



MarinTrust Standard V2

Whole fish Fishery Assessment Report Template

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Denmark		Zip:	
Tel. No.		Fax. No.	
Email address:		Applicant Code	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor Name	CB Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Conor Donnelly	Virginia Polonio	3	Surveillance 1
Assessment Period	To May 2021		
Scope Details			
Management Authority (Country/State)		EU, Latvia	
Main Species		<i>Clupea harengus</i>	
Fishery Location		ICES subdivision 28.1 (Gulf of Riga)	
Gear Type(s)		Pelagic trawl	
Outcome of Assessment			
Overall Outcome		Pass	
Clauses Failed		None	

CB Peer Review Evaluation	Agree with assessor’s determination
Fishery Assessment Peer Review Group Evaluation	See Appendix
Recommendation	Approval

Table 2. Assessment Determination

Assessment Determination
<p>This fishery targets Gulf of Riga herring using pelagic trawls in ICES subdivision 28.1.</p> <p>As Baltic sprat can make up a significant by-catch (>5%) it is also assessed as a Category A stock. There are a range of other species by-caught in small quantities which are assessed under Category C and D. These include central Baltic herring, flounder, fourhorn sculpin, round goby and smelt.</p> <p>In relation to management of the Gulf of Riga herring and Baltic sprat fisheries, both the management framework and the surveillance, control and enforcement system meet minimum requirements set by the MARINTRUST Standard.</p> <p>With regards the target stock of Gulf of Riga herring (and Baltic sprat), sufficient data is collected to determine fishery removals and stock status, a stock assessment is in place which provides an estimate of the status of the biological stock relative to reference points and shows the stocks are above target reference points. The harvest strategy restricts total fishing mortality and removals do not regularly exceed the level indicated in the stock assessment.</p> <p>The fishery targets homogeneous shoals of herring with small quantities of sprat and even smaller quantities of other non-target species. Aside from central Baltic herring, which passed Clause C, these non-target species are not subject to a species-specific regime and so have been assessed as Category D stocks through a risk-based approach using Productivity-Susceptibility Analysis (PSA). Fourhorn sculpin, flounder, round goby, sea lamprey, eelpout and three-spined stickleback were found to be vulnerable by the PSA but passed clause D following further consideration which found no substantial evidence that the fishery has a significant negative impact upon them.</p> <p>In relation to further impacts of the fishery in other areas, the assessment considers interactions with ETP species. In this fishery these species include the marine mammals, harbour porpoise, grey and ringed seals and also seabirds and seaducks. Some of these are in a poor state, in particular the Baltic proper population of harbour porpoise which is considered critically endangered. Interactions of ETP with pelagic trawls are monitored by an observer programme and are considered infrequent. It is concluded that there is no substantial evidence that the fishery has a significant negative effect on ETP species.</p> <p>In relation to impacts on habitats, pelagic trawl gears are not designed to make contact with the seabed, such contact is likely to be minimal and consequently this gear is considered to have marginal impact on benthic habitats and bottom structures. There is no substantial evidence that the fishery has a significant negative impact on physical habitats.</p>

In relation to ecosystem effects of the fishery, there is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.

All species considered in this assessment are either not listed or classified as ‘of least concern’ on the IUCN Red List and are not on the current list of CITES endangered species.

Gulf of Riga herring and Baltic sprat are approved by the assessment team for the production of fishmeal and fish oil under the Marin Trust v 2.0 Whole fish standard.

Fishery Assessment Peer Review Comments

The fishery has been correctly assessed. The catch composition has followed the approach given in the MSC report as no further catch composition was provided to the assessment team.

The classification of the species is correct as it has followed the MT guidelines.

Management system is in place and there are not negative impacts identified on habitats, ETPs or ecosystem key components.

The Category A species has passed all the clauses and the species which represent less than 5 % have been assessed under category D. Some of them have achieved a PASS and other have been assessed in Table D4. Due to the indirectly benefit from measures introduced under the Baltic Sea MAP to manage the main commercial species including closures to protect spawning cod, salmon, flounder and plaice it can be said that those species do not have negative impacts from the fishery.

Having said that, the PR agree with the assessor’s determination and the stocks are approved by the assessment team for the production of fishmeal and fish oil under the Marin Trust v 2.0 Whole Fish standard.

Notes for On-site Auditor

Table 3 General Results

General Clause	Outcome (Pass/Fail)
M1 - Management Framework	Pass
M2 - Surveillance, Control and Enforcement	Pass
F1 - Impacts on ETP Species	Pass
F2 - Impacts on Habitats	Pass
F3 - Ecosystem Impacts	Pass

Table 4 Species- Specific Results

List all Category A and B species. List approximate total percentage (%) of landings which are Category C and D species; these do not need to be individually named here

Category	Species	% landings	Outcome (Pass/Fail)	
Category A	Gulf of Riga herring <i>Clupea harengus</i> , Baltic sprat <i>Sprattus sprattus</i>	88-99%	A1	Pass
			A2	Pass
			A3	Pass
			A4	Pass
Category C	Central Baltic herring <i>Clupea harengus</i> ,	<5%	Pass	
Category D	Fourhorn sculpin <i>Myoxocephalus quadricornis</i> , Round goby <i>Neogobius melanostomus</i> , Shorthorn sculpin <i>Myoxocephalus Scorpius</i> , Lamprey <i>Petromyzon marinus</i> , Smelt <i>Osmerus eperlanus</i> , Eelpout <i>Zoarces viviparus</i> , Three-spined stickleback <i>Gasterosteus aculeatus</i> Eastern Gotland and Gulf of Gdansk flounder <i>Platichthys flesus</i>	<5%	Pass	

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ¹	% of landings	Management	Category
Herring	<i>Clupea harengus</i>	ICES subdivision 28.1 (Gulf of Riga herring)	Least concern	85-100	EU CFP / Baltic Sea MAP	A
Sprat	<i>Sprattus sprattus</i>	ICES subdivisions 22-32 (Baltic Sea)	Least concern	5-15	EU CFP / Baltic Sea MAP	A
Fourhorn sculpin	<i>Myoxocephalus quadricornis</i>		Least concern	<5		D
Flounder	<i>Platichthys flesus</i>	ICES subdivision 26, 28 (Eastern Gotland and Gulf of Gdansk)	Least concern	<5	EU CFP / Baltic Sea MAP	D
Round goby	<i>Neogobius melanostomus</i>		Least concern	<5		D
Shorthorn sculpin	<i>Myoxocephalus scorpius</i>		Not listed	<5		D
Lamprey	<i>Petromyzon marinus</i>		Least concern	<5		D
Smelt	<i>Osmerus eperlanus</i>		Least concern	<5		D
Eelpout	<i>Zoarces viviparus</i>		Least concern	<5		D
Three-spined stickleback	<i>Gasterosteus aculeatus</i>		Least concern	<5		D
Herring	<i>Clupea harengus</i>	ICES subdivisions 25-29 and 32 (excl. Gulf of Riga. Central Baltic herring.	Least concern	<5	EU CFP / Baltic Sea MAP	C

Species categorisation rationale

¹ <https://www.iucnredlist.org/>

The client directed the assessment team to the following MSC assessment report for information on fleet and catch composition, BV (2020): “NZRO Gulf of Riga herring (*Clupea harengus membras*) and sprat (*Sprattus sprattus*) trawl fishery. Public Certification Report. Updated version July 2020”. This report includes catch composition information from the Latvian fleet between 2014 and 2018 and data from biological sampling undertaken by BIOR between 2016 and 2018. The report shows that sprat catches frequently exceed 5% of total catches so Baltic sprat has been identified as a Category A species alongside the target species, Gulf of Riga herring. Some mixing of the central Baltic and Gulf of Riga herring stocks occur in the Gulf of Riga but at low levels (average of 3.1% of total central Baltic herring stock is caught in the Gulf over the period 2000-2017) (ICES, 2018)², for this reason central Baltic herring has been included as a category C stock in this fishery (by-catch species making up less than 5% of landings which is subject to a species-specific management regime).

² ICES. 2018b. Baltic Fisheries Assessment Working Group (WGBFAS), 6–13 April 2018, ICES HQ, Copenhagen, Denmark. 748 pp. Section 4: Herring in the Baltic Sea.

<http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2018/WGBFAS/06%20WGBFAS%20Report%202018%20-%2004%20Herring%20in%20the%20Baltic%20Sea.pdf>

MANAGEMENT

The two clauses in this section (M1, M2) relate to the general management regime applied to the fishery under assessment. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. A fishery must meet all the minimum requirements in every clause before it can be recommended for approval.

M1 Management Framework – Minimum Requirements		
M1.1	There is an organisation responsible for managing the fishery.	Yes
M1.2	There is an organisation responsible for collecting data and assessing the fishery.	Yes
M1.3	Fishery management organisations are publicly committed to sustainability.	Yes
M1.4	Fishery management organisations are legally empowered to take management actions.	Yes
M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.	Yes
M1.6	The decision-making process is transparent, with processes and results publicly available.	Yes
Clause outcome:		Pass
<p>M1.1 There is an organisation responsible for managing the fishery.</p> <p>The fishery is managed within the context of the EU Common Fisheries Policy (CFP) and the Latvian national system for fisheries management. At regional level, management of the fishery is based on input from the Regional Baltic Sea Fisheries Forum (BALTFISH) and the Baltic Sea Advisory Council (BSAC). Scientific advice is provided by the International Council for the Exploration of the Sea (ICES) and the European Commission’s Scientific, Technical and Economic Committee for Fisheries (STECF). In 2016, the EU adopted a multiannual management plan for cod, herring and sprat in the Baltic Sea which was updated in 2019. The plan specifies targets and harvest control rules (HCRs) for these stocks and includes management measures to ensure that the stocks of plaice, flounder, turbot, and brill caught as a bycatch in the cod, herring, and sprat fisheries are managed in accordance with CFP objectives.</p> <p>At EU level, the main management body is the EU Commission’s Director-General (DG) for Maritime Affairs and Fisheries (DG Mare) and the main regulatory basis the 2013 CFP Basic Regulation.</p> <p>In Latvia, fisheries legislation and management is through the Fisheries Department of the Ministry of Agriculture and the State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out licensing, control and inspection.</p> <p>At the international level, a binding agreement has been in place since 2009 between the EU and Russia regarding fisheries management in the Baltic Sea.</p> <p>There is an organisation responsible for managing the fishery. Sub-clause M1.1 is met.</p> <p>M1.2 There is an organisation responsible for collecting data and assessing the fishery.</p> <p>In Latvia, the BIOR Institute is responsible for scientific assessment and advice relating to fisheries. BIOR’s mission is, <i>“to take care of public and animal health, food and environmental quality, sustainable use of fish and other aquatic biological resources by ensuring research activities in accordance with international standards, carrying out high-quality scientific expertise and laboratory examinations, providing services internationally”</i>.</p>		

Science-based fishery management advice is provided by the International Council for the Exploration of the Sea (ICES). ICES is a network of nearly 6 000 scientists from over 700 marine institutes (including BIOR) in 20 member countries and beyond, linked by an intergovernmental agreement (the ICES Convention) to add value to national research efforts. Scientists working through ICES gather information about the marine ecosystem. Besides filling gaps in existing knowledge, this information is developed into unbiased, non-political fishery management advice.

ICES provides annual stock assessment and management advice in relation to the Gulf of Riga herring and Baltic sprat fisheries via its Baltic Fisheries Assessment Working Group (WGBFAS). ICES Stock Annex Reports provide a great deal of integrated advice at ecosystem level, in support of their shift towards a more holistic approach to managing Europe's seas.

There are organizations responsible for collecting data and assessing the fishery. **Sub-clause M1.2 is met.**

M1.3 Fishery management organisations are publicly committed to sustainability.

