

MarinTrust Standard V2

Whole fish Fishery Assessment WF09 – Herring and Sprat in ICES Subdivisions 25-29 and 32, excluding the Gulf of Riga

MarinTrust Programme Unit C, Printworks 22 Amelia Street London SE17 3BZ E: <u>standards@marin-trust.com</u> T: +44 2039 780 819

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Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome							
Name(s): TripleNine Thyborøn, FF Skagen A/S							
Country: Denmark							
Email address:		Applicant	Code				
Certification Body Details	S						
Name of Certification Bo	dy:	Global Tru	st Certificatior	ı			
Assessor Name	CB Peer Reviewer	Assessme	nt Days	Initial/Sur	veillance/ Re-approval		
Sam Peacock	Ivan Mateo	1.5 Surveillance 1					
Assessment Period			June 2023 – Ju	ne 2024			
Scope Details							
Management Authority (Country/State)			EU, Denmark				
Main Species			Herring, Clupea harengus Sprat, Sprattus sprattus				
Fishery Location			ICES Subdivisions 25-29 and 32, excluding the Gulf of Riga				
Gear Type(s)			Pelagic trawl				
Outcome of Assessment							
Overall Outcome			PASS				
Clauses Failed			NONE				
CB Peer Review Evaluation			Agree with assessor's assessment				
Fishery Assessment Peer	Review Group Evaluatio	on	PASS				
Recommendation			PASS				

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Table 2. Assessment Determination

Assessment Determination

As at the time of the previous MT assessment of this fishery, the only species regularly present in the catch in sufficient quantities to be covered by this surveillance are herring and sprat. Both species have been categorised by the IUCN as Least Concern, and neither appears in the CITES appendices. Both are managed via regular stock assessments relative to established reference points, and were once again assessed under Category A.

There have been minimal changes in most aspects of the fishery since the previous assessment. The fishery is managed under a legal and administrative framework which meets the requirements of Section M. There is no new evidence to change the conclusions of the previous assessment regarding the potential impacts of the fishery on ETP species, habitats or ecosystems, and the fishery continues to meet the requirements of Section F.

The herring stock assessment was benchmarked by ICES in 2023, leading to the reference points for the stock being updated. As of the most recent stock assessment, SSB is considered to be below the limit reference point. Despite this, the ICES catch recommendation for 2024 is 41,706t – 52,549t. In every year since the current MAP was implemented, the international TAC has been set broadly in line with the ICES advice, and therefore it is reasonable to assume this will also occur in 2024. Generally, a fishery in which stock biomass is below the limit reference point and which remains open does not meet the requirements of clauses A3.3 and/or A4.1. However, after extensive consideration, it was concluded that the specific circumstances which had led to the current situation in this fishery were extenuating; namely:

- 1. The fall below the LRP was caused by a change in the LRP, not a drop in biomass;
- 2. The recommended TAC for 2024 is 41-45% lower than the 2023 TAC;
- 3. The recommended TAC for 2024 is expected to lead to SSB rising above the new LRP in 2025, with a probability of 69-71%;
- 4. The recommended TAC follows the Multi-Annual Plan for this stock, which has been assessed and found by ICES to be precautionary.

As a result, and based on review of the MT whole fish assessment guidelines, the herring stock continues to meet the MT requirements.

The sprat stock remains healthy, according to the most recent stock assessment, which concluded that sprat SSB is nearly double the level of the target reference point. The total international TAC remains within the range recommended by ICES, and catches have not substantially exceeded the quota. Although catch in excess of the recommendation is a concern, the sprat stock meets the Category A MT requirements because (i) catch has only exceeded the advice by more than 10% in one of the last 6 years; (ii) SSB is well above the limit reference point; and (iii) quotas and catches have been increasingly close to the ICES advice in recent years.

The fishery therefore continues to meet all of the MT requirements, and should remain approved as a source of raw material for use in MT-certified facilities.

Fishery Assessment Peer Review Comments

The peer reviewer agrees with all the scoring which has been clearly evidenced throughout. All sections of the report have been completed with sufficient information and evidence to justify the scoring given. See appendix B for Fishery Assessment Peer Review comments in full.

Notes for On-site Auditor

None.



