MarinTrust Whole fish fishery assessment report

Document TEM-002 (prev. FISH2) - Version 3.0

Issued June 2024 – Effective June 2024

Denmark - Clupea harengus - Herring and Sprattus sprattus – Sprat, FAO 27, ICES 25-29, 32 (excluding Gulf of Riga)
Re-Approval
WF09

Table 1: Whole fish fishery assessment scope

Fishery name	**Denmark - *Clupea harengus* - Herring and *Sprattus sprattus* – Sprat, FAO 27, ICES 25-29, 32 (excluding Gulf of Riga)**
MarinTrust report code	**WF09**
Type 1 species (common name, Latin name)	*Herring (Clupea harengus) and sprat (Sprattus sprattus)*
Fishery location	FAO 27, ICES 3.d.25-29, 32 (Central Baltic Sea, excl. Gulf of Riga)
Gear type(s)	Pelagic trawls
Management authority (country/state)	EU, Denmark

Table 2: Applicant and Certification Body details

Application details			
Applicant(s)		FF Skagen A/S, Thyborøn (TripleNine)	
Applicant country		Denmark	
Certification Body details			
Name of Certification Body		LRQA	
Contact Information for CB (e.g. email address/address/telephone number)		E: mt-ca@lrqa.com LRQA, 4-5 Lochside Way, Edinburgh Park, EH12 9DT T: +44 800 092 0452	
Fishery Assessor name		Blanca Gonzalez	
CB Peer Reviewer name		Jim Missen	
Number of assessment days	3	**Assessment period**	September 2025 – September 2026

Table 3: Assessment outcome

Assessment outcome (See Table 4 for a summary of assessment determination)		*Approve*
Approval validity	Valid from September 2025	Valid until September 2026
CB peer reviewer evaluation		*Agree with assessment determination*
Fishery Assessment Peer Review Group external peer reviewer evaluation		*Agree with assessment determination*

Table 4: Assessment determination

Assessment determination
Summary of assessment and outcome

The pelagic trawl herring (*Clupea harengus*) and sprat (*Sprattus sprattus*) fishery in the Baltic (excluding the Gulf of Riga) represents more than 99% of the total catch. Both species are categorized by the IUCN as Least Concern, are not in any CITES appendix, and ICES establish reference point, a total allowance catch (TAC) and the stocks are assessed annually by the Baltic Fisheries Assessment Working Group (WGBFAS). Therefore, herring from central Baltic stocks and sprat were assessed as Category A species.

Gulf of Riga herring (*Clupea harengus*) and three-spined stickleback (*Gasterosteus aculeatus*) represent 0.32% of the catches. These species are considered Least Concern by the IUCN, are not included in any CITES appendix; however, Gulf of Riga herring is managed relative to a reference point and was assessed as a Category C species, while three-spined stickleback was assessed as Category D since it is not managed in relation to a reference point.

The reviewed evidence about the herring and sprat stock management framework (M1) indicates that there is an organisation responsible for managing the fishery which are legally empowered to take management actions, also, there are entities responsible for collecting scientific data and assessing the fishery, and the fishery management system is based on principles of sustainable fishing and a precautionary approach and there is a consultation process through which fishery stakeholders are engaged in decision-making, the process is transparent and results are publicly available; therefore all clauses were met. Regarding surveillance, control and enforcement measures (M2), there is an organisation responsible for monitoring compliance with fishery laws and regulations, there is a framework of sanctions which are applied when laws and regulations are discovered to have been broken, and there is no substantial evidence of widespread non-compliance in the fishery, nor IUU fishing; thus, all clauses were also met.

As indicated by MarinTrust, the outcomes of the harmonization process for Baltic Sea herring and sprat fisheries were used for Category A, B, and C species. Sprat and Gulf of Riga herring met all clauses, while Central Baltic herring failed in Category A, but passed in Category B. In the Productivity-Susceptibility Analysis (PSA) of category D species, the three-spined stickleback passed the criteria, indicating this stock is not vulnerable to the fishery under assessment.

The fishery has a very low impact on ETP species and does not affect the habitat either, since pelagic trawls generally do not interact with any physical habitat. Fishery management framework considers an ecosystem approach to ensure the long-term conservation and sustainable use of the resources while safeguarding the marine ecosystems.

The herring and sprat fishery in the central Baltic Sea (excluding the Gulf of Riga) PASSED all the MarinTrust requirements in this assessment, therefore its approval is recommended to be used as a MarinTrust certified product.

Summary of CB peer review	The CB peer reviewer agrees with the assessor's determination of a pass for this fishery, confirming that sufficient evidence has been provided to demonstrate compliance with all the requirements of Version 3 of the MarinTrust Whole Fish Fishery Assessment. The reviewer agrees with the assessor's categorisation of Central

	Baltic herring, along with sprat, as Category A species. Subsequently, Central Baltic herring did not meet the requirements under Category A and was reassessed against Category B, where it passed. Gulf of Riga herring and three-spined stickleback were assessed as Category C and D species, respectively, and both passed. Therefore, the CB supports the decision for approval under the MarinTrust Standard.
Summary of external peer review (see Appendix 1 for the full peer review report)	*Note to assessor: Include a brief summary of the external peer review evaluation.*
Notes for on-site auditor	*Note to assessor: Notes for on-site auditor should be included where there may be reason to validate the findings of the assessment during the on-site audit. For example, if a marine mammal or ETP shark is allowed to be landed by the fishery, the auditor on site can review evidence to ensure this species is not used for reduction purposes.*

Table 5: General results

Section	Outcome (Pass/Fail)
M1 - Management Framework	Pass
M2 - Surveillance, Control and Enforcement	Pass
E1 - Impacts on ETP Species	Pass
E2 - Impacts on Habitats	Pass
E3 - Ecosystem Impacts	Pass

Table 6: Species-specific results

See Table 7 for further details of species categorisation.

Category	Species name (common & Latin name)	Outcome (Pass/Fail/n/a)	
Category A	Sprat - *Sprattus sprattus*	A1	Pass
		A2	Pass
		A3	Pass
		A4	Pass
	Central Baltic herring - *Clupea harengus*	A1	Pass
		A2	Pass
		A3	Fail
		A4	Fail
Category B	Central Baltic herring - *Clupea harengus* (Failed A)	Pass	
Category C	Gulf of Riga herring - *Clupea harengus*	Pass	
Category D	Three-spined stickleback - *Gasterosteus aculeatus*	Pass	

Table 7: Species categorisation table

List of all the species assessed. Type 1 species are assessed against Category A or Category B. Type 1 species must represent 95% of the total annual catch. Type 2 species are assessed against Category C or Category D. Type 2 species may represent a maximum of 5% of the annual catch. Species that comprise less than 0.1% of the catch are not required to be assessed or listed here.

Species name (common & Latin name)	Stock	CITES listed yes/no	IUCN Red list Category	% catch composition	Management (Y/N)	Category (A, B, C or D)
Sprat - *Sprattus sprattus*	Baltic Sea	No	Least Concern	55.50	Y	A
Herring - *Clupea harengus*	Central Baltic	No	Least Concern	44.18	Y	A (Fail) - B
Herring - *Clupea harengus*	Gulf of Riga	No	Least Concern	0.22	Y	C
Three-spined Stickleback - *Gasterosteus aculeatus*	Baltic Sea	No	Least Concern	0.10	N	D

Rationale

Catch composition was obtained from the 2023 MSC surveillance assessment for this fishery, which reported a list of Danish landings in herring and sprat fisheries in the Baltic Sea for 2021. Herring and sprat represent the majority of the catch, with the catch of other species being relatively small, so that in terms of percentage, they are not even detected, except for the three-spined stickleback, which represents 0.2% of the catch in the herring targeted fishery (Table 1) (LRQA 2023).

Species			Sprat targeted fishery	
English	Scientific	Danish	kg	%
Sprat	*Sprattus sprattus*	Brisling	20722059	89%
Herring	*Clupea harengus*	Sild	2549144	11%
Flounder	*Platichthys flesus*	Skrubbe	8336	0.0%
Plaice	*Pleuronectes platessa*	Rødspætte	6386	0.0%
Three-spined stickleback	*Gasterosteus aculeatus*	Hundestejle	988	0.0%
Cod	*Gadus Morhua*	Torsk	608	0.0%
Mackerel	*Scomber scombrus*	Makrel	22	0.0%
Anchovy	*Engraulis encrasicolus*	Ansjos	13	0.0%
Perch	*Perca fluviatilis*	Aborre		
Garfish	*Belone belone*	Hornfisk		
Pollack	*Pollachius virens*	Mørksej		
Shells		Skaller		
Total			23287556	100%

Species	Herring targeted fishery	
	kg	%
Herring	3925333	78%
Sprat	1104472	22%
Three-spined stickleback	11360	0.2%
Shells	5	0.0%
Flounder	5	0.0%
Perch	2	0.0%
Pollack	2	0.0%
Cod	2	0.0%
Garfish	1	0.0%
Anchovy		
Mackerel		
Plaice		
Total	5041182	100%

Table 1. Danish vessel landings in 2021 for the herring and sprat targeted fishery. (LRQA 2023).

To obtain a general percentage of catch composition, an average was calculated from both fisheries. Additionally, according to ICES catch data in the Central Baltic, differentiating between Gulf of Riga and Central Baltic herring, Central Baltic herring represent 99.5% of the catch on average from 2018 to 2024 (ICES 2025). Thus, this value was used to estimate the herring catch composition from each stock. (Table 2)

Species	% Catch Composition
Sprat	55.50
Central Baltic herring	44.18
Gulf of Riga herring	0.22
Three-spined Stickleback	0.10
Total	100.00

Table 2. Average catch composition from the sprat and herring target fishery in the Baltic Sea.

Data indicate that sprat and herring represent 99.68% of the total catch. These two species are considered Least Concern by the IUCN and are not included in any CITES appendix, and these stocks are managed relative to reference points; therefore, they were assessed as Category A species. Gulf of Riga herring and three-spined stickleback represent 0.32% of the total catch, are considered Least Concern by the IUCN, and are not included in any CITES appendix. Gulf or Riga herring is managed relative to reference points and was assessed as a Category C species. Three-spined Stickleback is not managed relative to reference points, and it was assessed as a category D species.

References

LRQA (2023). Denmark, Estonia, Germany, Sweden Baltic herring and sprat. Second Surveillance Report. https://fisheries.msc.org/en/fisheries/denmark-estonia-germany-sweden-baltic-herring-and-sprat/@@assessments

ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

Management requirements

This section, or module, assesses the general management regime applied to the fishery under assessment. It comprises two parts, M1, which evaluates the management framework, and M2, which evaluates surveillance, control and enforcement within the fishery.

2.6. All management criteria must be met (pass) for a fishery to pass the Management requirements.

2.6.1. The sub-criteria offer a structured evidence base to demonstrate that the fishery sufficiently meets the management criteria. It is not expected that sub-criteria are assessed independently of the main criterion.

M1 Management framework

M1.1	**M1.1 There is an organisation responsible for managing the fishery.** *In reaching a determination for M1.1, the assessor should consider if the following is in place:*
	M1.1.1 The management and administration organisations within the fishery are clearly identified.
	M1.1.2 The functions and responsibilities of the management organisations include the overall regulation, administration, science and data collection and enforcement roles, and are documented and publicly available.
	M1.1.3 Fishers have access to information and/or training materials through nationally recognised organisations.
Outcome	*Pass*

Rationale

In Denmark, fisheries management is primarily the responsibility of the Ministry of Food, Agriculture and Fisheries of Denmark, through the Danish Fisheries Agency. Since Denmark is part of the EU, management activities are executed within the framework of the European Union's Common Fisheries Policy (CFP).

The European Commission, through the CFP, sets rules for sustainably managing European fishing fleets and conserving fish stocks in EU waters (EC 2025a). Through the Regulation (EU) No 1380/2013 of the European Parliament and of the Council on the CFP, objectives for catch and fishing effort limits to ensure that EU fisheries are ecologically, economically, and socially sustainable are set out (EU2013).

The Ministry of Food, Agriculture and Fisheries is responsible for the administration and regulation of EU fisheries policy, rule-making, control, structural policy, angling, support for business promotion and for environmentally friendly fishing. The Danish Fisheries Agency implements the government's fisheries policy and conducts, among other things, rules and policy preparation, control, regulatory preparedness, case management and participation in international cooperation

(MFAFD 2025).

In Denmark, fishers have access to information and training materials through the Danish Agency for Higher Education and the Danish Maritime Authority, which are responsible for the maritime training programmes and courses (DMA 2025).

The Danish Agency for Higher Education is responsible for:

- Orders on training programmes, educational plans, guidelines and training books
- Supervision of maritime training programmes, including the training ships Danmark and Georg Stage
- The Educational Council for the Maritime Training Programmes
- Subsidies for shipowners in connection with work-experience places as well as study grants for participation in adult and supplementary courses.

The maritime educational institutes offering maritime training and education as well as training ships, include five Marine Engineer Colleges, one Maritime Education Centre for Ship's Officers, Two Nautical Colleges, two Schools, and two Sailing Training Vessels for Ordinary Ratings, and one School for Commercial Fishermen

The Danish Maritime Authority is responsible for:

- Obligations under the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers(STCW)
- Certificates of competency and certificates of proficiency
- Maritime courses on, for example, radio, maritime safety, simulator training and tanker safety
- Training programmes for yachtsmen
- Training programme for commercial divers
- Mandatory courses in medical care at sea

References

DMA (2025). Danish Maritime Authority. Maritime courses. https://www.dma.dk/seafarers-and-manning/maritime-courses

EC (2025a). European Commission. Common fisheries policy (CFP). https://oceans-and-fisheries.ec.europa.eu/policy/common-fisheries-policy-cfp_en

MFAFD (2025). Ministry of Food, Agriculture and Fisheries in Denmark. https://en.fvm.dk/the-ministry

EU (2013). Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. https://www.legislation.gov.uk/eur/2013/1380/contents#

M1.2	**M1.2 Fishery management organisations are legally empowered to take management actions.** *In reaching a determination for M1.2, the assessor should consider if the following is in place:*
	M1.2.1 There are legal instruments in place to give authority to the management organisation(s) which can include policies, regulations, acts or other legal mechanisms.
	M1.2.2 Vessels wishing to participate in the fishery must be authorised by the management organisation(s).
	M1.2.3 The management system has a mechanism in place for the resolution of legal disputes.
	M1.2.4 There is evidence of the legal rights of people dependent on fishing for food or livelihood.
Outcome	*Pass*

Rationale

In EU member states, fisheries management is generally carried out under national legislation arising from the implementation and/or transposition of EU regulations, in particular, but not limited to, Regulation (EU) No 1380/2013.