The CFP is the primary instrument for sustainable fisheries management. As such it looks to address impacts of fishing on target stocks as well as impacts on other ecosystem components. Implementing an ecosystem approach to fisheries management has been set as one of the objectives of the CFP:

"...to ensure that negative impacts of fishing activities on the marine ecosystem are minimized and that aquaculture and fisheries activities avoid degradation of the marine environment." (Article 2.3 CFP Reform).

The CFP contributes 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 Regulation (EU) No 1380/2013.

Objectives of the CFP are, *inter alia*, to ensure that fishing and aquaculture are environmentally sustainable in the long term and to apply the precautionary approach to fisheries management.

Similarly the objectives of the Baltic Sea Multiannual Plan (MAP) as set out in Article 3, refers to the achievement of the objectives of the CFP, *"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"*. It further notes that, *"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 minimized"*.

Latvia is a Member State of the European Union, and therefore in Community waters implement the CFP and the Baltic sprat and central Baltic herring fishery is operated under the Baltic Sea MAP.

Fishery management organisations are publicly committed to sustainability. **Sub-clause M1.3 is met**

M1.4 Fishery management organisations are legally empowered to take management actions.

Latvia is a Member State of the European Union, and therefore in Community waters are subject to and implement the CFP.

Total allowable catches (TACs) are set for most commercial fish stocks, by the EU for member states following consultation with Council and Parliament. The EU prepares regulations, based on scientific advice from the advisory bodies ICES and STECF. TAC's are then set annually by the European Council. Some multi-annual plans (as in the case of the Baltic MAP for Baltic sprat and central Baltic herring) contain rules for the setting of TACs which are then shared between EU countries in the form of national quotas. For each stock a different allocation percentage per EU country is applied for the sharing out of the quotas. This fixed percentage is known as the relative stability key.

EU countries have to use transparent and objective criteria when they distribute the national quota among their fishermen. They are responsible for ensuring that the quotas are not overfished. When all the available quota of a species is fished, by national law the EU country has to close the fishery.

In Latvia, "Fishing Law" (12.04.1995 as amended) sets the basis for fisheries legislation in Latvia and institutions responsible for fisheries management and control, as well as rules on fish resources management.

Fishery management organisations are legally empowered to take management actions. **Sub-clause M1.4 is met.**

M1.5 There is a consultation process through which fishery stakeholders are engaged in decision-making.

The EU receives scientific advice on EU fisheries from its Scientific, Technical and Economic Committee for Fisheries (STECF). STECF is composed of independent scientists and experts representing a broad range of opinion and is systematically consulted before any proposals are drafted. On biological issues, STECF depends to a great extent on advice from ICES for areas including the Baltic.

Advice provided by ICES includes stock assessments and deeper analysis on which the Commission bases both its annual recommendations for setting TACs and quotas, and more long-term proposals on how fisheries in European waters can be managed sustainably. Increasingly ICES also provides a great deal of integrated advice at ecosystem level, in support of the shift towards a more holistic approach to managing Europe's seas.

The BSAC is a stakeholder-led organization, established in 2006, which provides advice on the management of Baltic fisheries to the European Commission and member states and consists of organisations representing fisheries and other interest groups affected by the CFP (e.g. environmental, organisations, and sports and recreational fisheries organisations). Following CFP reform, a new regulation was adopted at the end of 2013 in which the role and function of Advisory Councils has been included - Advisory Councils are consulted in the context of regionalisation and should also contribute to data for fisheries management and conservation measures. There is evidence of this, in the form of consultation responses and advice provided to the European Commission and others, on the BSAC website.

There is a consultation process through which fishery stakeholders are engaged in decision-making. **Sub-clause M1.5 is met.**

M1.6 The decision-making process is transparent, with processes and results publicly available.

ICES provide annual stock assessment and management advice in relation to Gulf or Riga herring and Baltic sprat via its Baltic Fisheries Assessment Working Group (WGBFAS). The advice is published annually on the ICES website. Quotas for the EU

fleet in the assessment area are set annually through the AGRIFISH Council meeting of EU Fisheries Ministers and are published annually in the Baltic Sea Fishing Opportunities Regulation. Following the EU Ombudsman issuing a formal recommendation (October, 2019) to the EU Council to release more information on fishing quota negotiations between governments, the EC has committed to increasing transparency of the negotiation process for the EU's annual fishing opportunities. In the future, all elements of the commission's documents complementing proposals on total allowable catches (TACs) and quotas will be made public when they are transmitted to the Council.

Whilst some issues have been identified in the transparency of decision making around quota-setting, improvements have been identified and, on balance, taking into account the transparency of other parts of the process, the assessment team consider **sub-clause M1.6 is met**.

References

Advisory Councils

<https://ec.europa.eu/fisheries/partners/advisory-councils/>

Baltic Sea Advisory Council

<http://www.bsac.dk/>

BIOR Institute

<https://www.bior.lv/lv/par-bior/par-mums>

BSAC statements and recommendations

<http://www.bsac.dk/BSAC-Resources/BSAC-Statements-and-recommendations>

Baltic Sea Multi-annual Plan (MAP)

https://ec.europa.eu/fisheries/cfp/fishing_rules/multi_annual_plans_en

Commission Delegated Regulation (EU) 2017/1575 of 23 June 2017 amending Delegated Regulation (EU) 2015/242 laying down detailed rules on the functioning of the Advisory Councils under the common fisheries policy https://eur-lex.europa.eu/eli/reg_del/2017/1575/oj

EU's annual fisheries quota decision to be made more transparent

<https://www.seafoodsource.com/news/environment-sustainability/eu-s-annual-fisheries-quota-decision-making-to-be-made-more-transparent>

EU Common Fisheries Policy (CFP) overview

<https://ec.europa.eu/fisheries/cfp/>

Latvian Ministry of Agriculture

<https://www.zm.gov.lv/zivsaimnieciba/statiskas-lapas/zvejnieciba?nid=699#jump>

Reform of the Common Fisheries Policy

<https://ec.europa.eu/fisheries/reform/>

Fisheries control authorities in the Baltic Sea area

https://ec.europa.eu/fisheries/cfp/control/who_does_what/baltic_sea_authorities_en

Fishing Opportunities Regulations
https://ec.europa.eu/fisheries/cfp/fishing_rules/tacs_en

ICES – who we are
<https://www.ices.dk/about-ICES/who-we-are/Pages/Who-we-are.aspx>

ICES latest advice on Baltic sprat
<https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/spr.27.22-32.pdf>

ICES latest advice on central Baltic herring
<https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/her.27.25-2932.pdf>

STECF home page
<https://stecf.jrc.ec.europa.eu/>

The State Environmental Service (SES), Ministry of Environmental Protection and Regional Development, Republic of Latvia
<https://www.vvd.gov.lv/lv/par-mums>

Links	
MARINTRUST Standard clause	1.3.1.1, 1.3.1.2
FAO CCRF	7.2, 7.3.1, 7.4.4, 12.3
GSSI	D.1.01, D.4.01, D2.01, D1.07, D1.04,

M2 Surveillance, Control and Enforcement - Minimum Requirements		
M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations.	Yes
M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.	Yes
M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	Yes
M2.4	Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.	Yes

Clause outcome: Pass

M2.1 There is an organisation responsible for monitoring compliance with fishery laws and regulations.

Each Member State maintains an official website on fishery related control and reporting issues which are of benefit to the Commission, other Member States and the masters of fishing vessels in the Baltic.

National websites contain *inter alia* information on:

- Description of control services and the resources available;
- National control action programmes;
- Fishing effort limitation schemes;

- Contact details for the submission of logbooks and landing declarations when landing in that Member State
- Lists of designated ports for landing of certain species and addresses for fulfilling notification requirements

Member States must apply effective, proportionate and dissuasive sanctions against natural or legal persons engaged in IUU or other illegal activities.

The State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out fishing controls in marine waters under Latvian jurisdiction.

The European Fisheries Control Agency (EFCA) mission is to promote the highest common standards for control, inspection and surveillance under the CFP. Its primary role is to organise coordination and cooperation between national control and inspection activities so that the rules of the CFP are respected and applied effectively.

Joint Deployment Plans (JDP's) are established for fisheries/areas considered a priority by the Commission and the Member States concerned. They can refer either to European Union waters for which a Specific Control and Inspection Programme (SCIP) has been adopted or to International waters under the competence of a Regional Fisheries Management Organisation (RFMO), where EFCA is requested to coordinate the implementation of the European obligations under an International Control and Inspection Scheme.

In 2020 (Jan-June) a JDP was undertaken in EU Waters Subdivisions 22-32 (Baltic Sea) with the participation of inspection services and assets from competent authorities in Germany, Denmark, Estonia, Finland, Latvia, Lithuania, Poland and Sweden.

There is an organisation responsible for monitoring compliance with fishery laws and regulations. **Sub-clause 2.1 is met.**

M2.2 There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.

To ensure that fishing rules are applied in the same way in all member countries, and to harmonise the way infringements are sanctioned, the EU has established a list of serious infringements of the rules of the common fisheries policy. EU countries must include in their legislation effective, proportionate and dissuasive sanctions, and ensure that the rules are respected. A maximum sanction of at least five times the value of fishery products obtained is provided for with regard to the committing of the said infringement.

Since 2012, EU countries have been required to have a point system for serious infringements. Under the scheme, National Authorities are obliged to:

- Assess alleged infringements involving vessels registered under its flag, using standard EU definitions.
- Impose a pre-set number of penalty points on vessels involved in serious infringements (points are recorded in the national registry of fisheries offences).
- Suspend the vessel's license for 2, 4, 8 or 12 months when a pre-set number of points have been accumulated in a 3-year period.

The State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out fishing controls in marine waters under Latvian jurisdiction. A Latvian Administrative Penalty Code exists and is applied for violations of fishing rules. Where repeated violation of fishing regulations occurs or fishing occurs without authorization fines range from 700€ up to 14 000€, gear can be confiscated, and fishing licenses suspended for up to three years.

There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken. **Sub-clause M2.2 is met.**

M2.3 There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.

Joint Deployment Plans (JDP's) undertaken in 2020 in the Baltic involved competent authorities for fisheries control and protection vessels from Germany, Denmark, Estonia, Finland, Latvia, Lithuania, Poland and Sweden. The Report (Jan-June 2020) noted that a total of 1 700 inspections (at sea, on land and in transport) were undertaken.

A total of 1 404 inspections were made ashore with 29 suspected infringements detected on 28 fishing vessels. 14 931.56 tonnes of sprat were controlled during these inspections.

A total of 282 inspections were made at sea with 3 suspected infringements detected on 3 fishing vessels. 1 558.6 tonnes of sprat were controlled during inspections at sea.

The main type of suspected infringement detected related to 'falsifying the logbook, landing declarations, sales notes, transfer declaration, transport docs or failure to keep or submit these documents, as required', accounting for 60% of all infringements detected. No IUU-related infringements were detected.

There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing. **Sub-clause M2.3 is met.**

M2.4 Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.

In practice, CFP control as carried out by the Member States' control authorities can be broken down into three broad areas: conservation, structures, and markets:

- Conservation measures cover issues such as quota management or the implementation of technical measures (e.g. mesh sizes). Inspections are used to ensure that the fishing gear on board vessels meets official norms and that the information entered in logbooks.
- Structural policy plays a key role in the search for a balance between the fishing capacity of Member States, the fishing effort actually deployed, and the available fish resources. Checks are therefore necessary to establish that allocated days-at-sea have not been exceeded.
- Finally, national inspections are not limited to the catching sector, but also include all operations from landing and marketing to storage and transportation. Operators must, at all times, be in possession of proper documentation

detailing the origin, nature, quantity and quality of fish involved in transactions, so that it can be cross-checked with data in log-books and from other sources, such as fish auctions.

As with the application of sanctions, bodies responsible for control and enforcement are set up by individual EU states.

The State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out fishing controls in marine waters under Latvian jurisdiction. These organisations work with colleagues from other EU Member States to implement the Baltic Sea Joint Deployment Plan.

Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS. **Sub-clause M2.4 is met.**

References

European Fisheries Control Agency

<https://www.efca.europa.eu/en/content/objectives-and-strategy>

EFCA Joint Deployment Plan Baltic Sea January-June 2020.

<https://www.efca.europa.eu/sites/default/files/atoms/files/2020-%20BALTIC%20SEA%20CAMPAIGN%20-%206M%20WEB%20REP%20final.pdf>

EU's Fisheries Control System

<https://ec.europa.eu/fisheries/cfp/control/>

Fisheries control authorities in the Baltic Sea area

https://ec.europa.eu/fisheries/cfp/control/who_does_what/baltic_sea_authorities/

MSC Sustainable Fisheries Certification. Denmark, Estonia, Germany, Sweden Baltic Sea herring and sprat. Public Certification Report. Lloyd's Register, November 2020.

<https://fisheries.msc.org/en/fisheries/denmark-estonia-germany-sweden-baltic-herring-and-sprat/@@view>

The State Environmental Service (SES), Ministry of Environmental Protection and Regional Development, Republic of Latvia

<https://www.vvd.gov.lv/lv/par-mums>

Links

MARINTRUST Standard clause	1.3.1.3
FAO CCRF	7.7.2
GSSI	D1.09

CATEGORY A SPECIES

The four clauses in this section apply to Category A species. Clauses A1 - A4 should be completed for **each** Category A species. If there are no Category A species in the fishery under assessment, this section can be deleted. A Category A species must meet the minimum requirements of all four clauses before it can be recommended for approval. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. The species must achieve a pass rating against all requirements to be awarded a pass overall. **If the species fails any of these clauses it should be re-assessed as a Category B species.**

Species Name		Gulf of Riga herring <i>Clupea harengus</i>	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	Yes
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	Yes
			Clause outcome: Pass
<p>A1.1 Landings data are collected such that the fishery-wide removals of this species are known.</p> <p>The EU Fisheries Control System, through the Fisheries Control Regulation (EC Regulation No 1224/2009) requires that data on catches (target species and bycatch) are recorded in logbooks by vessel captains and transmitted to the competent authority of each member state who then provide it to the Commission. These landings data are used in the stock assessment undertaken by ICES and published in their advice (e.g. ICES, 2020a).</p> <p>Landings data are collected such that the fishery-wide removals of this species are known. Sub-clause A1.1 is met.</p>			
<p>A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.</p> <p>In addition to catch data (commercial catches), stock abundance estimates are made from the Baltic International Acoustic Survey (BIAS).</p> <p>Mixing of Gulf of Riga herring (Subdivision 28.1) and central Baltic herring (subdivisions 25–27, 28.2, 29, and 32) occurs in subdivisions 28.1 and 28.2. The ICES assessment for Gulf of Riga herring and TAC-setting for the stock take this into account. The TAC proposed for the Gulf of Riga area is based on the advised catch for the Gulf of Riga herring stock, plus the assumed catch of herring from the central Baltic stock taken in the Gulf of Riga, minus the assumed catch of the Gulf of Riga herring taken outside the Gulf of Riga. The values of the latter two are given by the average catch over the last five years (ICES. 2020a).</p> <p>Mixing also occurs with sprat stocks, which varies on a spatial scale. According to logbooks and sales slips, this mixing can vary between < 5% and 40%, although these percentages are not quantifiable at this stage (ICES, 2020b).</p> <p>Sufficient additional information is collected to enable an indication of stock status to be estimated. Sub-clause A1.2 is met.</p>			
References			
Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community 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.

<https://eur-lex.europa.eu/eli/reg/2009/1224/oj/eng>

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

ICES. 2020b. Baltic Sea ecoregion – Fisheries overview. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, section 4.2. <https://doi.org/10.17895/ices.advice.7607>

Links	
MARINTRUST Standard clause	1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	7.3.1, 12.3
GSSI	D.4.01, D.5.01, D.6.02, D.3.14

A2 Stock Assessment - Minimum Requirements		
A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.	Yes
A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	Yes
A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	Yes
A2.4	The assessment is subject to internal or external peer review.	Yes
A2.5	The assessment is made publicly available.	Yes
Clause outcome:		Pass
<p>A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.</p> <p>A stock assessment is conducted annually. The latest stock assessment was undertaken in May 2020 by the Working Group on Baltic Sea Fisheries (WGBFAS) (ICES, 2020a). It includes commercial catches, discarding is considered to be negligible.</p> <p>Biological information used in the assessment includes stock abundance estimates from the BIAS survey (ICES, 2020a). Clause A2.1 is met.</p> <p>A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.</p> <p>Reference points have been defined for the stock under ICES MSY and precautionary approach and also under the Baltic Sea MAP. The reference points are presented in the table below.</p>		

Table 6. Herring in Subdivision 28.1. Reference points, values, and their technical basis. Weights in tonnes (source: ICES, 2020a).

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	60 000	From stock–recruitment relationship.	ICES (2009, 2015)
	F_{MSY}	0.32	Stochastic simulations with Beverton, Ricker, and segmented regression stock–recruitment model from the full time-series (1977–2013).	ICES (2015)
Precautionary approach	B_{lim}	40 800	$B_{lim} = B_{loss}$	ICES (2015)
	B_{pa}	57 100	$B_{pa} = B_{lim} \times \exp(\sigma \times 1.645)$ with the default value $\sigma = 0.2$.	ICES (2015)
	F_{lim}	0.88	F_{lim} derived from the curve of SSB/R against F	ICES (2015)
	F_{pa}	0.63	$F_{pa} = F_{lim} \times \exp(-\sigma \times 1.645)$ with the default value $\sigma = 0.2$.	ICES (2015)
Management plan	MAP MSY $B_{trigger}$	60 000	MSY $B_{trigger}$	EU (2016 – Annex II column A)
	MAP B_{lim}	Not defined		EU (2016 – Annex II column B)
	MAP F_{MSY}	0.32	F_{MSY}	EU (2016 – Annex I columns A and B)
	MAP target range $F_{lower}–F_{MSY}$	0.24 – 0.32	Consistent with the ranges provided by ICES (2015), resulting in no more than 5% reduction in long-term yield compared with MSY.	ICES (2015) and EU (2016 – Annex I column A)
	MAP target range $F_{MSY}–F_{upper}$	0.32 – 0.38	Consistent with the ranges provided by ICES (2015), resulting in no more than 5% reduction in long-term yield compared with MSY.	ICES (2015) and EU (2016 – Annex I column B)

The latest stock assessment (ICES, 2020a) shows SSB has had an increasing trend since the late 1980s and is estimated above MSY $B_{trigger}$ since then and also above its limit reference point B_{lim} (see figure below). Fishing mortality has generally been fluctuating around F_{MSY} since 2008 and been below F_{MSY} since 2017. Recruitment has been quite variable from year to year without any clear trend since the late 1980s. The 2018 recruitment is estimated to be high.

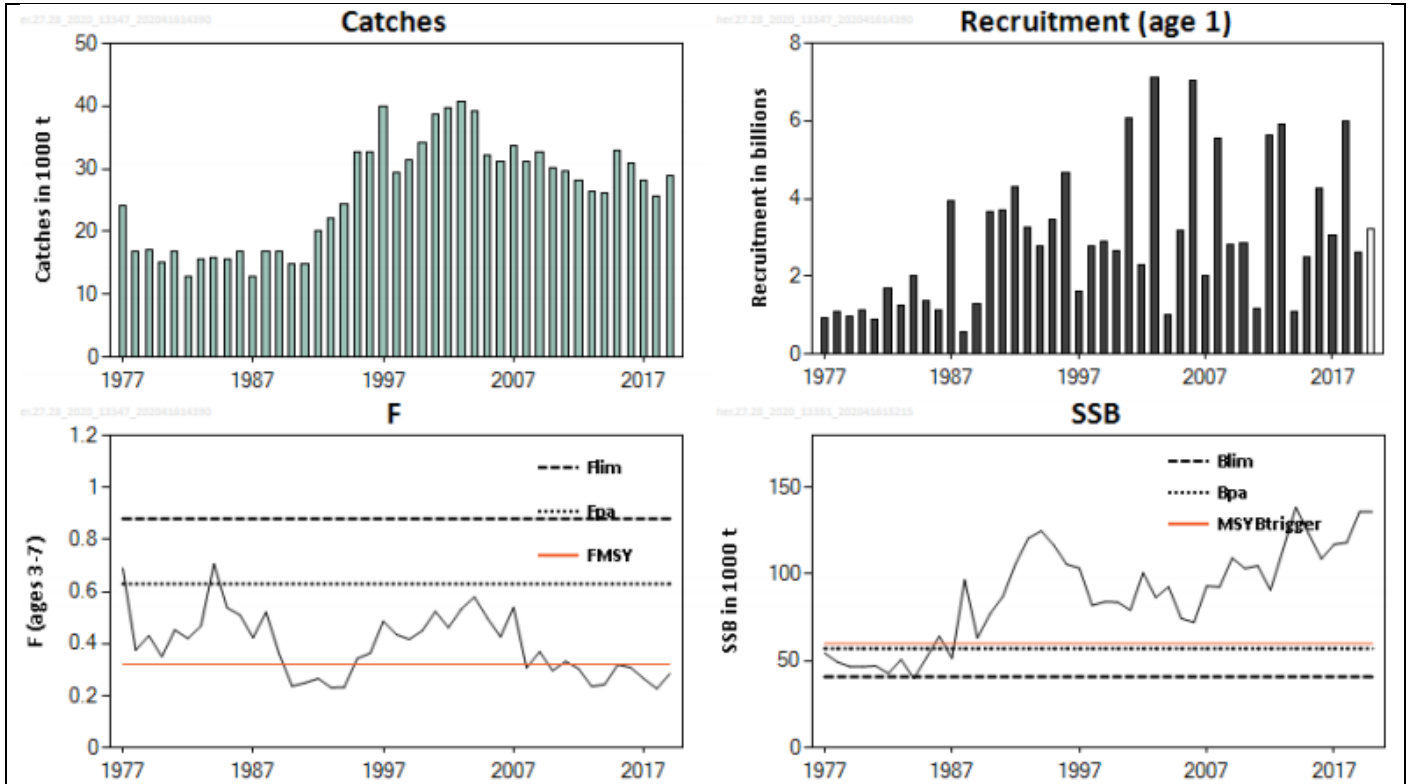


Figure 1. Herring in Subdivision 28.1. Summary of the stock assessment. The assumed recruitment for 2020 is unshaded. SSB at spawning time in 2020 is predicted (source: 2020a).

The status of the stock relative to its reference points is shown in the table below.

Table 7. Herring in Subdivision 28.1. State of the stock and fishery relative to reference points (Source: ICES. 2020a).

		Fishing pressure			Stock size					
		2016	2017	2018	2017	2018	2019			
Maximum sustainable yield	F_{MSY}	✘	✔	✔	Appropriate	MSY	✔	✔	✔	Above trigger
Precautionary approach	F_{pa} , F_{lim}	✔	✔	✔	Harvested sustainably	B_{pa} , B_{lim}	✔	✔	✔	Full reproductive capacity
Management plan	F_{ranges}	✔	✔	✔	Within range	MSY	✔	✔	✔	Above trigger
						$B_{trigger}$	✔	✔	✔	

The stock assessment provides an estimate of the status of the biological stock relative to a reference point or proxy. **Clause A2.2 is met.**

A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.

As noted above commercial catches are used in the assessment of stock status. ICES have raised a number of issues relevant to the assessment of fishery removals:

Significant misreporting can potentially be a large problem with regards to the perception of Baltic sprat and central Baltic herring stocks (ICES, 2020c). However, in the Gulf of Riga misreporting is not considered a significant problem. Between 1992 and 2010, unallocated landings were added to official landings. However, ICES WGBFAS (2020d) note that in recent years the level of misreporting has decreased as a result of the scrapping of fishing vessels (in Latvia the fleet is almost three times smaller than it used to be) so that fishing capacity is now more or less balanced with fishing possibilities and no unallocated landings were assumed in 2011-2019. WGBFAS also note that the level of misreporting in the Estonian herring fishery has been low from 1995–2019.