Table 3 General Results

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

Table 4 Species- Specific Results

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

Category	Species	% landings	Outco	ome (Pass/Fail)		
			A1	PASS		
Category A	Horring	23%	A2	PASS		
	Herring		A3	PASS		
			A4	PASS		
		77%	A1	PASS		
	Carat		A2	PASS		
	Sprac		A3	PASS		
			A4	PASS		
Category B	No Category B S	pecies				
Category C	No Category C Species					
Category D	No Category D S	Species				



Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ¹	% of landings	Management	Category	
Herring	Clupea harengus	Central Baltic herring	Least Concern ²	23%	EU	А	
Sprat	Sprattus sprattus	Baltic sprat	Least Concern ³	77%	EU	А	
Species categorisation rationale							

In the July 2022 MT re-assessment of this fishery, the most recently available catch data were from 2020. Data for 2021 are available from the MSC Second Surveillance Report for the Denmark, Estonia, Germany, Sweden Baltic herring and sprat fishery⁴. This report provides the landings by Danish vessels in the herring-targeting and sprat-targeting components of the fisheries (see table below). As previously, herring and sprat effectively make up 100% of the catch, and when both components of the fishery are taken into account no other species represents more than 0.1% of landings.

Herring and sprat continue to be managed relative to reference points and subjected to regular stock assessment, and so both species were assessed under Category A as previously.

Table 1: Danish landings in the Baltic Sea herring and sprat fisheries, 2021. All weights in kg. From page 25 of the 2023 MSC surveillance report⁴.

Species			Sprat targeted fishery		Species	Herring targete	ring targeted fishery	
English	Scientific	Danish	kg	%		kg	%	
Sprat	Sprattus sprattus	Brisling	20722059	89%	Herring	3925333	78%	
Herring	Clupea harengus	Sild	2549144	11%	Sprat	1104472	22%	
Flounder	Platichthys flesus	Skrubbe	8336	0.0%	Three-spined stickleback	11360	0.2%	
Plaice	Pleuronectes platessa	Rødspætte	6386	0.0%	Shells	5	0.0%	
Three- spined stickleback	Gasterosteus aculeatus	Hundestejle	988	0.0%	Flounder	5	0.0%	
Cod	Gadus Morhua	Torsk	608	0.0%	Perch	2	0.0%	
Mackerel	Scomber scombrus	Makrel	22	0.0%	Pollack	2	0.0%	
Anchovy	Engraulis encrasicolus	Ansjos	13	0.0%	Cod	2	0.0%	
Perch	Perca fluviatilis	Aborre			Garfish	1	0.0%	
Garfish	Belone belone	Hornfisk			Anchovy			
Pollack	Pollachius virens	Mørksej			Mackerel			
Shells		Skaller			Plaice			
Total			23287556	100%	Total	5041182	100%	

¹ <u>https://www.iucnredlist.org/</u>

² <u>https://www.iucnredlist.org/species/155123/45074983</u>

³ <u>https://www.iucnredlist.org/species/198583/45077260</u>

⁴ LRQA, March 2023. Available at <u>https://fisheries.msc.org/en/fisheries/denmark-estonia-germany-sweden-baltic-herring-and-sprat/@@assessments</u>



MANAGEMENT

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

МЛ1	Management Framework – Minimum Requirements							
M1.1 There is an organisation responsible for managing the fishery.								
	M1.2	There is an organisation responsible for collecting data and assessing the fishery.	PASS					
	M1.3	Fishery management organisations are publicly committed to sustainability.	PASS					
	M1.4	Fishery management organisations are legally empowered to take management actions.	PASS					
M1.5 There is a consultation process through which fishery stakeholders are engaged in decision-								
		making.	PASS					
	M1.6	The decision-making process is transparent, with processes and results publicly available.	PASS					
		Clause outcome:	PASS					

There have been no substantial changes in the aspects of the fishery relevant to the requirements of this clause. A summary of the conclusions of the 2022 re-assessment is provided below for convenience, but for full details please refer to the full assessment report⁵.

M1.1 There is an organisation responsible for managing the fishery.

Fisheries in Denmark and other EU countries are managed according to the Common Fisheries Policy (CFP), which was most recently updated through Regulation (EU) No. 1380/2013. Individual member states generally incorporate the requirements of the CFP into their national legislation, and are individually responsible for its implementation. In Denmark, 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.

At the regional level, management of the fishery is based on input from the Regional Baltic Sea Fisheries Forum (BALTFISH) and the Baltic Sea Advisory Council (BSAC). A significant proportion of the catch is taken by Russian vessels, and a binding agreement has been in place since 2009 between the EU and Russia regarding fisheries management in the Baltic Sea.

M1.2 There is an organisation responsible for collecting data and assessing the fishery.

The primary provider of scientific information and advice at the national level within Denmark is the National Institute of

Aquatic Resources at the Technical University of Denmark (DTU Aqua). Science-based fishery management advice is provided by the International Council for the Exploration of the Sea (ICES). ICES is a network of nearly 6,000 scientists from over 700 marine institutes (including DTU Aqua) in 20 member countries and beyond. CES provides annual stock assessment and management advice in relation to the central Baltic herring and Baltic sprat fisheries via its Baltic Fisheries Assessment Working Group (WGBFAS).