Denmark has legally empowered fishery management organisations, primarily the Danish Fisheries Agency, which operates under national law and the EU Common Fisheries Policy. The legislative basis for fishery management is outlined in the Fisheries and Fish Farming Act, which sets regulations on the management and conservation of fishery, aquaculture, and trade in related activities to ensure the protection and rehabilitation of natural resources in salt and fresh waters, as well as the protection of other animal and plant species providing a sustainable basis for commercial and recreational fishing, as well as the implementation of certain EU fishery provisions; The Act includes provisions for research activities, inspection rules, provisions for prevention of IUU fishing and fishing vessel requirements. (FAO 2025a, FAO 2025b, Retsinformation 2025)

Vessels wishing to participate in the fishery must be authorised by the Danish Fisheries Agency, without a valid license, a vessel cannot legally fish in Danish waters or under the Danish flag abroad. (DAFA 2025)

Denmark's fisheries management system has a formal mechanism for resolving legal disputes, in line with national administrative and judicial structures, as well as EU legal frameworks. Decisions made by authorities like the Danish Fisheries Agency can be appealed to independent administrative appeal boards, such as the Environment and Food Appeals Board; if still unsatisfied, a party can escalate the matter to the courts. The specialized venue for maritime and commercial disputes, including fisheries-related cases, is the Maritime and Commercial Court, which handles cases involving maritime law and commercial matters. If someone believes there has been

wrongdoing or maladministration by the fisheries authority, complaints can be brought to the Parliamentary Ombudsman (Folketingets Ombudsmand), an independent role that investigates public administration issues. Also, given Denmark's membership in the EU and the fisheries policy framework set by the Common Fisheries Policy (CFP), if disputes involve EU law interpretation or cross-border regulation, they can ultimately be escalated to The European Commission or, for judicial resolution, the Court of Justice of the European Union (CJEU)—often via a preliminary reference from domestic court. (European Justice 2025).

Denmark has policies explicitly aimed at supporting small-scale coastal fishers, like the 2007 Coastal Fishery Regulation reserves portions of national quotas (e.g., for cod, plaice) specifically for coastal fishers with small vessels (under 17 m) and short trips; the Association of Low-Impact Coastal Fishers (FSK-PO) which represent the small-scale fishers and advocate on behalf of their rights and sustainability; and more recently, a fisheries package has enhanced these rights by increasing quota allocation to coastal fishers, introducing a "locked group" system that allows fishers to secure their quotas and capacity within a collective, preventing speculative selling and prioritizing long-term access, and offering quota-based support to young or new fishers to help them enter the sector. (Eurofish 2024)

References

DAFA (2025). Danish Agriculture and Fisheries Agency. Fishing permits. https://lfst.dk/erhvervsfiskeri/tilladelser/fiskeritilladelser

Eurofish (2024). The Danish coastal fishery faces challenges but also opportunities. https://eurofish.dk/the-danish-coastal-fishery-faces-challenges-but-also-opportunities/

European Justice (2025). Access to justice at Member State level. Denmark. https://e-justice.europa.eu/access-justice-member-state-level/dk_en

FAO (2025a). Fisheries and Aquaculture. Country profile. Denmark. https://www.fao.org/fishery/en/facp/dnk?lang=en

FAO (2025b). FAOLEX database. Denmark. Fisheries Act. https://www.fao.org/faolex/results/details/en/c/LEX-FAOC134943

EU (2013), Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. https://www.legislation.gov.uk/eur/2013/1380/contents#

Retsinformation (2025). Executive Order on Fisheries and Fish Farming Act (Fisheries Act). https://www.retsinformation.dk/eli/lta/2019/261

M1.3	**M1.3 There is an organisation responsible for collecting data and (scientifically) assessing the fishery.** *In reaching a determination for M1.3, the assessor should consider if the following is in place:*
	M1.3.1 The organisation(s) responsible for collecting data and assessing the fishery is/are clearly identified.
	M1.3.2 The management system receives scientific advice regarding stock, non-target species and ecosystem status.
	M1.3.3 Scientific advice is independent from the management organisation(s) and transparent in its formulation through a clearly defined process.
Clause outcome	*Pass*

Rationale

The EU's data collection framework outlines the EU countries' obligations to collect, manage, and make available a wide range of fisheries and aquaculture data needed for scientific advice. This includes biological, environmental, economic, and social data. Member States' data collection activities are financially supported by the EU. Data collection needs to ensure accuracy, reliability, and timeliness, safe storage, and improved availability of data. (EC 2025).

Denmark has dedicated organizations responsible for collecting data and assessing fisheries, both to support sustainable management and to meet national and EU obligations under the Common Fisheries Policy (CFP). The DTU Aqua – National Institute of Aquatic Resources is the primary scientific institution for fisheries research and assessment in Denmark, is part of the Technical University of Denmark (DTU) and conducts stock assessments, surveys at sea and biological sampling, fisheries impact and ecosystem studies, and advice to Danish government and EU bodies, including ICES. (DTU Aqua 2025)

The International Council for the Exploration of the Sea (ICES), which is an intergovernmental marine science organization, meeting societal needs for impartial evidence on the state and sustainable use of our seas and oceans, trough the Baltic Fisheries Assessment Working Group (WGBFAS) assess each year the herring and sprat fisheries, providing advice on fishing opportunities, catch, and effort, including each year total allowable catch (TAC) and an overview of the stock development over time (ICES 2025). In 2023, the Central Baltic herring stock was benchmarked (ICES 2023), and the last assessment for herring and sprat was published in 2024 (ICES 2025).

References

DTU Aqua (2025). Nationa Institute of Aquatic Resources. Fisheries Management. https://www.aqua.dtu.dk/english/research/research-areas/fisheries-management

EC (2024b). Scientific advice and data collection. https://oceans-and-fisheries.ec.europa.eu/fisheries/scientific-input/scientific-advice-and-data-collection_en

ICES (2025). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

ICES. (2023) Benchmark Workshop on Baltic Pelagic stocks (WKBBALTPEL). ICES Scientific Reports. 5:47. https://doi.org/10.17895/ices.pub.23216492

M1.4	**M1.4 The fishery management system is based on the principles of sustainable fishing and a precautionary approach.** *In reaching a determination for M1.4, the assessor should consider if the following is in place:* M1.4.1 A policy or long-term management objective for sustainable harvesting based on the best scientific evidence and a precautionary approach is publicly available and implemented for the fishery.
Outcome	*Pass*

Rationale

As part of the European Union, Denmark fisheries in the Baltic are managed according to a Multiannual Plan (MAP), which contains goals for fish stock management, detailed roadmap for achieving objectives, fishing effort restrictions, specific control rules and technical measures, and measures for implementing the landing obligation, safeguards for remedial action and review clauses (EU 2025).

The regulation (EU) No 2016/1139 stablish the multiannual plan objectives and target for herring and sprat stock in the Baltic Sea, which includes the Gulf of Riga. Article 3 indicates that:

1. The plan shall contribute to the achievement of the objectives of the common fisheries policy (CFP) listed in Article 2 of Regulation (EU) No 1380/2013, in particular by applying the precautionary approach to fisheries management, and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce MSY.

2. The plan shall contribute to the elimination of discards by avoiding and reducing, as far as possible, unwanted catches, and to the implementation of the landing obligation established in Article 15 of Regulation (EU) No 1380/2013 for the species which are subject to catch limits and to which this Regulation applies.

3. The plan shall implement the ecosystem-based approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised. It shall be coherent with Union environmental legislation, in particular with the objective of achieving good environmental status by 2020 as set out in Article 1(1) of Directive 2008/56/EC.

4. Measures under the plan shall be taken in accordance with the best available scientific advice
References EU (2025). Ocean and Fisheries. Multiannual plans. https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/multiannual-plans_en EU (2013). Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007. https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32016R1139

M1.5	**M1.5 There is a clearly defined decision-making process which is transparent, with processes and results made publicly available.** *In reaching a determination for M1.5, the assessor should consider if the following is in place:*	
	M1.5.1	There is participatory engagement through which fishery stakeholders and other stakeholders can access, provide information, consult with, and respond to, the management systems' decision-making process.
	M1.5.2	The decision-making process is transparent, with results made publicly available.
	M1.5.3	he fishery management system is subject to periodic internal or external review to validate the decision-making process, outcomes and scientific data.
Outcome	*Pass*	

Rationale

Regarding the EU, the latest reform of the CFP, introduced in 2013, features regionalization, allowing EU countries with a management interest to propose detailed measures. These measures can then be adopted by the Commission as delegated or implementing acts and transposed into EU law (EC 2025a). The CFP foresees regionalization for several instruments, including multiannual plans, discard plans, the establishment of fish stock recovery areas, conservation measures to comply with EU environmental laws, and technical measures, to ensure that joint recommendations reflect the views of stakeholders (EC 2025b). According to the CFP, Multiannual plans should be adopted in consultation with Advisory Councils, operators in the fishing industry, scientists, and other stakeholders having an interest in fisheries management.

In Denmark, the primary fisheries legislation is the Fisheries Act, promulgated, cf. Consolidation Act No. 764 of 19 June 2017, with the amendments resulting from Act No. 1563 of 19 December 2017, Act No. 736 of 8 June 2018, and Act No. 1734 of 27 December 2018, which empowers the Ministry of Food, Agriculture and Fisheries to implement the measures of the CFP (Retsinformation 2025).

All of the information used to produce this MarinTrust assessment report was freely available online. The ICES advice primarily guides the fisheries management decision-making process, the basis for which and its outcomes are made available via the ICES website. Decisions and outcomes at the EU level are published on the EC website and elsewhere. This indicates that the decision-making process is transparent.
References EC (2025a). https://oceans-and-fisheries.ec.europa.eu/policy/common-fisheries-policy-cfp_en EC (2025b). Multiannual plans. https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/multiannual-plans_en Retsinformation (2025). Executive Order on Fisheries and Fish Farming Act (Fisheries Act). https://www.retsinformation.dk/eli/lta/2019/261

M2 Surveillance, control and enforcement

M2.1	**M2.1 There is an organisation responsible for monitoring compliance with fishery laws and regulations.** *In reaching a determination for M2.1, the assessor should consider if the following is in place:*	
	M2.1.1	There is an organisation responsible for monitoring compliance with specific monitoring, control and surveillance (MCS) mechanisms in place.
	M2.1.2	There are relevant tools or mechanisms used to minimise IUU fishing activity.
	M2.1.3	There is evidence of monitoring and surveillance activity appropriate to the intensity, geography, management control measures and compliance behaviour of the fishery.
Outcome	*Pass*	

Rationale

Monitoring and enforcement of fisheries compliance in the EU is primarily the responsibility of the individual member states. Through the Council Regulation No. 1005/2008, a Community system is established to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing, where each Member State shall take appropriate measures, in accordance with Community law, to ensure the effectiveness of that system. In Denmark, the Danish Fisheries Agency operates under the Ministry of Food, Agriculture and Fisheries and is legally empowered to (DFA 2025):

- Inspect fishing vessels at sea, in port, and during landing.
- Control catches, logbooks, and landing declarations.

- Monitor and enforce compliance with National fisheries legislation and EU regulations, including those from the CFP.
- Operate the Vessel Monitoring System (VMS) and Electronic Reporting System (ERS)
- Conduct risk-based inspections of fishing gear and bycatch, fishing licenses and permits, and minimum sizes and closed areas/seasons.
- Apply penalties for non-compliance, such as fines, quota deductions, and license suspensions or revocations.

National control and enforcement activities are supported by the European Fisheries Control Agency (EFCA). The EFCA aims to "promote the highest common standards for control, inspection and surveillance under the CFP" (EFCA 2025a). The EFCA collaborates with the European Border and Coast Guard Agency and the European Maritime Safety Agency to support the various national agencies responsible for coastguard functions.

The EFCA coordinates international control and enforcement activities through the use of Joint Deployment Plans (JDPs). The JDP for the Baltic Sea, which coordinates actions between Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, and Sweden, has been in place since 2007. (EFCA 2025b)

References

DFA (2025). Danish Fisheries Agency. Control. https://lfst.dk/erhvervsfiskeri/kontrol

EFCA (2025a). Mission and Strategy. https://www.efca.europa.eu/en/content/mission-and-strategy

EFCA (2025b). Baltic Sea JDP overview. https://www.efca.europa.eu/en/content/baltic-sea

M2.2	**M2.2 There is a framework of sanctions which are applied when infringements against laws and regulations are discovered.** *In reaching a determination for M2.2, the assessor should consider if the following is in place:*	
	M2.2.1 The laws and regulations provide for penalties or sanctions that are adequate in severity to act as an effective deterrent.	
	M2.2.2 There is no evidence of systematic non-compliance.	
Outcome	*Pass*	

Rationale

Regulation (EC) No 1224/2009 establishes a community system for control, inspection and enforcement to ensure compliance with the rules of the common fisheries policy. EU countries must ensure that a system of inspections and enforcement measures is in place to identify infringements and sanction offenders. They are responsible for establishing their own sanctioning systems but to

ensure a level playing field they must conform to the requirements of the EU laws. These requirements include the obligation for sanctions to be 'dissuasive, proportionate and effective', to consider the seriousness and potential economic benefit of the offence as well as the prejudice to fishing resources and marine environments. EU countries are required to have a point system to sanction fishing vessel masters and license holders when they commit serious infringements, the number of points to be attributed for specific infringements is fixed in detailed rules. Any vessel that accumulates more than a certain number of points in three years will have its fishing license suspended for up to 12 months (EC 2025).