The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status. **Sub-clause A2.3 is met.**

A2.4 The assessment is subject to internal or external peer review.

The assessment of Gulf of Riga herring is conducted annually at the ICES WGBFAS (ICES, 2020d), where fisheries scientists from about nine European fisheries laboratories participate. The assessment is presented and reviewed at the meeting and must meet ICES standards to be accepted. If the assessment is agreed, it is subsequently reviewed by the ICES Advice Drafting Group which consists of National Experts and, finally, by the Advisory Committee (ACOM) which delivers the ICES advice.

A group of external experts participate every few years in the benchmark process to provide a review of the assessment. It has been some time since the Gulf of Riga stock was last benchmarked (April 2008, according to the Stock Annex – see ICES, 2020b), however biological and fishing mortality reference points have been updated more recently, at the WGBFAS meeting in 2015 (ICES, 2020d).

A2.5 The assessment is made publicly available.

ICES operate a transparent assessment framework (TAF); an online open resource of annual ICES stock assessments. All data input and output are fully traceable and versioned. The open framework enables anyone to easily find, reference, download, and run the assessment from any stage in the process leading to published ICES advice for a given stock.

Stock Assessments are made publicly available on the ICES website. **Sub-clause A2.5 is met.**

References

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

ICES. 2020c. Inter-Benchmark Process on Baltic Sprat (*Sprattus sprattus*) and Herring (*Clupea harengus*) (IBPBash). ICES Scientific Reports, 2:34. 44 pp. <http://doi.org/10.17895/ices.pub.5971>

ICES. 2020d. Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 2:45. 643 pp. http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/Fisheries%20Resources%20Steering%20Group/2020/WGBFAS_2020.pdf	
Links	
MARINTRUST Standard clause	1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	12.3
GSSI	D.5.01, D.6.02, D.3.14

A3 Harvest Strategy - Minimum Requirements		
A3.1	There is a mechanism in place by which total fishing mortality of this species is restricted.	Yes
A3.2	Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.	Yes
A3.3	Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).	Yes
Clause outcome:		Pass
<p>A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.</p> <p>A3.2 Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.</p> <p>A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).</p> <p>The main mechanism to restrict total fishing mortality is the Baltic Sea MAP (Regulation (EU) No 2016/1139 as amended). The multiannual plan established, is based on scientific, technical and economic advice and contains objectives, quantifiable targets with clear time frames, conservation reference points and safeguards which work together towards achieving stock management objectives. The MAP specifies that the target fishing mortality should be maintained (by 2020) in line with the ranges of F_{MSY} specified in the plan, informed by advice on the state of the stock which is assessed annually by ICES. It requires that fishing opportunities (the TAC) for the stock should be established within the lower range of F_{MSY} available at that time for the stock. In specific circumstances fishing opportunities may be fixed in line with the upper range of F_{MSY}, provided that the stock is above $MSY_{B_{trigger}}$. These circumstances include to avoid serious harm arising from intra- or inter-species stock dynamics.</p> <p>The harvest strategy has been effective in maintaining Gulf of Riga herring SSB above $MSY_{B_{trigger}}$ and F at or below F_{MSY}. TACs are within the specified ranges set out in ICES advice (provided in line with the MAP) and catches are within the TAC – see table below.</p>		

Table 8. Herring in Subdivision 28.1. ICES advice, TAC for the Gulf of Riga, and catches of Gulf of Riga herring stock from the Gulf of Riga. All weights are in tonnes (source: ICES, 2020a).

Year	ICES advice	Catch from stock corresp. to advice	Agreed TAC for Gulf of Riga	Catches of Gulf of Riga herring stock
2017	MSY approach ($F_{MSY} = 0.32$)	≤ 23100	31100	28058
2018	MAP target F ranges: F_{lower} to F_{upper} ($F = 0.24-0.38$), but F higher than $F_{MSY} = 0.32$ only under conditions specified in the MAP	19396–29195, but catch higher than 24919 only under conditions specified in the MAP	28999	25747
2019	MAP target F ranges: F_{lower} to F_{upper} ($F = 0.24-0.38$), but F higher than $F_{MSY} = 0.32$ only under conditions specified in the MAP	20664–31237, but catch higher than 26932 only under conditions specified in the MAP	31044	28922
2020	MAP target F ranges: F_{lower} to F_{upper} ($F = 0.24-0.38$), but F higher than $F_{MSY} = 0.32$ only under conditions specified in the MAP	23395–35094, but catch higher than 30382 only under conditions specified in the MAP	34445	
2021	Management Plan	35771 (ranges 27702–41423)		

The MAP requires that fishing opportunities are fixed in such a way that there is a less than 5% probability of the spawning stock biomass falling below B_{lim} . When scientific advice indicates that the spawning stock biomass of the stock is below B_{lim} , further remedial measures shall be taken to ensure rapid return of the stock to levels above the level capable of producing MSY. Those remedial measures may include suspending the targeted fishery for the stock and the adequate reduction of fishing opportunities.

Sub-clauses A3.1 to A3.3 are met.

References

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

Regulation (EU) 2016/1139 (as amended) of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007 <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02016R1139-20190814&from=EN>

Standard clause 1.3.2.1.3

Links	
MARINTRUST Standard clause	1.3.2.1.3, 1.3.2.1.4
FAO CCRF	7.2.1, 7.22 (e), 7.5.3
GSSI	D3.04, D6.01

Stock Status - Minimum Requirements

A4	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	Yes
	Clause outcome:		Pass
	<p>A4.1 The stock is at or above the target reference point,</p> <p>As noted in clause A2, the stock level has been above the target biomass reference point (MSY $B_{trigger}$) since the late 1980s. Fishing mortality has generally been fluctuating around F_{MSY} since 2008 and been below F_{MSY} since 2017 (ICES. 2020a).</p> <p>The stock is at or above the target reference point. Clause A4.1 is met.</p>		
<p>References</p> <p>ICES. 2020a. Herring (<i>Clupea harengus</i>) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.28. https://doi.org/10.17895/ices.advice.5877</p>			
Links			
MARINTRUST Standard clause		1.3.2.1.4	
FAO CCRF		7.2.1, 7.2.2 (e)	
GSSI		D6 01	

Species Name		Baltic sprat <i>Sprattus sprattus</i>	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	Yes
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	Yes
Clause outcome:			Pass
<p>A1.1 Landings data are collected such that the fishery-wide removals of this species are known.</p> <p>The EU Fisheries Control System, through the Fisheries Control Regulation (EC Regulation No 1224/2009) requires that data on catches (target species and bycatch) are recorded in logbooks by vessel captains and transmitted to the competent authority of each member state who then provide it to the Commission. These landings data are used in the stock assessment undertaken by ICES and published in their advice (e.g. ICES, 2020e).</p> <p>Landings data are collected such that the fishery-wide removals of this species are known. Sub-clause A1.1 is met.</p>			
<p>A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.</p> <p>In addition to commercial catch data, stock abundance estimates are made from two acoustic surveys (BASS, BIAS) and natural mortalities calculated from the SMS multispecies model (ICES, 2020e). Mixing also occurs with herring stocks, which varies on a spatial scale. According to logbooks and sales slips, this mixing can vary between < 5% and 40%, although these percentages are</p>			

not quantifiable at this stage (ICES, 2020b). As a consequence, misreporting of catches is expected to occur, but as noted in §A2.3 for Gulf of Riga herring, misreporting is not considered a significant issue in the Gulf of Riga.

Sufficient additional information is collected to enable an indication of stock status to be estimated. **Sub-clause A1.2 is met.**

References

Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community 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.
<https://eur-lex.europa.eu/eli/reg/2009/1224/oj/eng>

ICES. 2020b. Baltic Sea ecoregion – Fisheries overview. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, section 4.2. <https://doi.org/10.17895/ices.advice.7607>

ICES. 2020e. 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>

Links

MARINTRUST Standard clause	1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	7.3.1, 12.3
GSSI	D.4.01, D.5.01, D.6.02, D.3.14

A2 Stock Assessment - Minimum Requirements

A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.	Yes
A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	Yes
A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	Yes
A2.4	The assessment is subject to internal or external peer review.	Yes
A2.5	The assessment is made publicly available.	Yes
Clause outcome:		Pass

A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

A stock assessment is conducted annually. The latest stock assessment was undertaken in May 2020 by the Working Group on Baltic Sea Fisheries (WGBFAS) (ICES, 2020e). It includes commercial catches from international catches (ICES, 2020e). Discard data have not generally been available for inclusion in stock assessments, although discards are estimated to be negligible. It is

expected that misreporting of catches occurs, as estimates of species composition of clupeid catches are imprecise in some mixed pelagic fisheries. This is taken into account when assessing sprat stocks (ICES, 2018a).

Biological information used in the assessment includes natural mortalities from the SMS multispecies model and stock abundance estimates from the BASS and BIAS surveys (ICES, 2020e; ICES, 2020b). **Clause A2.1 is met.**

A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

Reference points have been defined for the stock under ICES MSY and precautionary approach and also under the Baltic Sea MAP. Both MSY and PA reference points were re-estimated during an Inter-Benchmark Process (IBP) on Baltic Sprat (*Sprattus sprattus*) and herring (*Clupea harengus*) (IBPBASH) in March 2020 (ICES, 2020c). The reference points are presented in the table below.

Table 9. Sprat in subdivisions 22–32. Reference points, values, and their technical basis. Weights in tonnes (source: ICES, 2020e)

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	570 000	Assumed at B_{pa} .	ICES (2020a)
	F_{MSY}	0.31	Stochastic simulations with Beverton–Holt stock–recruitment model	ICES (2020a)
Precautionary approach	B_{lim}	410 000	Stock–recruitment relationship (average of biomasses which produce half of the maximal recruitment in the Beverton–Holt and Ricker models).	ICES (2020a)
	B_{pa}	570 000	$B_{lim} \times \exp(1.645 \times \sigma)$, where $\sigma = 0.2$.	ICES (2020a)
	F_{lim}	0.63	Consistent with B_{lim} .	ICES (2020a)
	F_{pa}	0.45	Consistent with B_{pa} .	ICES (2020a)
Management plan	MAP MSY $B_{trigger}$	570 000	MSY $B_{trigger}$	ICES (2020a)
	MAP B_{lim}	410 000	B_{lim}	ICES (2020a)
	MAP F_{MSY}	0.31	F_{MSY}	ICES (2020a)
	MAP target range $F_{lower} - F_{MSY}$	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 $F_{MSY} - F_{upper}$	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)

The latest stock assessment (ICES, 2020e) shows SSB is above MSY $B_{trigger}$ in 2020 and has been since 1991 (see figure below). Fishing mortality has been above F_{MSY} since 2002. The increase in 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.

