	Partially	Harmonise recognition of VMEs where both UoAs operate in the same 'managed area/s' (as in SA3.13.5).
PI 2.4.2a,c	Partially	Harmonise scoring at SG100, since all fishery impacts are considered (not at SG60 or 80).
All P2 PIs	Yes, if ->	Two UoAs are identical in scope, even if the UoCs are different (e.g. separate clients).
PIs 3.1.1-3	Yes, if ->	Both UoAs are part of the same larger fishery or fleet, or have stocks in either P1 or P2 which are at least partially managed by the same jurisdiction/s (nation states, RFMOs or others) or under the same agreements. Harmonisation may sometimes be possible for those management arrangements that apply to both UoAs (noting the limitations accepted in GPB3).
PIs 3.2.1-4	Yes, if ->	Both UoAs have stocks within either P1 or P2 which are at least partially managed by the same jurisdiction/s (nation states, RFMOs or others) or under the same agreements. Harmonisation is needed for those management arrangements that apply to both UoAs, e.g. at the RFMO level but not the national level in the case of two separate national fleets both fishing the same regional stock.

MSC Fisheries with overlapping UoCs to the UoAs under reassessment here are detailed below in **Table 9.8.2** and the relevant PIs which require harmonisation are shown. Please note only MSC Fisheries using the same version of the assessment tree (v2.0 or v2.01) have been harmonised (MSC FCP v2.2 Annex PB 1.2.1). **Table 9.8.3** shows a summary of the harmonisation meetings carried out between the five overlapping MSC fisheries in the past months. The scores awarded for the overlapping MSC fisheries were analysed during this re-assessment audit (see **Table 9.8.4**) and any differences in scoring is explained in **Table 9.8.5**.

Table 9.8.2 Baltic Sprat and Herring fisheries with Baltic Sprat as target species.

Fishery Name	Target Species	Gear Types	PIs to harmonise	MSC Certification Status and date	Assessment stage	CAB
Finland Baltic herring & sprat	- Herring in the Bothnian Sea and Gulf (ICES SD 30+31) - Central Baltic Herring (ICES SD 25, 26, 27, 28.2, 29) - European sprat (ICES SD 22-32)	Traps Trawls - Other	All overlapping P1 PIs (Baltic sprat and/or CBH). PI 2.3.1 for all UoCs	Certified June 2018 (FCR 2.0)	SV 3 (21 April 2022)	LR
Denmark, Estonia, Germany, Sweden Baltic herring and sprat	Herring, - European sprat (ICES SD 22-32)	Surrounding Nets - With purse lines (purse seines) Trawls - Midwater trawls		Certified 1 July 2020 (FCR 2.0)	SV 1 (21 April 2022)	LR
LFPO pelagic trawl sprat (Sprattus sprattus)	European sprat (ICES SD 22-32)	Trawls - Midwater trawls - otter trawls		Certified 22 May 2017 (FCR 2.0)	Reassessment	BV
NZRO Gulf of Riga herring and sprat trawl fishery	- GoR Herring (ICES SD 28.1) - Central Baltic Herring (ICES SD 25, 26, 27, 28.2, 29) - European sprat (ICES SD 22-32)	Trawls - Midwater trawls		Certified 23 June 2020 (FCR 2.0)	SV 2 (6 May 2022)	BV
Poland herring and sprat midwater trawl and gill net	- Western Baltic Herring (ICES SD 20-24 and eastern part 4) - Central Baltic Herring (ICES SD 25, 26, 27, 28.2, 29) - European sprat (ICES SD 22-32)	Gillnets And Entangling Nets - Gillnets, Trawls - Bottom trawls - pair trawls, Trawls - Midwater trawls - pair trawls		Certified 8 October 2021(FCP 2.2)	PCR (8 October 2021)	Global Trust

As it can be seen from the **Table 9.8.2** there are overlaps but also distinct differences both in the gears involved as well as the resource basis and management:

1. The Latvian fishery occurs only in the Central Baltic Sea and does not affect the Western Baltic Herring (Polish fishery)
2. The Latvian fishery is for human consumption only, there is no fishery for animal feed, fish meal and fish oil involved (Danish, Swedish, Polish, Finnish fisheries)
3. The Latvian fishery is using only trawl while other fisheries also certify purse seine, gillnets and traps
4. The NZRO [LPFO] Gulf of Riga fishery occurs in the Gulf of Riga where the other fisheries do not have access and where a separate management applies

The LFPO pelagic trawl sprat (*Sprattus sprattus*) assesses the Central Baltic Herring as by-catch under Performance indicator 2.1 (Primary species) and as a 'main' primary species.