References

EC (2009). 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/legal-content/EN/TXT/?uri=CELEX%3A02009R1224-20241011

EC (2025). Infringements and sanctions. https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/enforcing-rules/infringements-and-sanctions_en

M2.3	**M2.3**	**There is substantial evidence of widespread compliance in the fishery, and no substantial evidence of IUU fishing.** *In reaching a determination for M2.3, the assessor should consider if the following is in place:*
	M2.3.1	The level of compliance is documented and updated routinely, statistically reviewed and available.
	M2.3.2	Fishers provide additional information and cooperate with management/enforcement agencies/organisations to support the effective management of the fishery.
	M2.3.3	The catch recording and reporting system is sufficient for effective traceability of catches per vessel and supports the prevention of IUU fishing.
Outcome	*Pass*	

Rationale

The EFCA publishes quarterly reports detailing control and enforcement activities under the Baltic Sea JDP (EFCA 2024a). The most recent available report is from January to June 2024 (EFCA 2024b), which states that as part of the JDP, there were (across the entire Baltic Sea area) 1,393 inspections

carried out ashore, the majority on landings, including inspections on 44 vehicle transport, 10 on businesses and 4 inspections related to the gear. The inspection teams reported 57 suspected infringements detected during landing inspections on fishing vessels. There were 2 suspected infringements detected during the transport and 2 in business inspections. At sea, during the reporting period, 274 inspections were carried out, including 47 inspections of fishing gear (e.g. salmon or eel traps) with 4 suspected infringements reported. MS also reported 133 sightings. No suspected infringements were detected related to sightings. Aircraft surveillance reported 88 air sightings with no suspected infringements detected during the surveillance flights carried out in this period. (EFCA 2024b).

Throughout the compilation of this Marin Trust assessment report, no evidence was encountered suggesting widespread non-compliance in the fishery, and available evidence indicates that a robust and focused control and enforcement regime is in place.

References

EFCA (2024a). Baltic Sea JDP, Reports 2023. https://www.efca.europa.eu/en/content/BalticS-reports-2024

EFCA (2024b). Baltic Sea JDP Q2 Report. https://www.efca.europa.eu/sites/default/files/2024-11/6M-2024-WEB%20report-JDP-BS.pdf

Species requirements

This section, or module, comprises of four species categories. Each species in the catch is subject to an assessment against the relevant species category in this section (see clauses 1.2 and 1.3 and Table 6).

Type 1 species can be considered the 'target' or 'main' species in the fishery under assessment. They make up the bulk of the catch and a subjected to a detailed assessment. Type 1 species must represent 95% of the total annual catch. If a species-specific management regime is in place for a Type 1 species, it shall be assessed under Category A. If there is no species-specific management regime in place for a Type 1 species, it shall be assessed under Category B.

Type 2 Species can be considered the 'non-target' species in the fishery under assessment. They comprise a small proportion of the annual catch and are subjected to a relatively high-level assessment. Type 2 species may represent a maximum of 5% of the annual catch. If a species-specific management regime is in place for a Type 2 species, it shall be assessed under Category C. If there is no species-specific management regime in place for a Type 2 species, it shall be assessed under Category D.

Species that comprise less than 0.1% of the catch are not required to be assessed or listed here.

Category A species

3.1. All clauses must be met for a species to pass the Category A assessment.

3.1.1. If a species fails any of the Category A clauses, it should be re-assessed as a Category B species.

Sprat - *Sprattus sprattus*

A1 Data collection

A1.1	**A1.1 Landings data are collected such that the fishery-wide removals of this species are known.**
Outcome	*Pass*

Rationale

The EU Fisheries Control System, through the Fisheries Control Regulation (EC Regulation No 1224/2009), requires that each vessel record data on catches (target species and bycatch) in logbooks and complete a landing declaration indicating specifically all quantities of each species landed. Information should be transmitted to the competent authority of each member state, who then provide it to the Commission. (EC 2009).

Russia does not report landing information to ICES; however, the Baltic Fisheries Assessment Working Group (WGBFAS) estimates catches based on information available on the Russian Federation's official websites, providing a comprehensive overview of the fishery removals (ICES 2025a). Uncertainty around the accuracy of this catch data is factored into the stock assessment process.

The total catch of sprat in the Baltic Sea in 2024 was 239,888t (ICES 2025b)

Landings data are collected and A1.1 is met.

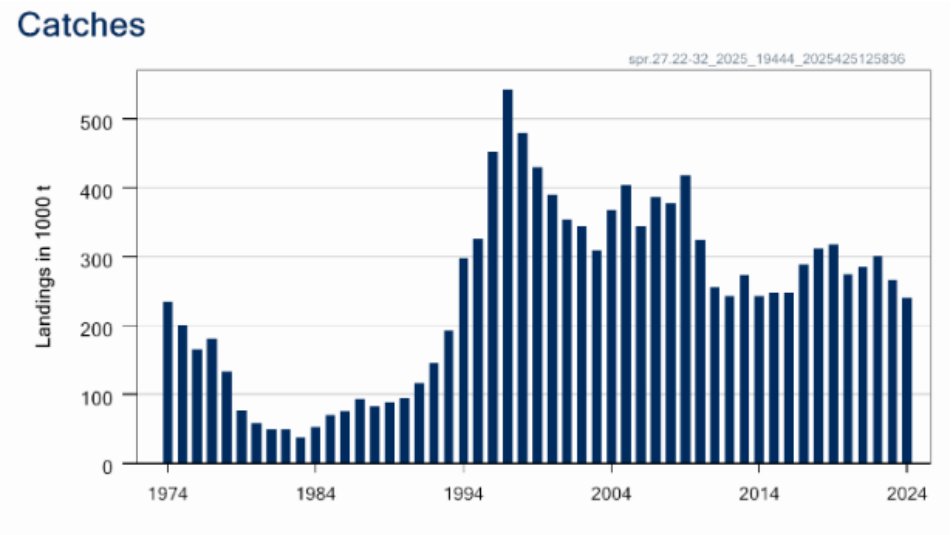

Figure 1. Sprat catches from 1974 to 2024 in ICES subdivisions 22–32, Baltic Sea (ICES 2025b)

References

EC (2009). Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of the common fisheries policy. In force. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009R1224-20241011.

ICES (2025a). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

ICES (2025b). Sprat (*Sprattus sprattus*) in subdivisions 22-32 (Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202893.v1

A1.2	**A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.**
Outcome	*Pass*

Rationale

In addition to commercial catch data, the stock assessment carried out annually by the ICES Baltic Fisheries Assessment Working Group (WGBFAS) utilises two acoustic survey indices (the Baltic Acoustic Spring Survey (BASS) and the Baltic International Acoustic Survey (BIAS)); and natural mortalities from the ICES multispecies model (ICES 2025). The model assumes discards and bycatch are negligible. During surveys, sampling is done with echo sounders and pelagic trawls. All fish species in the catch are measured in length, and biological samples, including age, are taken on the target species, herring and sprat. The Baltic Sea countries meet in the Baltic International Fish Survey Working Group (WGBIFS), and the results from each country are compiled in a common database. (SLU 2025, ICES 2024).

The 2025 catch advice includes a section covering the quality of the assessment, which notes that misreporting of herring and sprat is an ongoing problem which is challenging to quantify, and which introduces an unquantifiable level of uncertainty into the assessment. However, efforts are underway to estimate the levels of misreporting (ICES 2025).

Sufficient additional information is collected to enable an indication of stock status to be estimated, and A2.1 is met.

References

ICES (2024). Baltic International Fish Survey Working Group (WGBIFS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.25922290.v1

ICES (2025). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

SLU (2025). Sveriges lantbruksuniversitet (Swedish University of agricultural Sciencces). BIAS – Baltic International Acoustic Survey. https://www.slu.se/en/environment/statistics-and-

environmental-data/environmental-data-catalogue/bias/.

A2 Stock assessment

A2.1	**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.**
Outcome	*Pass*

Rationale

Sprat in the Baltic Sea, is subjected to an annual stock assessment carried out by the ICES Baltic Fisheries Assessment Working Group (WGBFAS). The stock was benchmarked in 2023 (ICES, 2023a), and outcomes were implemented in the last assessment published in 2025 (ICES, 2025). The benchmarking process ensures the stock assessment recognises the most recent available scientific understanding of the species, the stock, the fishery, and the ecosystems within which they occur. The stock assessment is conducted as a whole following the ICES methodology (ICES, 2023b).

The data used for the stock assessment included landing and catch data from all countries exploiting the stock, as well as biological data such as age composition, mean weights at age, maturity at age, and natural mortality. Additionally, fishery-independent information from the Baltic International Acoustic Survey (BIAS) and the Baltic Spring Survey (BASS) were also utilized. (ICES, 2025).

An annual stock assessment is conducted and A2.1 is met.

References

ICES. (2023a) Benchmark Workshop on Baltic Pelagic stocks (WKBBALTPEL). ICES Scientific Reports. 5:47. https://doi.org/10.17895/ices.pub.23216492

ICES. (2023b). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1. https://doi.org/10.17895/ices.advice.22116890

ICES (2025). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

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

Rationale

The WGBFAS stock assessment indicates the status of the stock relative to target and limit reference points. These reference points were updated in 2023 as a result of the full benchmarking of the stock (ICES 2023a) The reference points are listed in the table below. Key amongst these for the purpose of this Marin Trust assessment are the management plan target reference point (MAP MSY $B_{trigger}$ = 541,000t) and limit reference point (MAP B_{lim} = 459,000t) (ICES 2025).

The 2025 stock assessment predicted that SSB at spawning time in 2025 would be 601,856t, and the 2025 catch advice states that "Spawning-stock size is above MSY $B_{trigger}$, B_{PA}, and B_{lim}" (ICES 2025).

The assessment provides an indication of stock status relative to reference points, and A2.2 is met.

Framework	Reference point	Value	Technical basis	Source
Maximum sustainable yield (MSY) approach	MSY $B_{trigger}$	541 000	B_{PA}	ICES (2023a)
	F_{MSY}	0.34	Stochastic simulations with Beverton–Holt and segmented regression stock-recruitment model	ICES (2023a)
Precautionary approach	B_{lim}	459 000	Biomass that produces half of the maximal recruitment in the Beverton–Holt stock-recruitment relationship	ICES (2023a)
	B_{PA}	541 000	$B_{lim} \times \exp(1.645 \times \sigma)$, where $\sigma = 0.1$	ICES (2023a)
	F_{PA}	0.35	F_{P05}; the F that leads to SSB ≥ B_{lim} with 95% probability	ICES (2023a)
Management plan	Multiannual plan (MAP) MSY $B_{trigger}$	541 000	MSY $B_{trigger}$	ICES (2023a)
	MAP B_{lim}	459 000	B_{lim}	ICES (2023a)
	MAP F_{MSY}	0.34	F_{MSY}	ICES (2023a)
	MAP target F_{lower}	0.26	Consistent with the ranges that result in a ≤ 5% reduction in long-term yield compared with MSY	ICES (2023a)
	MAP target F_{upper}	0.35	Consistent with the ranges that result in a ≤ 5% reduction in long-term yield compared with MSY, constrained by F_{P05}	ICES (2023a)

Table 3. Sprat in ICES subdivisions 22-32 (Baltic Sea) reference points, values, and their technical basis. Weight in tonnes (ICES 2025).

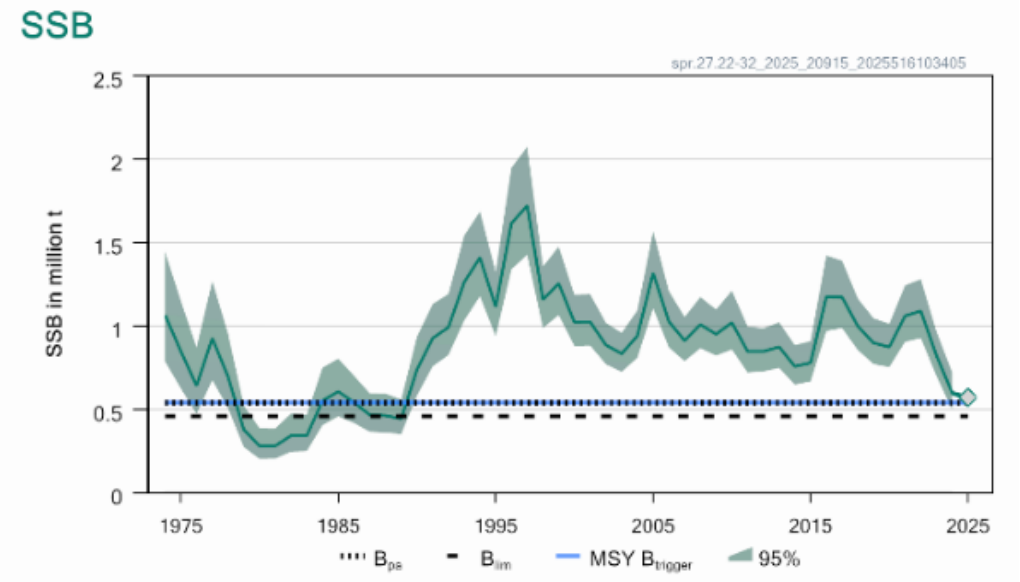

Figure 2. Sprat in ICES subdivisions 22-32 (Baltic Sea) spawning-stock size above MSY $B_{trigger}$, B_{pa}, and B_{lim} (ICES 2025).

References ICES (2023) Benchmark Workshop on Baltic Pelagic stocks (WKBBALTPEL). ICES Scientific Reports. 5:47. https://doi.org/10.17895/ices.pub.23216492 ICES (2025). Sprat (*Sprattus sprattus*) in subdivisions 22-32 (Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202893.v1

A2.3	**A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.**
Outcome	*Pass*
Rationale The annual ICES advice provides an indication of the volume of fishery removals which is appropriate for the current stock status in the form of recommended catches in the upcoming year. The latest advice indicates that when the EU multiannual plan (MAP) for the Baltic Sea is applied, catches in 2026 that correspond to the F ranges in the plan are between 176,056t and 230,518t. According to the MAP, catches higher than those corresponding to FMSY (224,616t) can only be taken under conditions specified in the plan, while the entire range is considered precautionary when applying the ICES advice rule (ICES 2025) The stock assessment provides an indication of an appropriate level of fishery removals, and A2.3 is met.	
References ICES (2025). Sprat (*Sprattus sprattus*) in subdivisions 22-32 (Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202893.v1	

A2.4	**A2.4 The assessment is subject to internal or external peer review.**
Outcome	*Pass*
Rationale The Guide to the ICES Advisory Framework and Principles (ICES 2023) outlines the process by which ICES conducts scientific activities and provides fisheries management advice. When the results of the assessments are agreed by the ICES groups, they are sent to the ICES Advice Drafting Group, which consists of National Experts, who review them, and they are finally reviewed by the Advisory Committee (ACOM), which delivers the ICES advice. The ACOM advice is grounded on 10 principles to support ecosystem-based management advice. This ensures that the advice is based on the best available science and data, considered legitimate by both authorities and stakeholders, and	

relevant and operational to the policy or management challenge in question (ICES 2023).