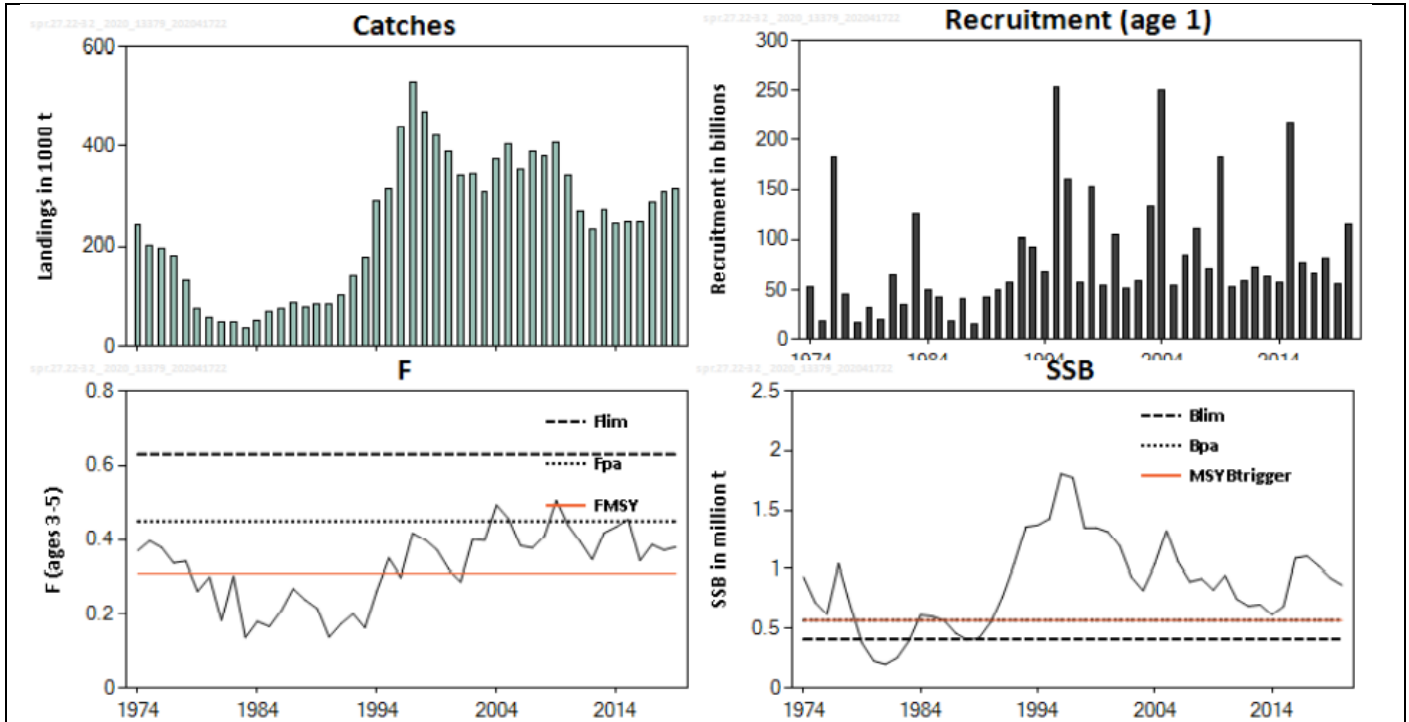


Figure 2. Sprat in subdivisions 22–32. Summary of the stock assessment. SSB at spawning time is predicted for 2020 (source: ICES. 2020e).

The status of the stock relative to its reference points is shown in the table below.

Table 10. Sprat in subdivisions 22–32. State of the stock and the fishery relative to reference points (source: ICES. 2020a).

	Fishing pressure			Stock size						
		2017	2018	2019	2018	2019	2020			
Maximum sustainable yield	F_{MSY}	✘	✘	✘	Above	MSY	✔	✔	✔	Above trigger
Precautionary approach	F_{pa}, F_{lim}	✔	✔	✔	Harvested sustainably	B_{pa}, B_{lim}	✔	✔	✔	Full reproductive capacity
Management plan	F_{MGT}	✔	✔	✔	Within the range	SSB _{MGT}	✔	✔	✔	Above

Species misreporting of sprat has occurred in the past and there are again indications of sprat being misreported as herring. These effects have not been quantified; however, it may affect the revision in SSB and F over time (ICES. 2020e).

The stock assessment provides an estimate of the status of the biological stock relative to a reference point or proxy. **Clause A2.2 is met.**

A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.

As noted above commercial catches are used in the assessment of stock status. ICES have raised a number of issues relevant to the assessment of fishery removals:

ICES has been stating for several years that pelagic fisheries take a mixture of herring and sprat and this causes uncertainties in catch levels. The extent to which species misreporting has occurred is however not well known. ICES WKBALT (2013), in assessing mixing of central Baltic herring and Baltic sprat, noted that analysis of a questionnaire answered by all Baltic countries during 2012 revealed that misreporting is mainly an issue in the industrial trawl fishery targeting sprat-herring mix in nearshore waters (e.g. archipelago area of Sweden or the Kolobrzeg-Darlowo fishing ground off Poland). Countries with major proportions of sprat catches used for industrial purposes are Sweden, Poland and Denmark. Countries with major proportions of herring catches used for industrial purposes are Finland and Sweden. The official catch figures of both sprat and herring are modified by Poland and Denmark, but not currently in Sweden. A worst-case scenario using the permitted margin of tolerance of 10% in the logbooks of the quantities by species on board (EU 1224/2009) revealed that sprat catches may be underestimated by 5% and that herring catches may be underestimated by 4% (ICES, 2013). It was, therefore, concluded at the time after the questionnaire that that species misreporting could be regarded as minor importance. However, as Sweden is not currently correcting for this misreporting and preliminary analyses by Sweden suggests that misreporting of herring and sprat is significantly worse than 5 and 4%, this issue needs to be investigated as soon as possible and when data available addressed in a benchmark. Significant misreporting can potentially be a large problem with regards to the perception of Baltic sprat and central Baltic herring stocks (ICES, 2018b). As previously noted it is not considered a significant issue in the Gulf of Riga (see § A2.3 for Gulf of Riga herring).

Nonetheless, the assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status. **Sub-clause A2.3 is met**

A2.4 The assessment is subject to internal or external peer review.

The assessment of Baltic sprat is conducted annually at the ICES WGBFAS (ICES 2020b), where fisheries scientists from about nine European fisheries laboratories participate. The assessment is presented and reviewed at the meeting and must meet ICES standards to be accepted. If the assessment is agreed, it is subsequently reviewed by the ICES Advice Drafting Group which consists of National Experts and, finally, by the Advisory Committee (ACOM) which delivers the ICES advice.

A group of external experts participate every few years in the benchmark process to provide a review of the assessment. The most recent meeting was for an inter-benchmark in March 2020 (ICES, 2020c).

The assessment is subject to internal and external peer-review. **Sub-clause A2.4 is met.**

A2.5 The assessment is made publicly available.

ICES operate a transparent assessment framework (TAF); an online open resource of annual ICES stock assessments. All data input and output are fully traceable and versioned. The open framework enables anyone to easily find, reference, download, and run the assessment from any stage in the process leading to published ICES advice for a given stock.

Stock Assessments are made publicly available on the ICES website. **Sub-clause A2.5 is met.**

References

ICES, 2020b. Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 2:45. 643 pp.
http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/Fisheries%20Resources%20Steering%20Group/2020/WGBFAS_2020.pdf

ICES, 2020c. Inter-Benchmark Process on Baltic Sprat (*Sprattus sprattus*) and Herring (*Clupea harengus*) (IBPBash). ICES Scientific Reports, 2:34. 44 pp.
<http://doi.org/10.17895/ices.pub.5971>

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

ICES, 2018a. Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2018, her.27.25-2932.
<http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2018/2018/her.27.25-2932.pdf>

ICES. 2018b. Baltic Fisheries Assessment Working Group (WGBFAS), 6–13 April 2018, ICES HQ, Copenhagen, Denmark. 748 pp. Section 4: Herring in the Baltic Sea.
<http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2018/WGBFAS/06%20WGBFAS%20Report%202018%20-%2004%20Herring%20in%20the%20Baltic%20Sea.pdf>

ICES. 2013. Report of the Benchmark Workshop on Baltic Multispecies Assessments (WKBALT), 4–8 February 2013, Copenhagen, Denmark. ICES CM 2013/ACOM:43. 399 pp.
https://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2013/WKBALT%202013/wkbalt_2013.pdf

ICES Transparent Assessment Framework
<https://www.ices.dk/data/assessment-tools/Pages/transparent-assessment-framework.aspx>

Links	
MARINTRUST Standard clause	1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	12.3
GSSI	D.5.01, D.6.02, D.3.14

A3	Harvest Strategy - Minimum Requirements		
	A3.1	There is a mechanism in place by which total fishing mortality of this species is restricted.	Yes
	A3.2	Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.	Yes
	A3.3	Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).	Yes
Clause outcome:			Pass
<p>A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.</p> <p>A3.2 Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.</p> <p>A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).</p> <p>The main mechanism to restrict total fishing mortality is the Baltic Sea MAP (Regulation (EU) No 2016/1139 as amended). The multiannual plan established, is based on scientific, technical and economic advice and contains objectives, quantifiable targets with clear time frames, conservation reference points and safeguards which work together towards achieving stock management objectives. The MAP specifies that the target fishing mortality should be maintained (by 2020) in line with the ranges of F_{MSY} specified in the plan, informed by advice on the state of the stock which is assessed annually by ICES. It requires that fishing opportunities (the TAC) for the stock should be established within the lower range of F_{MSY} available at that time for the stock. In specific circumstances fishing opportunities may be fixed in line with the upper range of F_{MSY}, provided that the stock is above $MSY B_{trigger}$. These circumstances include to avoid serious harm arising from intra- or inter-species stock dynamics.</p> <p>The harvest strategy has been effective in maintaining Baltic sprat SSB above $MSY B_{trigger}$. TACs and catches are largely in line with ICES advice (provided in line with the MAP) – see table below. Whilst SSB has been maintained above $MSY B_{trigger}$ it is noteworthy that fishing mortality has been above F_{MSY} since 2002.</p>			

Table 11 Baltic Sprat: ICES advice, the agreed TAC and ICES estimated catches (all weights are in tonnes) (source: ICES. 2020a)

Year	ICES advice	Catch corresponding to advice	Agreed TAC	ICES catch
2016	MSY approach (F = 0.26)	≤ 205000	243000**	246500
2017	MSY approach (F = 0.26)	≤ 314000	303593**	285701
2018	MAP target F ranges: Flower to Fupper (F = 0.19–0.27), but F higher than FMSY = 0.26 only under conditions specified in MAP	219152–301722, but catch higher than 291715 only under conditions specified	304900**	308827
2019	MAP target F ranges: Flower to Fupper (F = 0.19–0.27), but F higher than FMSY = 0.26 only under conditions specified in MAP	225752–311523, but catch higher than 301125 only under conditions specified	313100**	314147
2020	MAP target F ranges: Flower to Fupper (F = 0.19–0.27), but F higher than FMSY = 0.26 only under conditions specified in MAP	169965–233704, but catch higher than 225786 only under conditions specified in MAP	256700**	
2021	Management Plan	247952 (range 181567 – 316833)		

The MAP requires that fishing opportunities are fixed in such a way that there is a less than 5% probability of the spawning stock biomass falling below B_{lim} . When scientific advice indicates that the spawning stock biomass of the stock is below B_{lim} , further remedial measures shall be taken to ensure rapid return of the stock to levels above the level capable of producing MSY. Those remedial measures may include suspending the targeted fishery for the stock and the adequate reduction of fishing opportunities.

Sub-clauses A3.1 to A3.3 are met.