Central Baltic herring: ICES (2021b) has revised its perception of stock biomass downwards and correspondingly increased its estimate of F (https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2021/2021/her.27.25-2932.pdf).

The harmonisation meetings carried out last year which took place since the 16th June 2021 until the 6th September 2021 were explained in detail in the 4th Surveillance audit report (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments) and are summarized in **Table 9.8.3**. Since then, six more harmonisation meetings have been conducted (i.e., from the 3rd of February 2022 until the 21st of April 2022) and afterwards almost weekly meeting have taken place between the three CABS (**Table 9.8.3**).

The one on the 3rd of February dealt with harmonised timescales between the three CABs for the condition against PI 2.3.1a and to start the discussion on the timescales for PI1.1.1A (Baltic Sprat). The latter was further discussed during the following harmonisation meetings, i.e., from the 25th of February, until the final harmonisation meeting on the 21st of April where a final decision was made to have the deadline synchronized to 1st August 2023 (as explained in PI 1.1.1A SIb). However, as explained above the VR was recently declined (available at: https://fisheries.msc.org/en/fisheries/lfpo-pelagic-trawl-sprat-sprattus-sprattus/@@assessments). Afterwards the three CABs have continued meeting on an almost weekly basis to try to harmonize the progress on condition against PI1.1.1A.

Table 9.8.3 – Overlapping fisheries

Supporting information	
A series of harmonisation discussions have been held between CABs for the overlapping fisheries over the past months. The key meetings are listed below.	
Was either FCP v2.2 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?	**YES**
Date of harmonisation meeting	**16th June 2021 1st July 2021 14th July 2021 17th August 2021 27th August 2021 6th September 2021 3rd February 2022 25th February 2022 14th March 2022 25th March 2022 1st April 2022 21st April 2022 After the 21st of April, almost weekly meeting**

If applicable, describe the meeting outcome
The conclusion of these harmonisation discussions was that scores have been agreed between CABs for all Principle 1 PIs and SIs (with some slight differences), the latest being the agreement of the timescale for the Condition against PI 1.1.1A for the Baltic sprat (see **PI 1.1.1A SIb** for details). Harmonised scores for all Principle 1 PIs are listed in **Table 9.8.4.** CABs also agreed harmonised scoring for PI2.3.1, i.e., all fisheries score PI2.3.1 at 75. The rationale for the few scoring differences can be found in **Table 9.8.5**.

Table 9.8.4 – Scoring differences

Performance Indicators (PIs)	LFPO pelagic trawl sprat	NZRO Gulf of Riga herring and sprat trawl fishery (UoA3)	Finland Baltic herring & sprat (UoA1)	Denmark, Estonia, Germany, Sweden Baltic herring and sprat (UoAs 9-14)	Poland herring and sprat midwater trawl and gill net (UoA1)
1.1.1					
1.1.1A	70	70	70	70	70
1.1.2	Not scored	Not scored	Not scored	Not scored	Not scored
1.2.1	85	90	85	85	85
1.2.2	75	75	75	75	75
1.2.3	90	90	85	85	90
1.2.4	95	85	95	95	95

Table 9.8.5– Rationale for scoring differences

If applicable, explain and justify any difference in scoring and rationale for the relevant Performance Indicators (FCP v2.2 Annex PB1.3.6)
As explained above, the fisheries differ in several respects regarding fishing area, gear and management. However, and even though there are slight differences, the scoring among the five fisheries are not significant and there are no scoring differences for the relevant PIs.
If exceptional circumstances apply, outline the situation and whether there is agreement between or among teams on this determination
As defined by MSC FCP v2.2 PB1.3.6.1, there are no exceptional circumstances that apply to this harmonisation process.

9.9 Objection Procedure – delete if not applicable

To be added at Public Certification Report stage

The CAB shall include in the report all written decisions arising from the Objection Procedure.

Reference(s): MSC Disputes Process v1.0, FCP v2.2 Annex PD Objection Procedure