Principle 7 states that the process undergoes a peer review phase to ensure that the best available, credible science has been used and to confirm that the analysis provides a sound basis for advice. All analyses and methods are peer reviewed by at least two independent reviewers. For recurrent advice, the review is conducted through a benchmark process; for special requests, through one-off reviews. (ICES 2023). The sprat stock assessment was most recently benchmarked in 2023; thus, it was subject to peer review (ICES 2025).

Figure 3. ICES advice principles, Principle 7 states that the process undergoes a peer review phase. (ICES 2023).

The assessment is peer reviewed, and A2.4 is met.

References

ICES. (2023). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1. https://doi.org/10.17895/ices.advice.22116890

ICES (2025). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

A2.5	**A2.5 The assessment is made publicly available.**
Outcome	*Pass*

Rationale

All the stock assessment information used to produce this MarinTrust assessment report was publicly available. Specifically, information is published in the WGBFAS report (ICES 2023a) and the catch advice (ICES 2025). Additionally, the publication of methodologies, data, deliberations, and outcomes is a core part of the ICES process, as set out by the ICES Advisory Framework and Principles, particularly Principles 4, 5 and 6 (ICES 2023b).

The stock assessment is publicly available, and A2.5 is met.

References

ICES (2023a) Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 5:58.

606 pp. https://doi.org/10.17895/ices.pub.23123768

ICES. (2023b). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1. https://doi.org/10.17895/ices.advice.22116890

ICES (2025). Sprat (*Sprattus sprattus*) in subdivisions 22-32 (Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202893.v1

A3 Harvest strategy

A3.1	**A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.**
Outcome	*Pass*

Rationale

Total fishing mortality is restricted through the use of a TAC, which is generally based on the ICES advice, which in turn is based on the Baltic Sea Multiannual Plan (Regulation (EU) 2016/1139 as amended) (EU 2016). In Russia, the federal law on Fisheries and Protection of Aquatic Biological Resources mandates the establishment of TAC levels for various fish stocks to ensure the conservation of aquatic biological resources (FAF 2021).

There is a mechanism in place to restrict total fishing mortality, and A3.1 is met.

References

EU (2016). Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007. In force. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R1139-20240710.

FAF (2021). Federal Agency for Fisheries. Federal Law of 20.12.2004 N 166-FZ "On Fisheries and Conservation of Aquatic Biological Resources" https://fish.gov.ru/wp-content/uploads/documents/documenty/federalnye_zakony/Federalnyj-zakon_166-FZ_ot_20-12-2004.pdf. Translated by Google.

A3.2	**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.**
Outcome	*Pass*

Rationale

Since 2018, ICES has provided a range of potential catch recommendations to reflect the specifics of the Baltic Sea MAP (see A2.3). The total international quota – i.e. the sum of the EU TAC and the Russian autonomous quota – is generally within the boundaries of the ICES advice, although in the past it has sometimes exceeded the upper boundary of the advice. However, this did not occur between 2020 and 2024. In 2025 the total international TAC has been set around 9% higher than the maximum recommended catch; it remains to be seen whether this will lead to landings significantly above the advice.

SSB has been estimated to be well above the limit reference point since the 90s. Since 2021 catch estimations have not exceeded the top end of the range of advice provided by ICES.

Catches rarely exceed the advice by more than 10%, and SSB has been above the current target reference point for over 30 years. A3.2 is met; however, future assessments should review this conclusion if stock biomass falls below the target reference point.

Year	ICES advice	Catch corresponding to advice	Agreed TAC	ICES catch
2018	MAP target F ranges: F_{lower} to F_{upper} (0.19–0.27), but F higher than F_{MSY} = 0.26 only under conditions specified in MAP	219 152–301 722, but catch higher than 291 715 only under conditions specified in MAP	304 900**	312 200
2019	MAP target F ranges: F_{lower} to F_{upper} (0.19–0.27), but F higher than F_{MSY} = 0.26 only under conditions specified in MAP	225 752–311 523, but catch higher than 301 125 only under conditions specified in MAP	313 100**	317 700
2020	MAP target F ranges: F_{lower} to F_{upper} (0.19–0.27), but F higher than F_{MSY} = 0.26 only under conditions specified in MAP	169 965–233 704, but catch higher than 225 786 only under conditions specified in MAP	256 700**	274 100
2021	Management plan	247 952 (range 181 567–316 833)	268 458**	284 900
2022	Management plan	291 745 (range 214 000–373 210)	295 300**	301 409^,§
2023	Management plan	249 237 (range 183 749–317 905)	269 200**	265 900^
2024	Management plan	241 604 (range 191 075–247 704)	245 200**	239 888^
2025	Management plan	164 947 (range 130 195 – 169 131)	183 700**	
2026	Management plan	224 616 (range 176 056-230 518)		

* EU autonomous quota and does not include Russian Federation catches.
** TAC is calculated as EU + Russian Federation autonomous quotas.
^ Russian Federation landings were not officially reported to ICES, but an estimate is included.
§ Russian Federation landings were updated in 2024 by the Baltic Fisheries Assessment Working Group (WGBFAS).

Table 4. Sprat in subdivisions 22-32 (Baltic Sea) ICES advice, total allowable catches (TACs), and catches. All weights are in tonnes (ICES 2025).

References

ICES (2025). Sprat (*Sprattus sprattus*) in subdivisions 22-32 (Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202893.v1

A3.3	**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).**
Outcome	*Pass*	

Rationale

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 (EU 2016).

Fishery removals are likely to be prohibited if the stock biomass falls below the limit reference point, and A3.3 is met.

References

EU (2016). Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007. In force. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R1139-20240710.

A4 Stock status

A4.1	**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.**
Outcome	*Pass*	

Rationale

The most recent ICES catch advice states that "Spawning-stock size is above MSY $B_{trigger}$, B_{pa}, and B_{lim}" (ICES 2025). Therefore, the fishery meets the first option of this clause, and A4.1 is met.

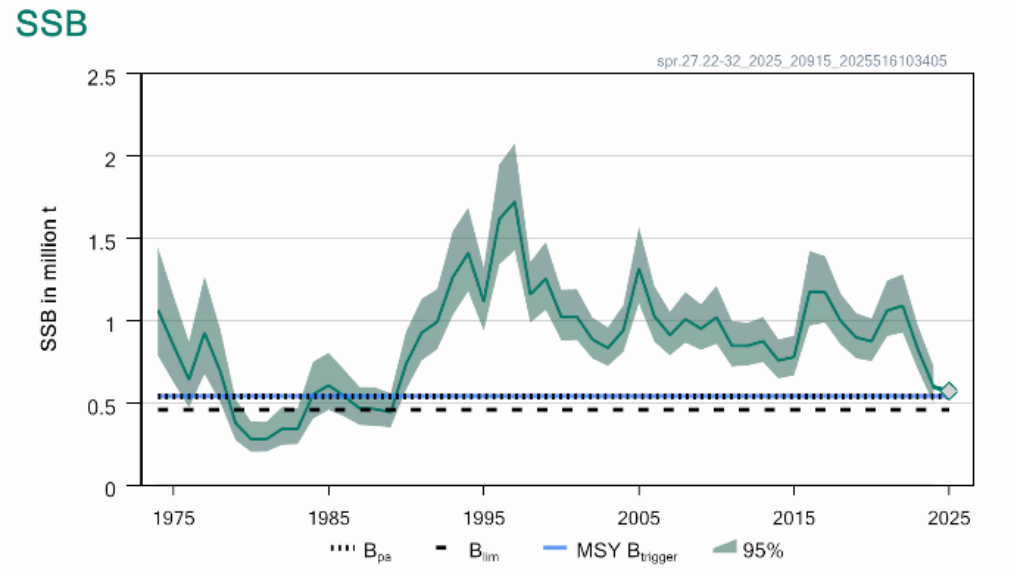

Figure 4. Sprat in ICES subdivisions 22-32 (Baltic Sea) spawning-stock size above MSY $B_{trigger}$, B_{pa}, and B_{lim}. (ICES 2025)

References

ICES (2025). Sprat (*Sprattus sprattus*) in subdivisions 22-32 (Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202893.v1

Central Baltic Herring - *Clupea harengus*

A1 Data collection

A1.1	**A1.1 Landings data are collected such that the fishery-wide removals of this species are known.**
Outcome	*Pass*

Rationale

The EU Fisheries Control System, through the Fisheries Control Regulation (EC Regulation No 1224/2009), requires that each vessel record data on catches (target species and bycatch) in logbooks and complete a landing declaration indicating specifically all quantities of each species landed. Information should be transmitted to the competent authority of each member state, who then provide it to the Commission (EC 2009).

Russia does not report landing information to ICES; however, the Baltic Fisheries Assessment Working Group (WGBFAS) estimates catches based on information available on the Russian Federation's official websites, providing a comprehensive overview of the fishery removals (ICES 2025a). Uncertainty around the accuracy of this catch data is factored into the stock assessment process.

Total catches in the Central Baltic (excluding Gulf of Riga) of herring in 2024 were 75,236 (ICES 2025b).

Landings data are collected and A1.1 is met.

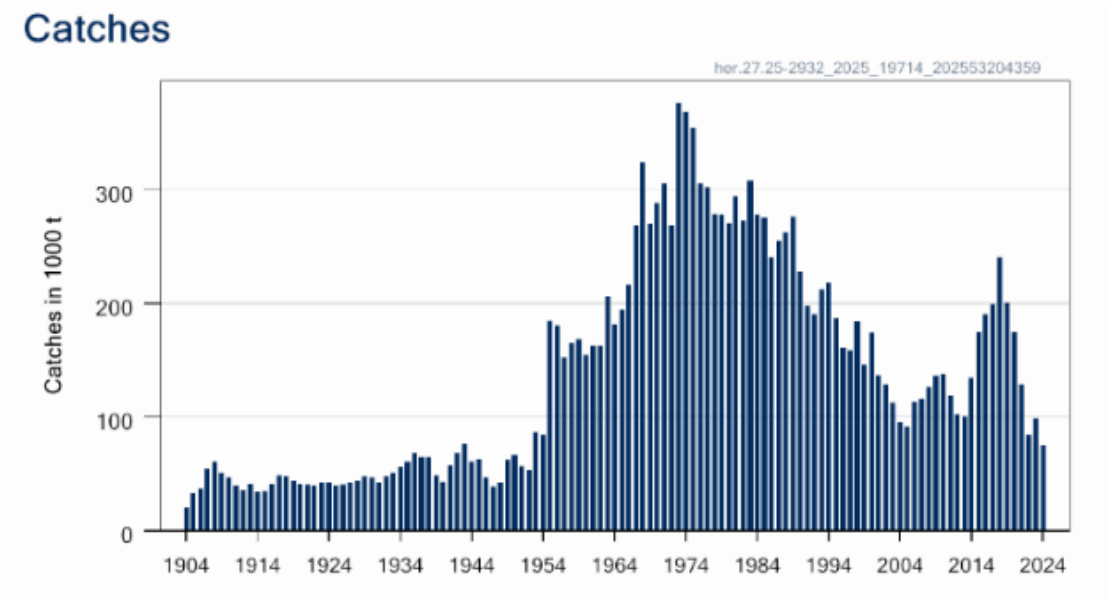

Figure 5. Herring catches from 1904 to 2024 in ICES subdivisions 25–29 and 32, excluding the Gulf of Riga. (ICES 2025b)

References

EC (2009). Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966/2006. In force. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009R1224-20241011.

ICES (2025a). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

ICES (2025b). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

A1.2	**A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.**
Outcome	*Pass*

Rationale

In addition to commercial catch data, the stock assessment carried out annually by the ICES Baltic Fisheries Assessment Working Group (WGBFAS) utilises one acoustic survey indices (the Baltic International Acoustic Survey (BIAS)); and natural mortalities from the ICES multispecies model (ICES 2025a). All fish species in the catch are measured in length, and biological samples, including age, are taken on the target species, herring and sprat. The Baltic Sea countries meet in the Baltic International Fish Survey Working Group (WGBIFS), and the results from each country are compiled in a common database (SLU 2025, ICES 2024).

The stock assessment model assumes discards and bycatch are negligible. The 2025 catch advice includes a section covering the quality of the assessment, which notes that misreporting of herring and sprat is an ongoing problem which is challenging to quantify, and which introduces an unquantifiable level of uncertainty into the assessment. However, efforts are underway to estimate the levels of misreporting (ICES 2025b). Additionally, there is uncertainty surrounding information on Russian catch composition in recent years, and recruitment in 2024 and 2025 is also uncertain. However, ICES recognises these uncertainties and takes them into account during the stock assessment process.

Overall, sufficient additional information is collected to enable an indication of stock status to be estimated, and A2.1 is met.

References

ICES (2024). Baltic International Fish Survey Working Group (WGBIFS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.25922290.v1

ICES (2025a). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

ICES (2025b). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

SLU (2025). Sveriges lantbruksuniversitet (Swedish University of agricultural Sciencces). BIAS – Baltic International Acoustic Survey. https://www.slu.se/en/environment/statistics-and-environmental-data/environmental-data-catalogue/bias/

A2 Stock assessment

A2.1	**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.**
Outcome	*Pass*	

Rationale

Herring in the Central Baltic Sea, excluding the Gulf of Riga, is subjected to an annual stock assessment carried out by the ICES Baltic Fisheries Assessment Working Group (WGBFAS). The stock was benchmarked in 2023 (ICES, 2023a), and outcomes were implemented in the last assessment published in 2025 (ICES, 2025). The benchmarking process ensures the stock assessment recognises the most recent available scientific understanding of the species, the stock, the fishery, and the ecosystems within which they occur. The stock assessment is conducted as a whole following the ICES methodology (ICES 2023b).