References

ICES. 2020e. 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>

Regulation (EU) 2016/1139 (as amended) of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007 <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02016R1139-20190814&from=EN>

Standard clause 1.3.2.1.3

Links	
MARINTRUST Standard clause	1.3.2.1.3, 1.3.2.1.4
FAO CCRF	7.2.1, 7.22 (e), 7.5.3
GSSI	D3.04, D6.01

A4 Stock Status - Minimum Requirements		
A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT:	Yes

		The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.							
			Clause outcome:						
			Pass						
<p>A4.1 The stock is at or above the target reference point, OR IF NOT: As noted in clause A2, the stock is above the target biomass reference point (MSY $B_{trigger}$).</p> <p>Clause A4.1 is met.</p>									
<p>References</p> <p>ICES. 2020e. Sprat (<i>Sprattus sprattus</i>) 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</p>									
<p>Links</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">MARINTRUST Standard clause</td> <td>1.3.2.1.4</td> </tr> <tr> <td>FAO CCRF</td> <td>7.2.1, 7.2.2 (e)</td> </tr> <tr> <td>GSSI</td> <td>D6 01</td> </tr> </table>				MARINTRUST Standard clause	1.3.2.1.4	FAO CCRF	7.2.1, 7.2.2 (e)	GSSI	D6 01
MARINTRUST Standard clause	1.3.2.1.4								
FAO CCRF	7.2.1, 7.2.2 (e)								
GSSI	D6 01								

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Species Name		Central Baltic herring, <i>Clupea harengus</i>	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Yes
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Yes
			Clause outcome: Pass
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.</p> <p>The stock assessment includes commercial catches from international landings. Discarding is considered to be negligible. Biological information used in the assessment includes natural mortalities from the SMS multispecies model and stock abundance estimates from the BIAS survey (ICES, 2020f). Clause C1.1 is met.</p> <p>C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.</p> <p>The latest stock assessment was undertaken in May 2020 by the Working Group on Baltic Sea Fisheries (WGBFAS) (ICES, 2020f). Reference points have been defined for the stock under ICES' MSY and precautionary approach and also under the Baltic Sea MAP. Both MSY and PA reference points were re-estimated during an Inter-Benchmark Process (IBP) on Baltic Sprat (<i>Sprattus sprattus</i>) and herring (<i>Clupea harengus</i>) (IBPBASH) in March 2020 (ICES, 2020c).</p> <p>The latest stock assessment (ICES, 2020f) shows SSB has had a decreasing trend since 2014 and is just below MSY Btrigger in 2020 and above its limit reference point Blim (see figure below). Fishing mortality has shown an increasing trend since 2014 and has been above FMSY since 2015 and above Fpa in 2019. The high recruitment in 2015 was followed by four years of below average or average recruitment. Recruitment in 2020 is above average.</p>			

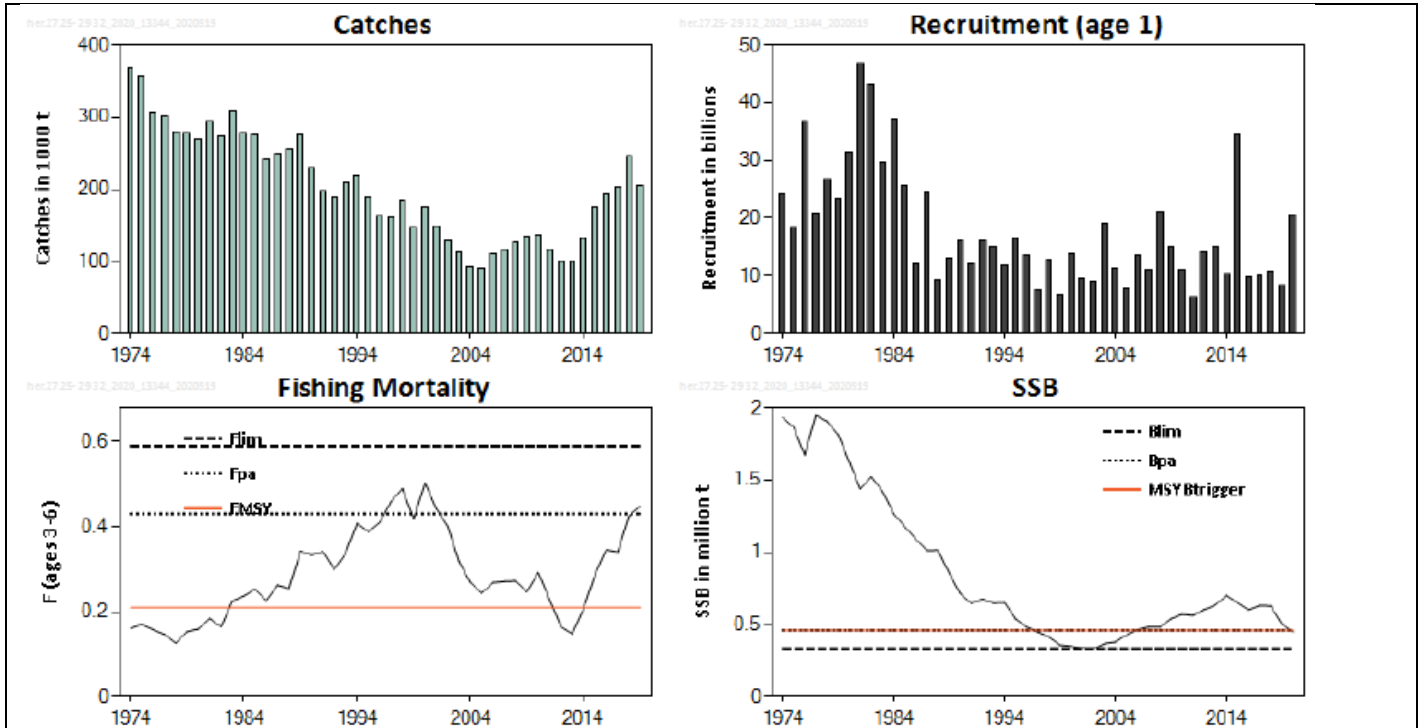


Figure 3. Herring in subdivisions 25-29 and 32, excluding the Gulf of Riga. Summary of the stock assessment. SSB at spawning time in 2020 is predicted (source: ICES, 2020f).

The status of the stock relative to its reference points is shown in the table below.

Table 12. Herring in subdivisions 25–29 and 32, excluding the Gulf of Riga. State of the stock and the fishery relative to reference points (source: ICES, 2020f).

		Fishing pressure			Stock size			
		2017	2018	2019	2018	2019	2020	
Maximum sustainable yield	F_{MSY}	✗	✗	✗ Above	$MSY B_{trigger}$	✓	✓	✗ Below trigger
Precautionary approach	F_{pa} / F_{lim}	✓	✓	⦿ Increased risk	B_{pa} / B_{lim}	✓	✓	⦿ Increased risk
Management plan	F_{MGT}	✗	✗	✗ Above the range	SSB_{MGT}	✓	✓	✗ Below

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point. **Clause C1.2 is met.**

References

ICES, 2020c. Inter-Benchmark Process on Baltic Sprat (*Sprattus sprattus*) and Herring (*Clupea harengus*) (IBPBash). ICES Scientific Reports, 2:34. 44 pp.
<http://doi.org/10.17895/ices.pub.5971>

ICES. 2020f. Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, her.27.25-2932.
<http://ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/her.27.25-2932.pdf>

Links	
MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

D1	Species Name	Fourhorn sculpin <i>Myoxocephalus quadricornis</i>		
	Productivity Attribute	Value	Score	
	Average age at maturity (years)	3.5	2	
	Average maximum age (years)	15	2	
	Fecundity (eggs/spawning)	792 – 18,000	1	
	Average maximum size (cm)	30	1	
	Average size at maturity (cm)	15-16	1	
	Reproductive strategy	Guarders / nesters	3	
	Mean trophic level	3.9	3	
			Average Productivity Score	1.86
	Susceptibility Attribute	Value	Score	
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1	
	Distribution	Throughout region	1	
	Habitat	demersal	3	
	Depth range	0-100m	3	
	Selectivity	Species > 2 times 16mm mesh size in SD28	3	
	Post-capture mortality	Most dead or retained	3	
			Average Susceptibility Score	2.5
			PSA Risk Rating (From Table D3)	Table D4
			Compliance rating	
References				
Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN				
All other attributes: https://www.fishbase.de/summary/Myoxocephalus-quadricornis.html				
<i>Standard clauses 1.3.2.2</i>				

D1	Species Name	Round goby <i>Neogobius melanostomus</i>		
	Productivity Attribute	Value	Score	
	Average age at maturity (years)	2-3 (female); 3-4 (male)	2	
	Average maximum age (years)	4.5	1	
	Fecundity (eggs/spawning)	300 – 5,000	2	
	Average maximum size (cm)	21.4	1	
	Average size at maturity (cm)	4.3	1	
	Reproductive strategy	Guarders / clutch tenders	3	
	Mean trophic level	3.3	3	
			Average Productivity Score	1.86
	Susceptibility Attribute	Value	Score	
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1	
	Distribution	Limited range in the region	2	
	Habitat	Demersal	3	
	Depth range	0-30m	2	
	Selectivity	Species > 2 times 16mm mesh size in SD28	3	
	Post-capture mortality	Most dead or retained	3	
			Average Susceptibility Score	2.5
			PSA Risk Rating (From Table D3)	Table D4
			Compliance rating	
References				
<p>Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN</p> <p>All other attributes: https://www.fishbase.de/Summary/SpeciesSummary.php?!D=12019&AT=round+goby</p>				
<i>Standard clauses 1.3.2.2</i>				

D1	Species Name	Shorthorn sculpin <i>Myoxocephalus scorpius</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	1	1
	Average maximum age (years)	18	2
	Fecundity (eggs/spawning)	4,800-16,000	1
	Average maximum size (cm)	53.6	1
	Average size at maturity (cm)	16.2	1
	Reproductive strategy	Guarders / clutch tenders	3
	Mean trophic level	3.9	3
	Average Productivity Score		1.71
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1
	Distribution	Throughout region	1
	Habitat	demersal	3
	Depth range	0-451m	3
	Selectivity	Species > 2 times 16mm mesh size in SD28	3
	Post-capture mortality	Most dead or retained	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		Pass
	Compliance rating		
References			
Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN			
All other attributes: Fishbase https://www.fishbase.se/summary/Myoxocephalus-scorpius.html			
<i>Standard clauses 1.3.2.2</i>			

D1	Species Name	Lamprey <i>Petromyzon marinus</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	5 - 9	3
	Average maximum age (years)	9	1
	Fecundity (eggs/spawning)	200,000 – 300,000	1
	Average maximum size (cm)	107.8	2
	Average size at maturity (cm)	No information	
	Reproductive strategy	Guarders / nesters	3
	Mean trophic level	4.4	3
	Average Productivity Score		2.16
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1
	Distribution	Throughout region	1
	Habitat	Demersal	3
	Depth range	1 – 4099m	3
	Selectivity	Species > 2 times 16mm mesh size in SD28	3
	Post-capture mortality	Most dead or retained	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		Table D4
	Compliance rating		
References			
Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN			
All other attributes: Fishbase https://www.fishbase.de/summary/Petromyzon-marinus.html			
<i>Standard clauses 1.3.2.2</i>			

D1	Species Name	Smelt <i>Osmerus eperlanus</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	2	2
	Average maximum age (years)	10	2
	Fecundity (eggs/spawning)	6,500 – 50,000	1
	Average maximum size (cm)	29.5	1
	Average size at maturity (cm)	12.75	1
	Reproductive strategy	open water/substratum egg scatterers	1
	Mean trophic level	3.5	3
	Average Productivity Score		1.57
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1
	Distribution	Throughout region	1
	Habitat	Pelagic - neritic	1
	Depth range	Usually down to 50m	3
	Selectivity	Species > 2 times 16mm mesh size in SD28	3
	Post-capture mortality	Most dead or retained	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		Pass
	Compliance rating		
References			
Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN			
All other attributes: Fishbase https://www.fishbase.de/summary/Osmerus-eperlanus.html			
<i>Standard clauses 1.3.2.2</i>			

D1	Species Name		Eelpout <i>Zoarces viviparus</i>	
	Productivity Attribute		Value	Score
	Average age at maturity (years)		2	2
	Average maximum age (years)		11	2
	Fecundity (eggs/spawning)		30 – 400 developed young	3
	Average maximum size (cm)		40.5	1
	Average size at maturity (cm)		16 – 18cm	1
	Reproductive strategy		Internal live bearers	3
	Mean trophic level		3.5	3
	Average Productivity Score			2.14
	Susceptibility Attribute		Value	Score
	Overlap of adult species range with fishery		<25% of stock occurs in area fished	1
	Distribution		Throughout region	1
	Habitat		Demersal	3
	Depth range		0 – 40m	3
	Selectivity		Species > 2 times 16mm mesh size in SD28	3
	Post-capture mortality		Most dead or retained	3
	Average Susceptibility Score			2.5
	PSA Risk Rating (From Table D3)			Table D4
	Compliance rating			
References				
Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN				
All other attributes: Fishbase https://www.fishbase.de/summary/Zoarces-viviparus.html				
<i>Standard clauses 1.3.2.2</i>				

D1	Species Name	Three-spined stickleback <i>Gasterosteus aculeatus</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	2	2
	Average maximum age (years)	2.65	1
	Fecundity (eggs/spawning)	80 - 1,300	2
	Average maximum size (cm)	9.74	1
	Average size at maturity (cm)	4.53	1
	Reproductive strategy	Guarders, nesters	3
	Mean trophic level	3.3	3
	Average Productivity Score		1.86
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1
	Distribution	Throughout region	1
	Habitat	Benthopelagic	3
	Depth range	0 – 100m	3
	Selectivity	Species > 2 times 16mm mesh size in SD28	3
	Post-capture mortality	Most dead or retained	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		Table D4
	Compliance rating		
References			
Mesh size info: REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN			
All other attributes: Fishbase https://www.fishbase.se/summary/Gasterosteus-aculeatus.html			
<i>Standard clauses 1.3.2.2</i>			

D1	Species Name	Eastern Gotland and Gulf of Gdansk flounder, <i>Platichthys flesus</i>		
	Productivity Attribute	Value	Score	
	Average age at maturity (years)	3	2	
	Average maximum age (years)	12.4	2	
	Fecundity (eggs/spawning)	894,427 [400,000-2,000,000]	1	
	Average maximum size (cm)	60	2	
	Average size at maturity (cm)	26.7	1	
	Reproductive strategy	nonguarders: open water/substratum egg scatterers	1	
	Mean trophic level	3.3	3	
	Average Productivity Score		1.71	
	Susceptibility Attribute	Value	Score	
	Overlap of adult species range with fishery	<25% of stock occurs in area fished	1	
	Distribution	Throughout region	1	
	Habitat	Benthopelagic	3	
	Depth range	0 – 100m	3	
	Selectivity	Species > 2 times	3	
	Post-capture mortality	Most dead or retained	3	
	Average Susceptibility Score		2.3	
	PSA Risk Rating (From Table D3)		PASS	
	Compliance rating		PASS	
	References			
	All other attributes: Fishbase https://www.fishbase.se/summary/Platichthys-flesus.html			
	<i>Standard clauses 1.3.2.2</i>			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4	Species Name	Fourhorn sculpin <i>Myoxocephalus quadricornis</i> ; round goby <i>Neogobius Melanostomus</i> ; sea lamprey <i>Petromyzon marinus</i> ; eelpout <i>Zoarces viviparus</i> ; three-spined stickleback <i>Gasterosteus aculeatus</i> .	
Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements			
D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.		Yes
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		Yes
Outcome:			Pass
<p>Evidence</p> <p>D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.</p> <p>D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.</p> <p>These species indirectly benefit from measures introduced under the Baltic Sea MAP to manage the main commercial species including closures to protect spawning cod, salmon, flounder and plaice. They also benefit indirectly from Regulation (EU) 2019/1241 laying down the fishery technical measures to be applied in European Union waters (and certain non-EU waters) to conserve fishery resources and the protection of marine ecosystems and contribute to the achievement of CFP objectives. Annex VIII of the Regulation covers the Baltic Sea and sets minimum conservation reference sizes for cod, plaice, salmon, flounder, turbot, brill, eel and sea trout. It specifies mesh sizes by fishery for both towed and static gears and includes provisions on spatial and temporal closed areas to protect juveniles, spawning aggregations and/or sensitive species and includes restrictions for salmon and sea trout, flounder and turbot and eel. It includes special provisions for the Gulf of Riga including a specific fishing authorisation for the area, limits on vessel engine power, and a prohibition on trawling in waters less than 20m depth.</p>			

Sea lamprey is also a species protected under European and Baltic Sea nature conservation legislation and management measures including the EU Habitats Directive (92/43/EEC, listed under Annex II which requires core areas of their habitat to be protected in the Natura 2000 network) and in HELCOM Marine Protected Areas. It is protected within 397 Natura 2000 sites³ and 6 Helcom MPAs in Poland, Denmark and Russia (HELCOM, 2016), although none of these occur in the Gulf of Riga.

The fishing practices used in the fishery are designed to target homogeneous shoals of the target species so that negligible quantities of non-clupeid species are caught. This is reflected in the low levels of non-clupeids caught in the fishery.

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<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN>

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

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02016R1139-20190814&from=EN>

Links

MARINTRUST Standard clause	1.3.2.2, 4.1.4
FAO CCRF	7.5.1
GSSI	D.5.01

³ <https://eunis.eea.europa.eu/species/569#protected>

FURTHER IMPACTS

The three clauses in this section relate to impacts the fishery may have in other areas. A fishery must meet the minimum requirements of all three clauses before it can be recommended for approval.

F1	Impacts on ETP Species - Minimum Requirements		
	F1.1	Interactions with ETP species are recorded.	Yes
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	Yes
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	Yes
Clause outcome:			Pass

F1.1 Interactions with ETP species are recorded.

Recording of the catch of seabirds and mammals has been undertaken in some Baltic Sea fisheries, usually where there is perceived risk of such bycatch. Seabirds can become entangled in gillnets or hooked on longlines. Seals can be caught in submerged trap nets and harbour porpoises entangled in gillnets. Pelagic trawlers or purse seines in general are not known to cause significant bycatch of birds or mammals in the offshore fishery.

There is a requirement for EU member states to record ETP bycatch initially through Council Regulation (EC) 812/2004 (which was focused on cetaceans, although member states also provided information on other species) and from 2019 through the technical measures Regulation (EU Regulation 2019/1241) (Annex XIII sets out monitoring requirements for marine mammals, reptiles and seabirds) and the Habitats and Birds Directives (1992/43/EC and 2009/47/EC) also require monitoring of bycatch of species protected under the Directives (ICES, 2020h).

Whilst the observer programmes have been running for a number of years they have been abandoned in some countries on the basis that no records of incidental catch of marine mammals were made. For this reason, Denmark has not undertaken a specific marine monitoring programme for its pelagic trawl fishery (monitoring is undertaken of its gillnet fisheries under the Data Collection Regulation (DCR) scheme) and Latvia is proposing to do the same in future for its pelagic trawl fisheries (ICES, 2019a). Observer coverage for some of these fisheries has been low (<5%).

The latest ICES WGBYC report (ICES, 2020i) notes that 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 subdivision 28.1 Gulf of Riga, observer coverage of the pelagic trawl fishery (12–18 m vessels) was 8.6 % of towing time and 9% of hauls. The report notes that Latvia has had an annual observer coverage of 8-10% of the pelagic fishery in the Baltic since 2006 and there have been no reports of cetacean bycatch by fishers.

In conclusion, interactions are recorded and are considered rare. **Clause F1.1 is met.**

F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.

At least three species of marine mammals can be found in the Gulf of Riga: grey seal; ringed seal and a small population of harbour porpoise (Baltic proper sub-population). The status of grey seals is generally good, whereas that of the southern populations of ringed seal is poor according to the latest HELCOM assessment (HELCOM, 2018a; HELCOM, 2018b). The Baltic

proper sub-population of harbour porpoise is also considered to be in a poor state, classified as critically endangered on the HELCOM Red List of species in danger of becoming extinct, which uses the IUCN Red List criteria as its basis HELCOM, 2013a).

The ICES Working group on Bycatch (WGBYC) recently assessed the bycatch risk posed by different fishing gears to protected species in the Baltic Seas using expert judgement. Each combination of protected species and gear type was assigned a simple 1 to 3 (lower-higher risk) score. Pelagic trawls were scored at '1', except for seals and harbour porpoise which were scored at '2' based on a record from Poland of one porpoise bycatch from a pelagic trawl (Skora and Kuklik, 2003 cited in ICES, 2018). However, as noted in the previous clause there is little evidence of bycatch of marine mammals in the Latvian pelagic trawl fishery from the observer programme.

The most likely indirect effects from pelagic trawl fisheries is prey depletion. HELCOM have reviewed and identified threats to the Baltic seal populations (HELCOM, 2013b). 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 fishery is posing a risk to grey seals.

The Baltic is an important overwintering ground for seabirds and sea ducks and nine of nineteen species breeding in the area are decreasing in numbers, ten have increased, nine were stable, and the trend was uncertain in one species (ICES Ecosystem Overview, Baltic Sea Ecoregion; ICES, 2020j). The greatest declines in breeding numbers were observed in common eider *Somateria mollissima* and great black-backed gull *Larus marinus*. Three species that feed mainly on herring and sprat (common guillemot, razorbill, and Arctic tern) have increased in number over recent decades. The Baltic Sea is an important wintering area for many species, including the globally threatened long-tailed duck, velvet scoter *Melanitta fusca*, and Steller's eider *Polysticta stelleri*. These three species have been declining in number during the last 25 years, as have many other benthic-feeding species (ICES, 2020j). However, pelagic trawls have not been identified as posing a significant risk to seabirds.

In conclusion, there is no substantial evidence that the fishery has a significant negative effect on ETP species. **Clause F1.2 is met.**

F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.

Latvia is a contracting party to HELCOM which agreed in 2006 on a Recommendation of the 'Conservation of seals in the Baltic Sea'. This is a regional agreement on joint management principles, management units for the different seal populations, limit reference levels for the respective management unit, and coordinated monitoring programmes.

The Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS), aims to achieve and maintain a favourable conservation status for small cetaceans. ASCOBANS has made a number of resolutions relating to harbour porpoise bycatch, most recently in ASCOBANS Resolution 8.5, which sets out targets for the reduction of bycatch. A number of harbour porpoise recovery plans have also been developed of which the 'Jastarnia Plan' (ASCOBANS, 2016) covers the harbour porpoise in the Baltic Sea. It lists a range of actions to protect harbour porpoise including for instance by reducing bycatch in fisheries towards zero, designating marine protected areas for them and minimising the impacts of anthropogenic noise. However, Latvia is not a contracting party to the Agreement and so its provisions are not binding upon Latvia.

ICES has recently been requested by the EU to produce advice on emergency measures to prevent bycatch of harbour porpoise (ICES, 2020k). Following this advice, BALTFISH and the European Commission met on the 3rd March 2021 and agreed emergency measures for the protection of harbour porpoises for 6 months starting April/May 2021. These measures (closures, use of pingers) are focused on the ‘fisheries of concern’, namely static net fisheries (i.e. trammel net, gillnet and semi-driftnet) rather than the pelagic trawls considered in this assessment.

The EU technical measure regulations, which covers all marine mammals listed under the Habitats Directive Annexes II and IV and seabirds covered by the Birds Directive, prohibits their capture and where captured requires their prompt release. Monitoring and reporting requirements also apply to marine mammals and seabirds as referred to in the previous sub-clause.

Pelagic trawlers or purse seines are not known to cause significant bycatch of ETP in the offshore fishery in the Baltic Sea but there is some evidence of interaction. Measures are in place to minimise mortality. **Clause F1.3 is met**

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Links	
MARINTRUST Standard clause	1.3.3.1
FAO CCRF	7.2.2 (d)
GSSI	D4.04, D.3.08

Impacts on Habitats - Minimum Requirements

F2	F2.1	Potential habitat interactions are considered in the management decision-making process.	Yes
	F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	Yes
	F2.3	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.	Yes
Clause outcome:			Pass

F2.1 Potential habitat interactions are considered in the management decision-making process.

F2.2 There is no substantial evidence that the fishery has a significant negative impact on physical habitats.

F2.3 If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.