The data used for the stock assessment included landing and catch data from all countries exploiting the stock, as well as biological data such as mean weights at age, maturity at age, and natural mortality. Additionally, fishery-independent information from the Baltic International Acoustic Survey (BIAS) was also utilized (ICES, 2025).

An annual stock assessment is conducted and A2.1 is met.

References

ICES. (2023a) Benchmark Workshop on Baltic Pelagic stocks (WKBBALTPEL). ICES Scientific Reports. 5:47. https://doi.org/10.17895/ices.pub.23216492

ICES. (2023b). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1. https://doi.org/10.17895/ices.advice.22116890

ICES (2025). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

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

Rationale

The WGBFAS stock assessment indicates the status of the stock relative to target and limit reference points. These reference points were updated in 2023 as a result of the full benchmarking of the stock (ICES 2023a), which used to be expressed as absolute values and are now expressed in relative values. Key amongst the reference points for the purpose of this Marin Trust assessment are the management plan target reference point MAP MSY $B_{trigger}$, set at B30% (i.e. 30% of the estimated unexploited biomass); and limit reference point MAP B_{lim}, set at 0.15*B0 (i.e. 15% of the estimated unexploited biomass) (ICES 2023).

The 2025 stock assessment projected that SSB in 2026 would be 79% of the target reference point level, and stated, “spawning-stock size is below MSY $B_{trigger}$, and between B_{PA} and B_{lim}”

(ICES 2025).

The assessment provides an indication of stock status relative to reference points, and A2.2 is met.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	$B_{30\%}$	Relative value. Set at 30% of B_0*. Determined through management strategy evaluation with the objective to achieve high sustainable yields without exceeding a 5% probability of SSB falling below B_{lim} in any single year.	ICES (2023a)
	F_{MSY}	$F_{B30\%}$	Relative value. Set as the F which will achieve 30% of B_0. Determined through management strategy evaluation with the objective to achieve high sustainable yields without exceeding a 5% probability of SSB falling below B_{lim} in any single year.	ICES (2023a)
Precautionary approach	B_{lim}	0.15 x B_0	Relative value. Set at 15% of B_0.	ICES (2023b)
	B_{pa}=MSY $B_{trigger}$	$B_{30\%}$	Relative value. Set at 30% of B_0.Determined through management strategy evaluation with the objective to achieve high sustainable yields without exceeding a 5% probability of SSB falling below B_{lim} in any single year.	ICES (2023a)
	F_{pa}	$F_{B25\%}$**= F_{MSY}*1.21	F_{P05}. Relative value. Determined through management strategy evaluation. The F that leads to SSB ≥ B_{lim} with 95% probability.	ICES (2023a)
Management plan	MAP MSY $B_{trigger}$	$B_{30\%}$	MSY $B_{trigger}$	ICES (2023a)
	MAP B_{lim}	0.15 x B_0	B_{lim}	ICES (2023a)
	MAP F_{MSY}	$F_{B30\%}$	F_{MSY}	ICES (2023a)
	MAP target range F_{lower}	$F_{B40\%}$ = F_{MSY}*0.75	Relative value. Determined through management strategy evaluation, consistent with the ranges that result in no more than a 5% reduction in long-term yield compared to MSY.	ICES (2023a)
	MAP target range F_{upper}	$F_{B25\%}$**= F_{MSY}*1.21	Relative value. Determined through management strategy evaluation, consistent with the ranges that result in no more than a 5% reduction in long-term yield compared to MSY. Capped to F_{P05}.	ICES (2023a)

* B_0 is the estimated unexploited spawning biomass at current conditions (average biological parameters for the last 10 years).
** Determined from the management strategy evaluation. To be precautionary, this reference point can only be used with the MSY $B_{trigger}$.

Table 5. Herring in ICES subdivisions 25–29 and 32, excluding the Gulf of Riga, Reference points, values, and their technical basis (ICES 2025a)

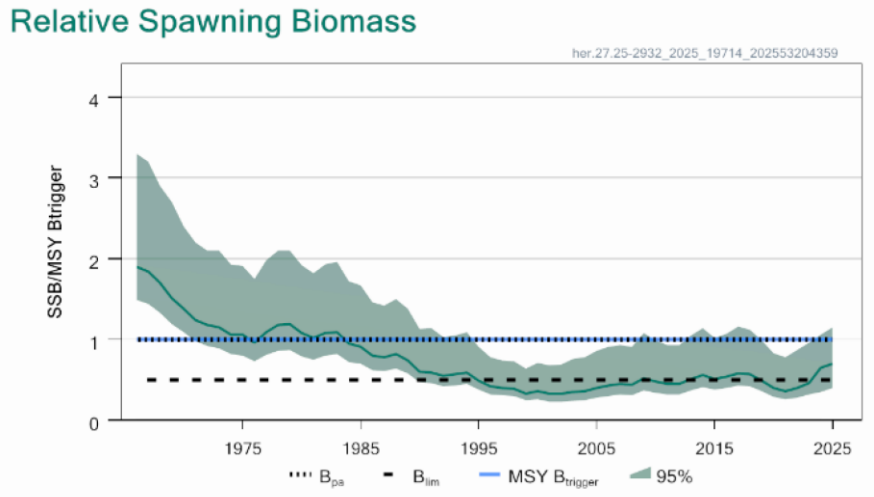

Figure 6. Central Baltic herring, excluding Gulf of Riga, spawning-stock size is below MSY $B_{trigger}$, and between B_{pa}, and B_{lim} (ICES 2025b)

References

ICES. (2023a) Benchmark Workshop on Baltic Pelagic stocks (WKBBALTPEL). ICES Scientific Reports. 5:47. https://doi.org/10.17895/ices.pub.23216492

ICES (2025a). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

ICES (2025b). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

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

Rationale

The ICES advice provides annually an indication of the volume of fishery removals which is appropriate for the current stock status in the form of recommended catches in the upcoming year

The latest catch advice indicates that when the EU multiannual plan (MAP) for the Baltic Sea is applied, catches in 2026 that correspond to the F ranges in the plan are between 120,378 (corresponding to $F_{MSY\ lower} \times SSB_{2026}/MSY\ B_{trigger}$) and 157,996t (corresponding to $F_{MSY} \times SSB_{2026}/MSY\ B_{trigger}$). The fishery for central Baltic herring includes fish from Gulf of Riga herring. The above advice corresponds to catches of herring in subdivisions 25–29 and 32 of no more than 154 542t (corresponding to $F_{MSY} \times SSB_{2026}/MSY\ B_{trigger}$) in 2026, assuming the same proportion of the Gulf of Riga herring and central Baltic herring stocks is taken in subdivisions 25–29 and 32 as was estimated for 2020–2024 (ICES 2025).

The stock assessment provides an indication of an appropriate level of fishery removals, and A2.3 is met.

References

ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

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

Outcome	*Pass*

Rationale

The Guide to the ICES Advisory Framework and Principles (ICES 2023) outlines the process by which ICES conducts scientific activities and provides fisheries management advice. When the results of the assessments are agreed by the ICES groups, they are sent to the ICES Advice Drafting Group, which consists of National Experts, who review them, and they are finally reviewed by the Advisory Committee (ACOM), which delivers the ICES advice. The ACOM advice is grounded on 10 principles to support ecosystem-based management advice. This ensures that the advice is based on the best available science and data, considered legitimate by both authorities and stakeholders, and relevant and operational to the policy or management challenge in question (ICES 2023).

Principle 7 states that the process undergoes a peer review phase to ensure that the best available, credible science has been used and to confirm that the analysis provides a sound basis for advice. All analyses and methods are peer reviewed by at least two independent reviewers. For recurrent advice, the review is conducted through a benchmark process; for special requests, through one-off reviews. (ICES 2023). The sprat stock assessment was most recently benchmarked in 2023; thus, it was subject to peer review (ICES 2025).

Figure 7. ICES advises principles, Principle 7 states that the process undergoes a peer review phase. (ICES 2023).

The assessment is peer reviewed, and A2.4 is met.

References

ICES. (2023). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1. https://doi.org/10.17895/ices.advice.22116890

ICES (2025). Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.29099786.v1

A2.5	**A2.5 The assessment is made publicly available.**
Outcome	*Pass*

Rationale All the stock assessment information used to produce this MarinTrust assessment report was publicly available. Specifically, information is published in the WGBFAS report (ICES 2023a) and the catch advice (ICES 2025). Additionally, the publication of methodologies, data, deliberations, and outcomes is a core part of the ICES process, as set out by the ICES Advisory Framework and Principles, particularly Principles 4, 5 and 6 (ICES 2023b). The stock assessment is publicly available, and A2.5 is met.
References ICES (2023a) Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 5:58. 606 pp. https://doi.org/10.17895/ices.pub.23123768 ICES. (2023b). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1. https://doi.org/10.17895/ices.advice.22116890 ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

A3 Harvest strategy

A3.1	**A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.**
Outcome	*Pass*
Rationale Total fishing mortality is restricted through the use of a TAC, which is generally based on the ICES advice, which in turn is based on the Baltic Sea Multiannual Plan (Regulation (EU) 2016/1139 as amended) (EU 2016). In Russia, the federal law on Fisheries and Protection of Aquatic Biological Resources mandates the establishment of TAC levels for various fish stocks to ensure the conservation of aquatic biological resources (FAF 2021). A mixture of central Baltic herring (subdivisions 25–27, 28.2, 29, and 32) and Gulf of Riga herring (subdivision 28.1) is caught in the central Baltic Sea. In the assessment and the advice, the central Baltic herring stock is considered to be caught both inside and outside the central Baltic Sea. The TAC (sum of the EU and Russian Federation autonomous quotas) is set for herring caught in the central Baltic management area; it includes a small amount of Gulf of Riga herring caught in the central Baltic Sea but excludes central Baltic herring caught outside of the central Baltic Sea (ICES 2025). There is a mechanism in place to restrict total fishing mortality, and A3.1 is met.	
References	

EU (2016). Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007. In force. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R1139-20240710.

FAF (2021). Federal Agency for Fisheries. Federal Law of 20.12.2004 N 166-FZ "On Fisheries and Conservation of Aquatic Biological Resources" https://fish.gov.ru/wp-content/uploads/documents/documenty/federalnye_zakony/Federalnyj-zakon_166-FZ_ot_20-12-2004.pdf. Translated by Google.

ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

A3.2	**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.**
Outcome	*Fail*	

Rationale

Since 2018, ICES has provided a range of potential catch recommendations to reflect the specifics of the Baltic Sea MAP (see A2.3). The total international quota – i.e. the sum of the EU TAC and the Russian autonomous quota – has historically been broadly within the boundaries of the ICES advice. However, while the headline 2023 ICES catch advice called for maximum catches within the range of 41,706t – 52,549t, the total international TAC for 2024 was set at 67,368t, nearly 30% greater than the maximum recommended level (ICES 2025).

An argument could be made that this excess TAC has only occurred in one year, and therefore does not represent removals which “regularly exceed” the level stated in the stock assessment. However, the severity of the excess TAC in 2024 is exacerbated by the conclusion of the 2023 stock assessment that this quota was set at a time when stock biomass was below the limit reference point. Some scientists and management stakeholders – including, originally, the European Commission (EC 2023) – argued that the TAC should be set to zero.

Total fishery removals in 2024 are likely to substantially exceed the range of catch recommendations provided by ICES, and A3.2 is not met.

Year	ICES advice	Catch corresponding to the advice	Agreed TAC	ICES catch SDs 25–29 and 32	ICES catch
2017	MSY approach (F_{MSY} = 0.22)	≤ 216 000	220 629^^		199 4281
2018	MAP target F ranges: F_{lower} to F_{upper} (0.16–0.28), but F higher than F_{MSY} = 0.22 only under conditions specified in MAP	200 236–331 510 but catch higher than 267 745 only under conditions specified in MAP	258 855^^		240 738
2019	MAP target F ranges: F_{lower} to F_{upper} (0.16–0.28), but F higher than F_{MSY} = 0.22 only under conditions specified in MAP	115 591–192 787 but catch higher than 155 333 only under conditions specified in MAP	200 260^^		200 956
2020	MAP target F ranges: F_{lower} to F_{upper} (0.16–0.28), but F higher than F_{MSY} = 0.22 only under conditions specified in MAP	130 546–214 553 but catch higher than 173975 only under conditions specified in MAP	182 484^^		174 521
2021	Management plan	111 852 (range 83 971–138 183)	126 051^^		128 961
2022	Management plan	71 939 (range 52 443–87 581)	80 753^^		83 821^^^§
2023	Management plan	95 643 (range 70 130–95 643)	97 822^^		98 696^^^
2024	Management plan	52 549 (range 41 706–52 549)	67 368^^		75 236^^^
2025	Management plan	125 344 (range 95 340–125 344)	110 881^^		
2026	Management plan	157 996 (range 120 378 – 157 996)			

* 1988–2003 including Gulf of Riga herring.
** TAC for subdivisions 22–29S and 32.
*** TAC for subdivisions 25–28.2, 29, and 32.
^ EU TAC for subdivisions 25–28.2, 29, and 32.
^^ TAC is calculated as EU (subdivisions 25–28.2, 29, and 32) + Russian Federation autonomous quotas.
^^^ Russian Federation landings were not officially reported to ICES, but an estimate is included.
§ Russian Federation landings were updated during the Baltic Fisheries Assessment Working Group (WGBFAS) 2024 meeting.

Table 6. Herring in subdivisions (SDs) 25–29 and 32, excluding the Gulf of Riga. ICES advice, total allowable catches (TACs), and catches. All weights are in tonnes. (ICES 2025)

References

ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

A3.3	**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).**
Outcome	*Fail*

Rationale

The 2023 ICES advice stated that the stock was substantially below the LRP; noted that the MAP requires fishing pressure to be set at a level which reduces the chance of SSB falling below LRP to less than 5%; and stated that the stock will likely remain under LRP even with zero fishing in 2024. However, despite this, the ICES headline catch advice recommended a quota of between 41,706t and 52,549t (ICES 2023), although text included within the advice also noted that "The EU MAP states, "Fishing opportunities shall in any event be fixed in such a way as to ensure that there is less than a 5% probability of the spawning stock biomass falling below B_{lim}"" (ICES 2023).