Pelagic trawl gears are not designed to make contact with the seabed, such contact is likely to be minimal and consequently this gear is considered to have marginal impact on benthic habitats and bottom structures. In relation to impact upon the pelagic habitat, the trawl fisheries are targeted at dense homogeneous shoals of herring and sprat with very little bycatch of non-target species so impacts on biological diversity and abundance of the habitat is limited to the target species and by-catch.

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. 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.

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, in particular to protect reef sites in Denmark from demersal gears used by the nations fishing there, 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 (offshore from the mouth of the Oder) and temporal area restrictions on fishing with any gear (Annex VIII).

In conclusion, potential habitat interactions are considered in the management decision-making process through the BSAP with its associated measures, the requirements associated with Natura 2000 sites and the technical measures under EU Regulations. There is no substantial evidence that the fishery has a significant negative impact on physical habitats. The pelagic trawl gears operate in the water column. Pelagic trawlers using fishfinders to locate their target shoal and netsounders to monitor the position of the gear, technology which enables fishers to avoid the gear contacting the bottom. This gear is considered to have marginal impact on benthic habitats and bottom structures. **Clauses F2.1, F2.2 and F2.3 are met.**

References

COMMISSION DELEGATED REGULATION (EU) 2017/1181 of 2 March 2017 amending Delegated Regulation (EU) 2017/117 establishing fisheries conservation measures for the protection of the marine environment in the Baltic Sea and repealing Delegated Regulation (EU) 2015/1778

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2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R1241	
Links	
MARINTRUST Standard clause	1.3.3.2
FAO CCRF	6.8
GSSI	D.2.07, D.6.07, D3.09

F3 Ecosystem Impacts - Minimum Requirements		
F3.1	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.	Yes
F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.	Yes
F3.3	If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.	Yes
Clause outcome:		Pass
<p>F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.</p> <p>The Baltic Sea main commercial fisheries (including herring and sprat) are regulated through the Baltic Sea MAP (Regulation (EU) 2016/1139). The objectives of the MAP, as set out in Article 3, are inter alia to:</p> <ul style="list-style-type: none"> • contribute to the achievement of the Common Fisheries Policy (CFP) (Regulation (EU) 1380/2013) in particular through the application of the precautionary approach to fisheries management. • implement the ecosystem-based approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised. • be coherent with EU environmental legislation, in particular with the objective of achieving good environmental status by 2020 as set out in the Marine Strategy Framework Directive MSFD (Directive 2008/56/EC) <p>The Baltic herring and sprat stocks are managed according to an MSY strategy where key trophic interactions are incorporated. Predation pressure on sprat by cod is taken into account in the assessment, reference points, management regulations (MAP ranges).</p> <p>The broader ecosystem within which the fishery occurs is considered during the management decision-making process. Clause F3.1 is met.</p> <p>F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.</p> <p>The Gulf of Riga, a semi-enclosed sub-basin of the Baltic Sea, is characterized by low salinity that restricts the occurrence of marine species. In comparison with the central Baltic, sprat biomass is low and the food web is simplified by the absence of abundant predators, like cod. Herring (<i>Clupea harengus</i>) is the dominant species and the main planktivorous fish and takes the top role in the pelagic food web (Putnis <i>et al.</i>, 2013).</p>		

The most significant potential ecosystem impact of the fishery is the removal of herring and sprat biomass. These species are a potential source of food for birds and for sea mammals. The main fish predator in the Baltic proper, cod, is only present in the Gulf of Riga in periods when the cod stock is very high and the last time this occurred was in the early 1980s (ICES, 2020l).

The ICES Ecosystem Overview (ICES, 2020j) noted that the populations of three seabird species that feed mainly on herring and sprat (common guillemot, razorbill, and Arctic tern) have increased in number over recent decades. As noted in the previous clause, prey depletion of the target clupeids is not considered a major threat to the Baltic Sea harbour porpoise and seal populations. Furthermore, the stocks of Gulf of Riga herring and Baltic sprat are healthy (see clause A). This suggests that food is available and that herring/sprat at present are not constraining these populations.

Given the healthy status of the clupeid stocks targeted by the fishery in this area and evidence of increases in predator populations that rely on these stocks, it is considered that there is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem. **Clause F3.2 is met.**

F3.3 If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.

There is evidence that additional precaution is included in fishing opportunities advice. For example, in relation to sprat, predation pressure on sprat by cod is taken into account in the assessment, reference points and management regulations (MAP ranges).

There are also a number of measures in place to restrict fishing effort, including trawling restrictions, closed seasons and measures to reduce capacity. Regulation (EU) 2019/1241 which lays down the fishery technical measures to be applied in European Union waters includes special provisions for the Gulf of Riga. These include a requirement for a specific authorisation to fish in the area, limits on vessel engine power, and a prohibition on trawling in waters less than 20m depth. In Latvia the number of trawlers as well as the total engine power has not been allowed to increase since the end of 1990s and the number of vessels is gradually decreasing due to scrapping (ICES, 2020l). The trawl fishery is closed for 30 days in May-June during the peak spawning of herring and in Estonia there is an additional prohibition on trawling from 15 June to 15 September. It is worth noting that in most winters the fishery stops or is reduced due to ice cover in the Gulf (ICES, 2020l).

On balance, it can be said that additional precaution is included in recommendations on fishery removals and also generally in the management of the fishery. **Clause F3.3 is met.**

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https://www.ices.dk/sites/pub/CM%20Documents/CM-2013/Theme%20Session%20E%20contributions/E3413.pdf Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1241&from=EN	
Regulation (EU) 2016/1139 (as amended) of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02016R1139-20190814&from=EN	
Links	
MARINTRUST Standard clause	1.3.3.3
FAO CCRF	7.2.2 (d)
GSSI	D.2.09, D3.10, D.6.09

SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.

Appendix A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

“The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of r_m (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of K , t_m and t_{max} and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on r_m (see below) as we are not yet confident with the reliability of the current method for estimating r_m . If users have independent r_m or fecundity estimates, they can refer to Table 1 for using this information.”

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
r_{max} (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
K (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
t_m (years)	< 1	2 - 4	5 - 10	> 10
t_{max} (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, “Estimation of Life-History Key Facts”,
<http://www.fishbase.us/manual/English/key%20facts.htm#resilience>]

Glossary

Non-target: Species for which the gear is not specifically set, although they may have immediate commercial value and be a desirable component of the catch. OECD (1996), Synthesis report for the study on the economic aspects of the management of marine living resources. AGR/FI(96)12

Target: In the context of fishery certification, the target catch is the catch of stock under consideration by the unit of certification – i.e. the fish that are being assessed for certification and ecolabelling. (GSSI)

Appendix

MarinTrust Fishery Assessment Peer Review Template

This section comprises a summary of the fishery being assessed against version 2 of the MarinTrust Standard.

Fishery under assessment	Gulf of Riga herring_Latvia_ICES Subdivision 28.1 (Gulf of Riga)
Management authority (Country/State)	EU, Latvia
Main species	Herring (<i>Clupea harengus</i>)
Fishery location	ICES subdivision 28.1 (Gulf of Riga)
Gear type(s)	Pelagic trawl

Summary: in this section, provide any additional information about the fishery that the reviewers feel is significant to their decision.

Summary of Peer Review Outcomes

Peer reviewers should review the fishery assessment report with the primary objective of answering the key questions listed in the table below. Where the situation is more complicated, reviewers may instead answer “See Notes”.

	YES	NO	See Notes
A – Fishery Assessment			
1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	X		
2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	X		
3. Are the scores in the following sections accurate (i.e. do the scores reflect the evidence provided)?			
Section M - Management	X		
Category A Species	X		
Category B Species			NA
Category C Species	X		
Category D Species	X		
Section F – Further Impacts	X		

Detailed Peer Review Justification

Peer reviewers should provide support for their answers in the boxes provided, by referring to specific scoring issues and any relevant documentation as appropriate.

Detailed justifications are only required where answers given are one of the ‘No’ options. In other (Yes) cases, either confirm ‘scoring agreed’ or identify any places where weak rationales could be strengthened (without any implications for the scores).

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust standard, and clearly based on the evidence presented in the assessment report?

The assessment report is adequate, the MARINTRUST standard has been adequately applied and the information provided seem to be enough to justify the scores assigned to the different categories. This is a pelagic fishery with relatively low impact on bycatch species and the habitat. The target stocks are above the limit reference points and a management plan has been implemented for the fishery. My only concern about this fishery is low level of observer coverage which makes difficult to assess the real impact on ETP species.

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?

The MARINTRUST standard has been adequately applied to this assessment.

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?

The species categorisation is based on the MSC reports provided by the clients. It includes a combination of self-reported and scientific data which seems to be adequate.

3M. Are the scores in “Section M – Management” clearly justified?

A management system is in place for the this fishery in the Baltic Sea. The EU adopted a multiannual management plan for cod, herring and sprat in the area. Some minor comments:
 M1.6 I miss some information about how quotas are set at the EU level. **Some further information has been added.**

M2.1 As in previous reviews. this list of information shown on the national websites is a general list or do you really checked that this information is shown in the Latvia's fishery management organization website? **This is the information generally shown on national websites and is true for Latvia.**

3A. Are the "Category A Species" scores clearly justified?

The information provided is clear. Commercial and survey data is collected for both species. A stock assessment is carried out annually and reference points have been set. For both species (the Gulf of Riga herring and sprat) SSB is above MSY Btrigger and F below FMSY. Only a couple of minors concerns, the level of mixing and misreporting of both species seems to be variable and it is not completely well estimated. Just a minor comment:

Sprat

Maybe some of the information shown in A2 should be moved to A4. **We disagree, the information in A2 is required to provide the evidence in support of the A2 clauses. We could copy it in A4 but consider this to be unnecessary repetition of a lot of information which has been presented more or less immediately above this clause.**

3B. Are the "Category B Species" scores clearly justified?

No Category B species identified.

3C. Are the "Category C Species" scores clearly justified?

Central Baltic herring is assessed in this category. The species is above Blimit. No further comments needed.

3D. Are the "Category D Species" scores clearly justified?

Several Category D species have been identified in the catch. Although I have not checked all the values included in the tables, they are based on the fishbase website and the standard seems to be adequately applied. Four species are considered vulnerable. The information shown in D4 is very informative.

3F. Are the scores in "Section F – Further Impacts" clearly justified?

As in other assessed fisheries in the Baltic Sea, my main concern is about the low level of observer coverage in these fisheries (<5%). Although it is true that this fishery does not seem to have a high impact on ETP species (at least it is lower than in other trammelnet and gillnet fisheries), taking into consideration that some ETP species in the area are endangered, such as the Baltic Sea harbour porpoise population, it is a point that needs to be considered carefully. And again, in my opinion more information is necessary to be able to assess adequately the indirect impact of these pelagic fisheries on ETP species due to prey depletion. **It is not clear what additional information the Peer Reviewer would like to see? The assessment team could find no evidence that prey depletion is affecting the ETP species. On the contrary there is evidence – from ICES and HELCOM and as presented in the report – that clupeid stocks are high at present (including Gulf of Riga herring and Baltic sprat) and ETP species that rely on clupeids such as seabird species have increased, whereas other ETP are not reliant on them e.g. seals.**

Optional: General comments on the Peer Review Draft Report

In the assessment determination summary there is not clear mention to why the central herring stock have been assessed under category C. It would eb interesting to explain it.

Please, use commas for numbers higher than 999. The assessment team consider the reason why central Baltic herring is classed as a category C stock is explained in the species categorisation rationale but we can add some additional explanation if it helps. Central Baltic herring is classed as a category C stock in line with the MarinTrust guidance on completing whole fish reports, i.e. it is a by-catch species (makes up less than 5% of landings) and is subject to a species-specific management regime.

Regarding the comments about commas, we haven't used commas as in some places these are interpreted in the same way as a decimal point. We have used a space instead.