Due to the state of the stock, in August 2023 the European Commission proposed the closure of the targeted central Baltic herring fishery (EC 2023). However, this proposal was not implemented, and the 2024 TAC was eventually set at 40,368t (EC 2023a). The 2024 ICES advice indicates that when combined with the Russian Federation autonomous quota, the total international TAC in 2024 was 67,368t.

In conclusion, despite biomass being below the LRP, the 2024 TAC was set substantially higher than the level recommended by ICES. A3.3 is not met.

References

ICES (2023) Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). Replacing advice provided in May 2023. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.25–2932. https://doi.org/10.17895/ices.advice.23310368

ICES (2024). Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019276.v1

A4 Stock status

A4.1	**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.**
Outcome	*Fail*	

Rationale

The stock is currently estimated to be above the limit reference point (B_{lim}) but below the target reference points B_{pa} and MSY $B_{trigger}$ (ICES 2025), therefore the first and third statements of this clause are not met.

In order to meet the second statement, there must be evidence that a fall below the limit reference point would result in fishery closure. The 2023 stock assessment concluded that stock biomass was

below the limit reference point level (ICES 2023). However, the fishery remained open in 2024, with a total international TAC of 67,368t, nearly 30% more than the maximum recommended by the ICES advice (52,549t). There is conclusive evidence that the fishery is not closed when biomass falls below the limit reference point, and the second statement is not met. A4.1 is not met. As per the Marin Trust whole fish assessment guidance, the stock has been further assessed under Category B.
References ICES (2023). Herring (*Clupea harengus*) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). Replacing advice provided in May 2023. ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.23310368.v1 ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

Category B species

Category B species are assessed using a risk-based approach.

2.1. The risk matrix in Table B(a) shall be used when assessing a Category B species when estimates of Fishing mortality (F), Biomass (B) and reference points are available.

2.2. The risk matrix in Table B(b) shall be used when assessing a Category B species when no reference points are available.

Central Baltic Herring - *Clupea harengus*

B1	**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).**
Table used B(a) or B(b)	B(a)
Outcome	*Pass*
Rationale Central Baltic herring is managed relative to established target and limit reference points, but fails in Category A assessment; thus information about biomass, fishing mortality, and reference points is available and table B(a) was used. In the last Central Baltic herring stock assessment, it was determined that fishing pressure on the stock is below F_{MSY}, and spawning-stock size is below MSY $B_{trigger}$ and between B_{PA} and B_{lim} (ICES 2025). Taking into account current estimates of biomass and fishing mortality relative to reference points,	

and reading off Table B(a), the outcome is that the stock Passes the Category B assessment.

Table B(a) – Biomass/fishing pressure risk assessment.

	Fishery removals are prohibited	Fishing mortality is below MSY or target reference point	Fishing mortality is around MSY or target reference point, or below the long-term average	Fishing mortality is above the MSY or target reference point, or around the long-term average	Fishing mortality is above the limit reference point or above the long-term average (stock is subject to overfishing)
Biomass is above MSY / target reference point	Pass	Pass	Pass	Fail	Fail
Biomass is below MSY / target reference point, but above limit reference point	Pass, but re-assess when fishery removals resume	Pass	Fail	Fail	Fail
Biomass is below limit reference point (stock is overfished)	Pass, but re-assess when fishery removals resume	Fail	Fail	Fail	Fail
Biomass is significantly below limit reference point (recruitment impaired)	Fail	Fail	Fail	Fail	Fail

Table 7. Table B(a) risk matrix. In green squares, results for Central Baltic herring are shown.

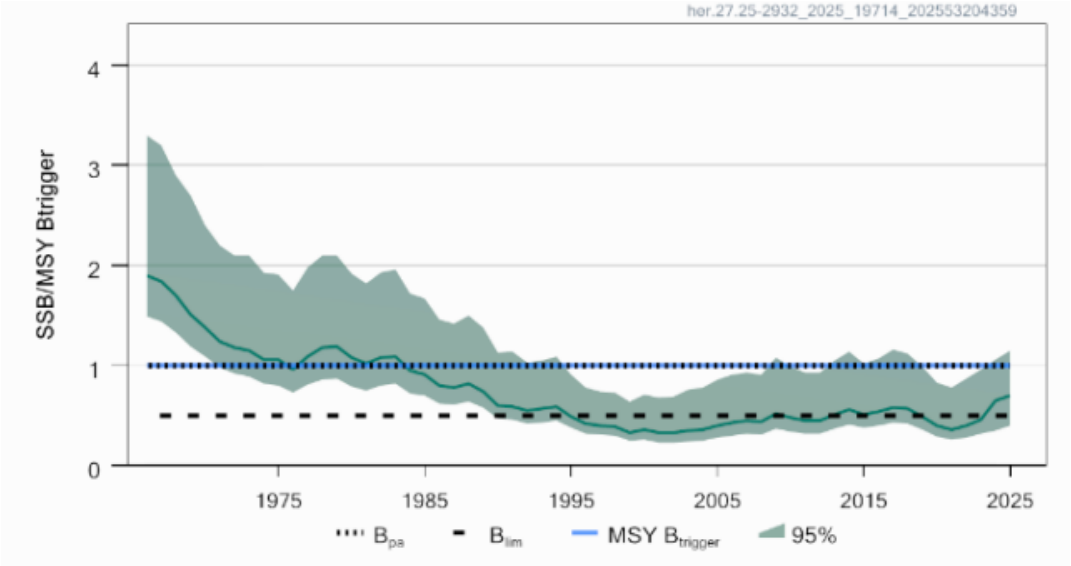

Figure 8. Central Baltic herring, relative spawning biomass and current reference points (ICES

2025).

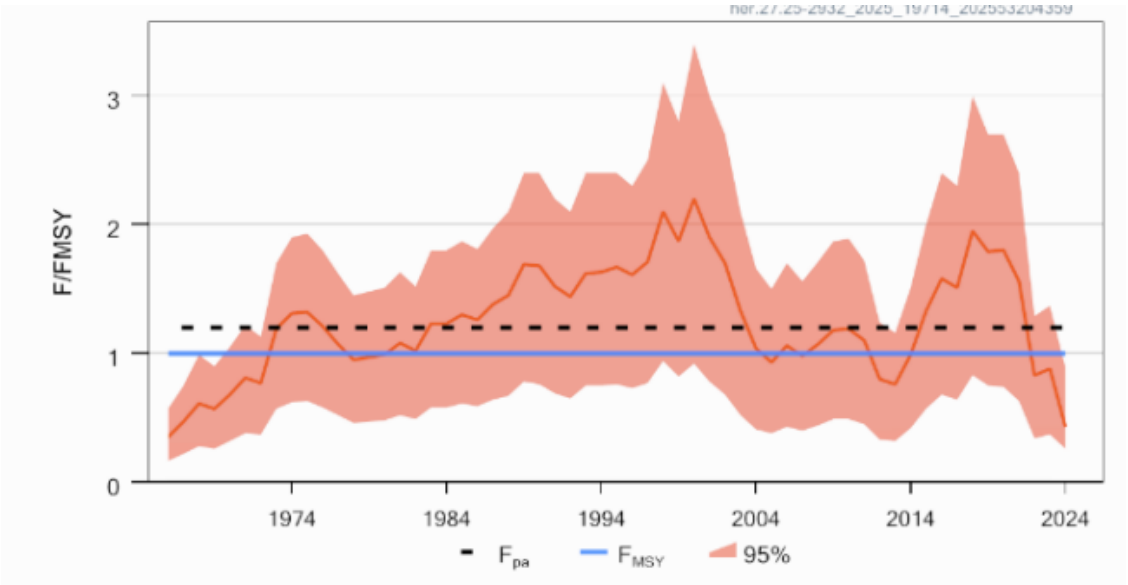

Figure 9. Central Baltic herring, relative fishing pressure (ICES 2025).

References

ICES (2025). Herring (*Clupea harengus*) in subdivisions 25-29 and 32, excluding the Gulf of Riga (central Baltic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202617.v1

Category C species

Gulf of Riga Herring - *Clupea harengus*

C1.1	**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.**
Outcome	*Pass*

Rationale

Gulf of Riga herring stock (ICES subdivision 28.1) most recent assessment was published in May 2025 by The International Council for exploration of the Sea (ICES) Baltic Fisheries Assessment Working Group (WGBFAS). The assessment was carried out using an age-based analytical assessment SAM that uses catches in the model and the forecast (Figure 10) (ICES 2025).

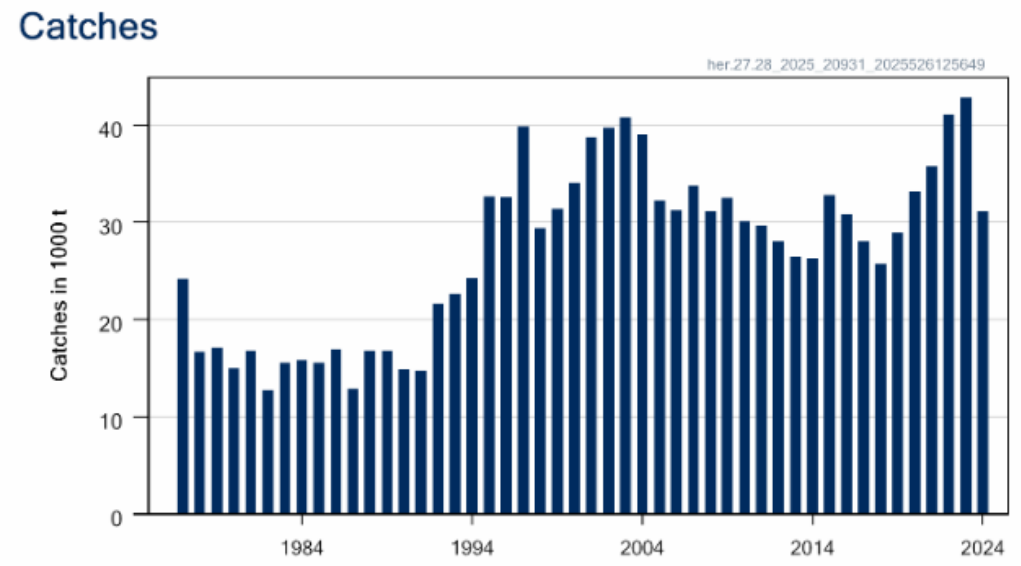

Figure 10. Gulf of Riga herring catches in the Gulf of Riga (ICES subdivision 28.1) 1977-2024 (ICES 2025).

References

ICES (2025). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202620.v1

C1.2	**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.**
Outcome	*Pass*

Rationale

The Gulf of Riga herring stock assessment indicates that spawning-stock size is above MSY $B_{trigger}$, B_{lim} and B_{PA}. Therefore, ICES advises that when the EU multiannual plan (MAP) for the Baltic Sea is applied, the catches in 2026 that correspond to the F ranges in the plan are between 23,962t and 35,643t (ICES 2025).

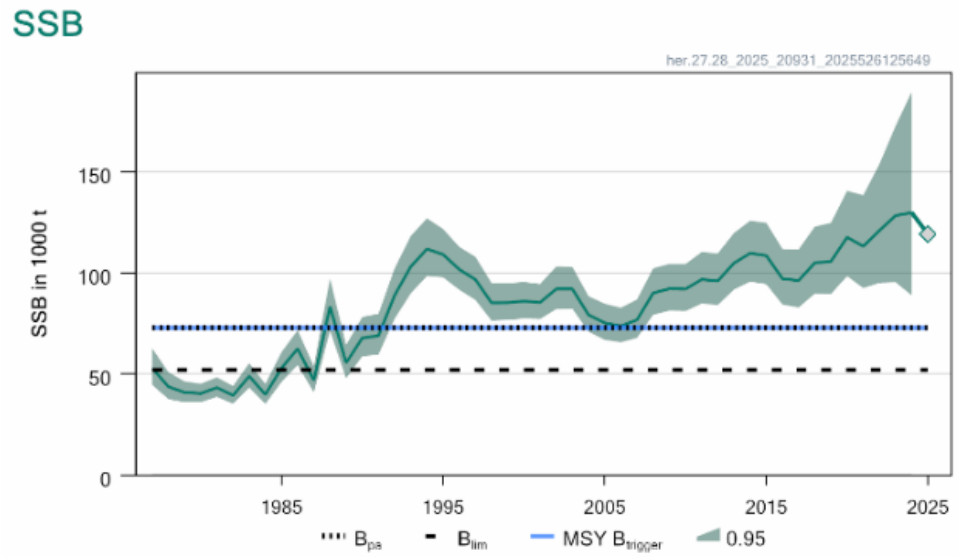

Figure 11. Gulf of Riga herring spawning biomass (ICES subdivision 28.1) (ICES 2025).

References

ICES (2025). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.27202620.v1

Category D species

Category D species are assessed against a risk-based approach.

2.1. The Productivity-Susceptibility Analysis (PSA) in Table D(a) shall be used when assessing Category D species.

2.2. Table D(b) shall be used to calculate the overall PSA risk rating for the Category D species.

2.3. Should the PSA indicate a high risk, further assessment shall be completed against the requirements in Table D(C).

Productivity Susceptibility Analysis (PSA) and scores

Table D(a) provides detailed values and scores for the species productivity and susceptibility attributes and attributes, the assessor shall use Table D(a) to the PSA table.
Table D(b) is used to calculate the overall PSA risk rating for the Category D species.

Species name	Three-spined stickleback - *Gasterosteus aculeatus*	
Productivity attributes	**Value**	**Score**
Average age at maturity	0.4 years [1]	1
Average maximum age	1.1 years [1]	1
Fecundity	255 [1]	2
Average	11 cm [1]	1

maximum size		
Average size at maturity	4.2 cm [1]	1
Reproductive strategy	Guarders: nesters [1]	2
Mean Trophic Level (MTL)	3.3 [1]	3
Density dependence (to be used when scoring invertebrate species only)	N/A	N/A
Susceptibility attributes		
Areal overlap (availability): Overlap of the fishing effort with a species concentration of the stock	<10% overlap Three-spined stickleback is distributed in circumarctic and temperate regions: Extending south to the Black Sea, southern Italy, Iberian Peninsula, North Africa; in Eastern Asia north of Japan (35°N), in North America north of 30-32°N; Greenland.[1]	1
Encounterability: The position of the stock/ species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap [1,2] Three-spined stickleback can be found up to 100m depth [1], while herring inhabits in a range of 0-364m depth[2.] Since herring is the target species and three-spined stickleback represents less than 0.1% of the bycatch species, it was considered that the fishing gear position has a low overlap with the three-spined stickleback given the herring wide range of depth.	1
Selectivity of gear type: Potential of the gear to retain species	Individuals < size of maturity are frequently caught No information was found about the selectivity of gear type for this stock. However, as a precautionary approach, a high-risk score was used in the assessment.	3
Post-capture mortality (PCM): The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Retained	3
Average productivity score		1.57
Average susceptibility score		2
PSA risk rating (from Table D(b))		Pass
Compliance rating		Pass

1 https://www.fishbase.se/summary/Gasterosteus_aculeatus.html

2 https://www.fishbase.se/summary/Clupea-harengus.html

Further assessment for Category D species

Should the PSA indicate a high risk, further assessment shall be completed against the requirements D1 and D2 – Table D(c).

D1	**D1. The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.**
Outcome	Choose an item.
Rationale N/A	
References	

D2	**D2. There is no substantial evidence that the fishery has a significant negative impact on the species.**
Outcome	Choose an item.
Rationale N/A	
References	

Ecosystem requirements

This section, or module, assesses the impacts that the fishery under assessment may have on key ecosystem components: ETP species, habitat and the wider ecosystem.

2.1. All ecosystem criteria must be met (pass) for a fishery to pass the Ecosystem Requirements.

2.1.1. The sub-criteria offer a structured evidence base to demonstrate that the fishery sufficiently meets the ecosystem criteria, it is not expected that sub-criteria are assessed independently of the main criterion.

E1 Impact on Endangered, Threatened or Protected species (ETP species)

E1.1	**E1.1 Information on interactions between the fishery and ETP species is collected.** *In reaching a determination for E1.1, the assessor should consider if the following is in place:*
	E1.1.1 ETP species which may be directly affected by the fishery have been identified.

	E1.1.2	Interactions between the fishery and ETP species are recorded and reported to management organisations.
	E1.1.3	Collection and analysis of ETP information is adequate to provide a reliable indication of the impact the fishery has on ETP species.
Outcome	*Pass*	

Rationale

The Working Group on Bycatch of Protected Species (WGBYC) was established in 2007 and collates and analyses information from across the Northeast Atlantic and adjacent sea areas (Baltic, Mediterranean and Black Seas) related to the bycatch of protected, endangered and threatened (PET) species, including marine mammals, seabirds, turtles and sensitive fish species in commercial fishing operations (ICES 2024).

There are several legislative instruments in ICES Member Countries, Regional Fisheries Management Organisations (RFMOs) and other European Union law concerning bycatch of PET species and their record. ICES obtains data on PETS bycatch through an annual data call. These data are primarily collected during at-sea observations conducted for fisheries monitoring purposes in accordance with the EU Data Collection Framework Regulation 2017/1004 (DCF). While the collection of protected species bycatch data through the DCF as part of the Multiannual Plan (DC-/EU-MAP) may facilitate targeted sampling of métiers of concern (ICES 2024)

Through the 2024 data call, 23 countries out of 25 responded and submitted data on fishing and sampling effort, and 22 for bycatch observations for 2023. Denmark have been participating in data submissions to ICES WGBYC regarding fishing effort, observer effort, and bycatch records since 2019 (ICES 2024).

At the time of writing, the Baltic herring fishery has withdrawn its MSC certification for the third surveillance, as the fishery is now covered by the FFA Finland and SPFPO Sweden Gulf of Bothnia herring fishery certificate. However, in the third surveillance report published in August 2024, no interactions within the Danish pelagic fleet and ETP species were recorded (LRQA 2024).

References

ICES (2024a). Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.27762723.v6

LRQA (2024). Denmark, Estonia, Germany, Sweden Baltic herring and sprat. MSC Third surveillance report. https://fisheries.msc.org/en/fisheries/denmark-estonia-germany-sweden-baltic-herring-and-sprat/@@assessments

E1.2	**E1.2 The fishery has no significant negative impact on ETP species.** *In reaching a determination for E1.2, the assessor should consider if the following is in place:*
	E1.2.1 The information collected in relation to E1.1.3 indicates that the fishery does not have a significant negative impact on ETP species.
Outcome	*Pass*

Rationale

In the Baltic Sea ecoregion, 218 marine mammals (7 species), 390 birds (21 species), 3 elasmobranchs (1 species), 79530 teleost individuals (3 species), 23 chondrosteians (2 species) and 40 lamprey (1 species) were recorded from 129,904 days at sea (ICES 2024a). However, in table 8 are the most recent WGBYC reported by catch species by the fisheries in the Gulf of Riga, and none of them is an ETP species, indicating that interactions with ETP species in this area of the Baltic Sea are rare.

Table 8. WCBYC by catch species for the Gulf of Riga (ICES 2024b)

Species	Common name	IUCN Category	Total specimens
Halichoerus grypus	Grey seal	Least Concern	3
Phalacrocorax carbo	Great cormoran	Least Concern	19
Alosa fallax	Twaite shad	Least Concern	20
Gavia stellata	Red-throated Loon	Least Concern	1
Lampetra fluviatilis	European river lamprey	Least Concern	33

The low probability of ETP interactions is evident in the MSC third surveillance report for the fishery, as there are no recorded interactions with any potentially ETP species. The report indicates concern about the fishery affecting the Baltic Sea sub-population of the harbour porpoise (*Phocoena phocoena*, IUCN Critically Endangered (Hammond et al, 2008)), however data on bycatch of this species since 2018 indicates that interaction rates are low. Denmark fishing vessel haven't recorded any interaction with it (LRQA 2024).

References

Hammond, P.S., Bearzi, G., Bjørge, A., Forney, K.A., Karczmarski, L., Kasuya, T., Perrin, W., Scott, M.D., Wang, J.Y. , Wells, R.S. & Wilson, B (2008). Phocoena phocoena (Baltic Sea subpopulation) (errata version published in 2016). The IUCN Red List of Threatened Species 2008: e.T17031A98831650. https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T17031A6739565.en

ICES (2024a). Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.27762723.v6

ICES (2023b). https://github.com/ices-eg/wg_WGBYC/blob/master/2024/WGBYC2TAF/output/TOR_A_long_table_bycatch_only.xlsx

LRQA (2024). Denmark, Estonia, Germany, Sweden Baltic herring and sprat. MSC Third surveillance

report. https://fisheries.msc.org/en/fisheries/denmark-estonia-germany-sweden-baltic-herring-and-sprat/@@assessments

E1.3	**E1.3 There is an ETP management strategy in place for the fishery.** *In reaching a determination for E1.3, the assessor should consider if the following is in place:*	
	E1.3.1	There are measures applied to the fishery which are designed to manage the impacts of the fishery on ETP species.
	E1.3.2	The measures are considered likely to achieve the objectives of regional, national and international legislation relating to ETP species.
Outcome	*Pass*	
Rationale As noted in E1.2, there is no evidence of interactions between the fishery and any species that fall within the Marin Trust definition of ETP. Despite this, throughout the Baltic Sea, measures are in place to minimise fishing-related ETP mortality. These include area closures (e.g. offshore from the mouth of the Oder), a ban on fishing in inshore areas in certain locations, monitoring requirements, marine protected areas designated for ETP species, and ban on capture of ETP and, where this occurs, their prompt release.		
References N/A		

E2 Impact on the habitat

E2.1	**E2.1 Information on interactions between the fishery and marine habitats is collected.** *In reaching a determination for E2.1, the assessor should consider if the following is in place:*	
	E2.1.1	Habitats which may be directly affected by the fishery have been identified, including any habitats which may be particularly vulnerable.
	E2.1.2	Information on the scale, location and intensity of fishing activity relative to habitats is collected.
	E2.1.3	Collection and analysis of habitat information is adequate to provide a reliable indication of the impact the fishery has on marine habitats.
Outcome	*Pass*	

Rationale

The pelagic trawl gears used in this fishery are not intended to make contact with the seabed, and to avoid damage, vessels will attempt to prevent such interactions wherever possible (seafish 2025, FAO 2025). The assessment guidance for this clause states that "good practice requires there to be a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types". However, for fisheries in the region that interact with seabed habitats, measures are in place to manage and mitigate impacts through mechanisms such as the HELCOM Baltic Sea Action Plan (BSAP), the requirements associated with Natura 2000 sites, and the technical measures outlined in EU regulations.

References

Seafish. (2025). Pleagic trawl. https://www.seafish.org/responsible-sourcing/fishing-gear-database/gear/pelagic-pair-trawl/#:~:text=As%20all%20pelagic%20trawls%20are,the%20bottom%20of%20the%20trawl.

FAO. (2025). Fishing Gear types Trawls.Technology Fact Sheets. In:*Fisheries and Aquaculture*. [Cited Wednesday, August 13th 2025]. https://www.fao.org/fishery/en/geartype/103/en

HELCOM (2023). Baltic Sea Action Plan 2021 update. https://helcom.fi/baltic-sea-action-plan/

E2.2	**E2.2 The fishery has no significant impact on marine habitats.** *In reaching a determination for E2.2, the assessor should consider if the following is in place:*
	E2.2.1 The information collected in relation to E2.1.3 indicates that the fishery does not have a significant negative impact on marine habitats.
Outcome	*Pass*

Rationale

Pelagic trawl gears are not designed to make contact with the seabed. Such contact is likely to be minimal, and consequently, the impact of this gear on benthic habitats and seabed structures is considered minimal, if any (Seafish 2025, FAO 2025).

References

Seafish. (2025). Pleagic trawl. https://www.seafish.org/responsible-sourcing/fishing-gear-database/gear/pelagic-pair-trawl/#:~:text=As%20all%20pelagic%20trawls%20are,the%20bottom%20of%20the%20trawl.

FAO. (2025). Fishing Gear types Trawls.Technology Fact Sheets. In:*Fisheries and Aquaculture*. [Cited Wednesday, August 13th 2025]. https://www.fao.org/fishery/en/geartype/103/en

E2.3	**E2.3 There is a habitat management strategy in place for the fishery.** *In reaching a determination for E2.3, the assessor should consider if the following is in place:*
	E2.3.1 There are measures applied to the fishery which are designed to manage the impact of the fishery on marine habitats.
	E2.3.2 The measures are considered likely to prevent the fishery from having a significant negative impact on marine habitats.
Outcome	*Pass*
Rationale Pelagic gears, such as those used in this fishery, are highly unlikely to cause significant habitat disruption (Seafish 2025, FAO 2025); therefore, no habitat management strategy is necessary, nor are there any measures to mitigate the impact of the fishery on marine habitats.	
References Seafish. (2025). Pleagic trawl. https://www.seafish.org/responsible-sourcing/fishing-gear-database/gear/pelagic-pair-trawl/#:~:text=As%20all%20pelagic%20trawls%20are,the%20bottom%20of%20the%20trawl. FAO. (2025). Fishing Gear types Trawls.Technology Fact Sheets. In:*Fisheries and Aquaculture*. [Cited Wednesday, August 13th 2025]. https://www.fao.org/fishery/en/geartype/103/en	

E3 Impact on the ecosystem

E3.1	**E3.1 Information on the potential impacts of the fishery on marine ecosystems is collected.** *In reaching a determination for E3.1, the assessor should consider if the following is in place:*
	E3.1.1 The main elements of the marine ecosystems in the area(s) where the fishery takes place have been identified.
	E3.1.2 The role of the species caught in the fishery within the marine ecosystem is understood, either through research on this specific fishery or inferred from other fisheries.
	E3.1.3 Collection and analysis of ecosystem information is adequate to provide a reliable indication of the impact the fishery has on marine ecosystems.
Outcome	*Pass*

Rationale

Commercial fisheries in the Baltic Sea are managed according to a Multi-Annual Plan (MAP), EU Regulation 2016/1139. The objectives of the MAP include implementing the ecosystem-based approach to fisheries management, the precautionary approach, and EU legislation including the Marine Strategy Framework Directive (MSFD), Directive 2008/56/EC. Article 3 Clause 3 of the MAP states, "The plan shall implement the ecosystem-based approach to fisheries management in order to ensure that negative impacts of fishing activities on the marine ecosystem are minimised". Article 8 empowers the European Commission to adopt technical measures to "minimise the negative impact of fishing gears and fishing activities on the ecosystem".

Herring and sprat are key forage fish in the Baltic Sea, transferring energy from zooplankton to higher predators such as cod, seabirds, and marine mammals. Since both species are zooplanktivores, their population fluctuations influence zooplankton abundance, which in turn affects phytoplankton blooms and overall ecosystem health by exerting stronger zooplankton grazing pressure and potentially enhancing eutrophication through trophic cascades. Also, variations in sprat stocks have been linked to changes in the fledgling mass of common guillemots (seabirds) (Casini et al. 2004, Österblom 2006).

ICES conducts Ecosystem Overviews, which utilize risk-based methods to identify the primary human pressures and explain how these pressures affect key ecosystem components in each ICES ecoregion. This overview provides information on trends in the ecosystem over recent years and plays a crucial role, providing the context for ecosystem-based management (ICES, 2025). The most recent Workshop for the revision of the Ecosystem Overview of the Baltic Sea Ecoregion (WKBALEO) was carried out in 2024, where experts worked to synthesize the knowledge that underpins the revision of the ICES Baltic Sea Ecosystem Overview, aiming to determine the main human activity sectors that cause pressures impacting the ecosystem components. WKBALEO experts have evaluated the links between sectors, pressures, and ecosystem components using a linkage framework and pressure assessment process that examines and scores all direct pressures and human activities for the Baltic Sea ecoregion following the ICES technical guidelines methodology and using the most up-to-date scientific knowledge (ICES 2024).

References

EU (2016). Regulation (EU) 2016/1139 of the European Parliament and of the Council of 6 July 2016 establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks, amending Council Regulation (EC) No 2187/2005 and repealing Council Regulation (EC) No 1098/2007. https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32016R1139

ICES (2024). Workshop for the revision of Ecosystem Overviews of the Baltic Sea Ecoregion (WKBALEO). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.27203316.v1

ICES (2025). Ecosystem Overviews. https://www.ices.dk/advice/ESD/Pages/Ecosystem-overviews.aspx

Casini, M., Cardinale, M., & Arrhenius, F. (2004). Feeding preferences of herring (*Clupea harengus*) and sprat (*Sprattus sprattus*) in the southern Baltic Sea. *ICES Journal of Marine Science*, *61*(8), 1267-1277. https://ui.adsabs.harvard.edu/abs/2004ICJMS..61.1267C/abstract

Österblom, H., Casini, M., Olsson, O., & Bignert, A. (2006). Fish, seabirds and trophic cascades in

the Baltic Sea. *Marine Ecology Progress Series*, *323*, 233-238. https://www.int-res.com/abstracts/meps/v323/meps323233

E3.2	**E3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.** *In reaching a determination for E3.2, the assessor should consider if the following is in place:*
	E3.2.1 The information collected in relation to E3.1.3 indicates that the fishery does not have a significant negative impact on marine ecosystems.
Outcome	*Pass*

Rationale

In the most recent Ecosystem overview for the Baltic Sea, results indicate that the most prevalent pressures in the Baltic Sea are related to nutrient discharge from multiple sources, as well as impacts from species extraction, e.g. fishery including bycatch and substrate disturbance. Furthermore, contaminants and litter, mainly due to their persistence and widespread prevalence, were identified as significant pressures in the Baltic Sea (ICES 2024)

The most significant potential ecosystem impacts of the fishery arise from the removal of herring and sprat biomass; however, while fishing is the main activity impacting the ecosystem via selective extraction of species, agriculture and forestry, together with wastewater discharge, pose the major pressure on the ecosystem through nutrient and organic enrichment (ICES 2024).

Although the understanding of the Baltic Sea ecosystem is relatively advanced compared to other marine regions, significant knowledge gaps remain on the cumulative effects of pressures on ecosystem components. For instance, key areas of uncertainty include the mechanistic understanding of how changes in the diet composition of important species alter their trophic positions within the food web, particularly under the influence of human activities (such as fishing) and climate change. This type of information is currently fragmented, yet essential for thoroughly assessing the impacts of anthropogenic pressures and climate-driven shifts on ecosystem dynamics. Therefore, when evaluating the state of the environment in the Baltic Sea, there is a lack of indicators for foodweb status, and threshold values have not yet been defined (ICES 2024).

The Ecosystem Overview of the Baltic Sea states that since the late 1980's "the open-sea system has been dominated by small pelagic fish, such as sprat and herring" (ICES 2024). Additionally, despite the knowledge gaps, ICES catch recommendations – which, as noted in Section A, are broadly followed – are calculated with the ecosystem considerations listed in E3.1 to minimize fisheries ecosystem impacts. No other evidence was encountered during the completion of this report to indicate that the fishery has a significant negative impact on the marine ecosystem.

References

ICES (2024). Workshop for the revision of Ecosystem Overviews of the Baltic Sea Ecoregion (WKBALEO). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.27203316.v1

E3.3	**E3.3 There is an ecosystem management strategy in place for the fishery.** *In reaching a determination for E3.3, the assessor should consider if the following is in place:*	
	E3.3.1	There are measures applied to the fishery which are designed to manage the impacts of the fishery on marine ecosystems.
	E3.3.2	The measures are considered likely to prevent the fishery from having a significant negative impact on marine ecosystems.
Outcome	*Pass*	
Rationale As described in E3.1, the fishery is managed according to a Multi-Annual Plan (MAP), which aims to implement an ecosystem-based approach to fisheries management to minimize the negative impacts of fishing activities on the marine ecosystem. Additionally, as documented through this report, the herring and sprat fisheries in the Baltic are subject to management measures aimed at mitigating their impact on the marine ecosystem, such as the establishment of TACs, technical regulations, regionalization, request of scientific advice, and enforcement and monitoring activities, all designed to ensure sustainable fishing practices and protect the broader ecosystem.		
References N/A		

Annex 1: External Peer Review report

Assessment and determination summary

Fishery name	**Denmark - Clupea harengus - Herring and Sprattus sprattus – Sprat, FAO 27, ICES 25-29, 32 (excluding Gulf of Riga)**
MarinTrust report code	**WFO9**
Type 1 species (common name, Latin name)	*Herring (Clupea harengus) and sprat (Sprattus sprattus)*
Fishery location	*FAO 27, ICES 3.d.25-29, 32 (Central Baltic Sea, excl. Gulf of Riga)*
Gear type(s)	*Pelagic trawls*
Management authority (country/state)	*EU, Denmark*
Certification Body recommendation	*Approved*
FAPRG reviewer recommendation	Agree with CB determination

Summary of peer review outcomes

Summary *Provide any information about the fishery that the reviewers feel is significant to their decision. This summary is used by the Certification Body in the Fishery Assessment Report.*
The Danish pelagic trawl fishery comprises >99% of Baltic sea herring (Clupea harnegus) and sprat (Sprattus sprattus). Stocks are fished by a number of Baltic states, including Latvia, Estonia, Finland and Denmark. A harmonised MT fishery assessment of the stocks for Category A species (sprat & Central Baltic sea herring); B species (Central Baltic sea herring by default); C (Gulf of Riga herring, Central Baltic herring (latter assessed as part of the Gulf of Riga fishery and not applicable to this Danish Baltic sea herring fishery assessment) has previously been undertaken and this assessment outcomes are consistent with the harmonised report. Additionally, the Danish fishery landings composition has very minor quantities (0.1%) of three spined stickleback (Gasterosteus aculeatus) just meeting the threshold for inclusion as a Category D species. This report assessed the Danish (and connected EU) fishery management framework, policy, regulations, fishery monitoring and control, fishery science and planning framework and stakeholder accessibility (M clauses) and also the assessment, management and mitigation of potential ecosystem components; ETP species, habitat and the wider ecosystem health.
General comments on the draft report provided to the peer reviewer
The report is consistent with MT template, methodology and guidance. The peer reviewer is in agreement with the pass decision of the report.

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

1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	Yes

2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	Yes
3. Are the scores in the following sections consistent with the MarinTrust requirements (i.e. do the scores reflect the evidence provided)?	Yes
Section M – Management Requirements	Yes
Category A Species	Yes
Category B Species	Yes
Category C Species	Yes
Category D Species	Yes
Section E – Ecosystem Impacts	Yes

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. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	Yes
The report consists of the harmonised assessment of Category A, B and C species . Category A species refer to Gulf of Riga Herring, Baltic sea sprat, Central Baltic Herring (A default To B), Gulf of Riga Herring (C) . Additionally, the assessment includes the non harmonised assessment of Three-spined stickleback as Category D which is specific to the species categorisation of the Danish landings. The report also includes the State relevant evidence supporting the assessment of Management Framework and Ecosystem Requirement sections. The fishery assessment has been fully completed using the correct template, methodology and guidance.	
Certification Body response	
n/a	

2. Does the species categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	Yes
The species categorisation section was completed using information documented in the 2023 MSC Surveillance asssessment of the fishery, the dataset being derived from Danish landing data from 2021 which is formed from two fisheries, the targeted sprat fishery and the targeted herring fishery. Whilst it might be argued that more recent landing	

data may be available, the assessor notes that (ICES 2025) data identifies that Central Baltic herring represents 99.5% of the catch on average from 2018 to 2024 and that collectively sprat and herring represent 99.68%, demonstrating that it is a very targeted fishery with minor bycatch and very little variability in landing composition. Gulf of Riga herring is assessed as Cat C species (0.2%) and consistent with the harmonised fishery assessment and one minor Cat D species is identified, three spined stickleback at 0.1% on average across the two fisheries (Baltic sea herring/sprat) expressed in the Danish data.
Certification Body response
n/a

3. Is the scoring of the fishery consistent with the MarinTrust requirements, and clearly based on the evidence presented in the assessment report?	Yes
The scoring outcomes of the fishery are consistent with MarinTrust requirements and clearly based on the evidence presented in the report. Harmonised sections are consistent with the Hrmonisation Assessment conducted July 2025 which included the assessment of 8 fishery assessments; including WF09, • WF09 – Denmark – Herring and sprat in the Baltic Sea excluding the Gulf of Riga.	
Certification Body response	
n/a	

3a. Are the “Category A Species” scores clearly justified?	Yes
Category A species are clearly justified and consistent with the harmonisation report whicn included WF09. Also noting the outcome of Central Baltic Herring failing clauses A3.2, A3.3, A4.1 resulting in a default Category B assessment.	
Certification Body response	
n/a	

3b. Are the “Category B Species” scores clearly justified?	Yes
Central Baltic Herring is assessed under Category B by default as it failed Category A assessment. The Cat B assessment is consistent with the July 2025 Harmonisation Report outcome for the combined Baltic Sea Herring fisheries	
Certification Body response	
n/a	

3c. Are the “Category C Species” scores clearly justified?	Yes
Gulf of Riga herring is assessed as a minor species in the Baltic sea Herring and Sprat fishery, representing 0.2% of the catch in the data provided. The outcome of the assessment is consistent with that of the Harmonisation Report of July 2025.	
Certification Body response	
n/a	

3d. Are the “Category D Species” scores clearly justified?	Yes
Three-spined Stickleback is assessed in the WF09 Denmark Baltic Sea Herring and Sprat fishery as a Category D species, representing 0.1% of landings on average, from the two respective targeted fisheries. The scores for productivity and susceptibility attributes are referenced and conform to the fishbase data base and the overall pass score is clearly justified.	
Certification Body response	
n/a	

Are the scores in “Section M – Management Requirements” clearly justified?	Yes
The evidence provided for Section M1.1 refers to the Danish fisheries management system, referencing the MFAF and Danish Fisheries Agency. As an EU member, the fisheries policy and regulations under the CFP framework are also referenced. The Agencies names, functions and the information provision and recognised training (STCW) that are available for fishers are referenced. M1.2 section clearly references the State and EU regulations that legally enpower the agencies (Fisheries and Fish Farming Act, EU 1380/2013). The authorisation of vessels via licensing , the mechansims for dispute resolution and mechanisms that relate to recognising legal rights of small scale fisheries are provided. A M1.3 The assessor has clearly described the data and scientific assessment provisions under the EU data collection framework under the responsibilities of DTU Aqua. Reference to ICES is made, whilst an International intergovernmental body, has participation from Denmark and is based in Denmark. Reference is made to the Baltic Fisheries Assessment Working Group (WBBFAS) and the 2023 benchmark of the Centrral Baltic herring stock assessment. Last assessment 2024. M1.4 score is clearly justified, evidenced by the Multi-annual fisheries management plan, the establishing Regulation, 2016/1139 and refering to 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'. Whilst the assessor does not state it is publically available, it is referenced and available online. M1.5 clauses is evidence refers to accessibility of the process, information and participation of various stakeholdrers (in consultation with Advisory Councils, operators	

in the fishing industry, scientists, and other stakeholders having an interest in fisheries management), and decisions and outcomes at the EU level are published on the EC website and elsewhere. The assessor may wish to confirm that the fishery management system is subject to periodic internal or external review to validate decision making process, outcomes and scientific data, for example, noting that fishery assessments are subject to benchmarking and peer review (referring to M1.3, and A2.4 clauses).
M2.1 score is justified with evidence describing the Danish Fisheries Agency's MCS and referring to European Fisheries Control Agency (EFCA) and at M2.2, referring to evidence of the sanctions and penalties applying to non compliances and that sanctions to be 'dissuasive, proportionate and effective', to consider the seriousness and potential economic benefit of the offence as well as the prejudice to fishing resources and marine environments. The assessor may wish to add that there is no evidence of systematic non-compliance, which is demonstrable and stated from the data evidence at M2.3.
M2.3 scores are justified.

Certification Body response
n/a

Are the scores in "Section E – Ecosystem Impacts" clearly justified?	Yes

The report documents the evidence supporting the clause requirements and E1.1-E1.3 evidence also details the species range and IUCN category of the most frequently encountered non target species; including marine mammals, birds, and other fish species. The assessor evidence describes the collection of protected species bycatch data through the DCF as part of the Multiannual Plan (DC-/EU-MAP) and may facilitate targeted sampling of métiers of concern (ICES 2024) and notes that in the third surveillance report published in August 2024, no interactions within the Danish pelagic fleet and ETP species were recorded (LRQA 2024).
The components of the management strategy for ETP's is described including closures, bans, protected areas, capture ban and release of ETP's where encountered. Scores are justified.
E2.1-E2.3 evidence refers to the low if not absence of interaction of gear with habitat and hence there is a low risk of or very unlikely habitat impact occuring.
E.3.1-3.3 scores are clearly evidenced with 'the MAP includes implementing the ecosystem-based approach to fisheries management, the precautionary approach, and EU legislation including the Marine Strategy Framework Directive (MSFD), Directive 2008/56/EC. ICES (2024, 2025) Ecosystem overviews are referenced indicating this is a continuous management consideration and also identifying gaps in knowledge 'key areas of uncertainty include the mechanistic understanding of how changes in the diet composition of important species alter their trophic positions within the food web, particularly under the influence of human activities (such as fishing) and climate change' and when evaluating the state of the environment in the Baltic Sea, there is a lack of indicators for foodweb status, and threshold values have not yet been defined (ICES 2024). As noted the assessor empahsises that there is an ecosystem strategy and to

minimise the negative impacts of fishing activities on the marine ecosystem. Additionally, as documented through this report, the herring and sprat fisheries in the Baltic are subject to management measures aimed at mitigating their impact on the marine ecosystem, such as the establishment of TACs, technical regulations, regionalisation, request of scientific advice, and enforcement and monitoring activities, all designed to ensure sustainable fishing practices and protect the broader ecosystem.
Certification Body response
n/a

Optional: General peer reviewer comments on the draft report
Report is concise, consistent with methodology and accurately referenced.
Certification Body response
All comments accepted