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

Implementing an ecosystem approach to fisheries management has been set as one of the objectives of the CFP:

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

Similarly, the objectives of the Baltic Sea Multiannual Plan (MAP) as set out in Article 3, refers to the achievement of the objectives of the CFP, "in particular by applying the precautionary approach to fisheries management and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce MSY" (Baltic Sea MAP).

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⁵ <u>https://www.marin-trust.com/sites/marintrust/files/approved-raw-</u>

materials/WF09 Denmark Central%20Baltic%20herring%20%20Baltic%20sprat Final%20July%202022.pdf



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

In Denmark, the legislative basis for fishery management is set out in the Fisheries and Aquaculture Act 2017 (Miljø-og Fødevareministeriet 2017). The Act's provisions cover fisheries control including giving powers to fisheries enforcement agencies to implement EU and domestic legislation, also provisions relating to managing impacts on the marine environment, addressing disputes between fishermen, and procedures for prosecuting fishing offences.

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

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

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

CES provide annual stock assessment and management advice in relation to central Baltic herring and Baltic sprat via its Baltic Fisheries Assessment Working Group (WGBFAS). The advice is published annually on the ICES website. Quotas for the EU fleet in the assessment area are set annually through the AGRIFISH Council meeting of EU Fisheries Ministers and are published annually in the Baltic Sea Fishing Opportunities Regulation.

References

Advisory Councils https://ec.europa.eu/fisheries/partners/advisory-councils/

Baltic Sea Advisory Council http://www.bsac.dk/

Baltic Sea Multi-Annual Plan (MAP) https://ec.europa.eu/fisheries/cfp/fishing_rules/multi_annual_plans_en

DTU Aqua, "Mission, vision and tasks" <u>http://www.aqua.dtu.dk/english/About/Mission_vision</u>

Danish Ministry of Food, Agriculture and Fisheries https://fvm.dk/fiskeri/

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

Reform of the Common Fisheries Policy https://ec.europa.eu/fisheries/reform/

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

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

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

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There have been no substantial changes in the aspects of the fishery relevant to the requirements of this clause. A summary of the conclusions of the 2022 re-assessment is provided below for convenience, but for full details please refer to the full assessment report⁶. Where more up-to-date references have become available (such as the 2022 Baltic Sea JDF reports), these have been included in the summary below.

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

The Danish Fishery Agency is the competent authority with responsibility of enforcement of sanctions and penalties with

respect to the prosecution of fishery rules in Denmark. The unifying agency across EU waters is the European Fisheries Control Agency (EFCA), which has a mission to promote the highest common standards for control, inspection and surveillance under the CFP. Its primary role is to organise coordination and cooperation between national control and inspection activities so that the rules of the CFP are respected and applied effectively.

Joint Deployment Plans (JDP's) are established for fisheries/areas considered a priority by the Commission and the Member States concerned. The Baltic Sea JDP has been in place since 2007.

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

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

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

The 2022 MT assessment included a description of the 2020 JDF report. A full annual report for 2021 plus three quarterly reports for 2022 have since become available. The most recent of these, covering Q3 2022, indicates that during this period there were 2,215 inspections carried out ashore and 639 inspections at sea, including 57 inspections on traps and 151 inspections of other fishing gear. Surveillance flights resulted in 318 sightings. As a result of these activities a total of 69 infringements were detected, of which the majority (33) related to "Catch declaration", and 13 related to "Marking and identification fishing gear or fishing device".

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

The Danish Fishery Agency is the competent authority with responsibility of enforcement of sanctions and penalties with respect to the prosecution of fishery rules. These organisations work with colleagues from other EU Member States to implement the Baltic Sea Joint Deployment Plan. Details of recent monitoring and enforcement activities are provided in M2.3 above.

References

Danish Fisheries Agency https://fiskeristyrelsen.dk

EFCA Baltic Sea JDF reports 2022 https://www.efca.europa.eu/en/content/reports-2022-4

EFCA Baltic Sea JDF report, Q3 2022 https://www.efca.europa.eu/sites/default/files/atoms/files/9M 2022 JDP BS.pdf

European Fisheries Control Agency https://www.efca.europa.eu/en/content/objectives-and-strategy

Fisheries control authorities in the Baltic Sea area

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

⁶ <u>https://www.marin-trust.com/sites/marintrust/files/approved-raw-</u> materials/WF09 Denmark Central%20Baltic%20herring%20%20Baltic%20sprat Final%20July%202022.pdf

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Links	
MarinTrust Standard clause	1.3.1.3
FAO CCRF	7.7.2
GSSI	D1.09



CATEGORY A SPECIES

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

Spe	cies	Name	Herring	
Λ1	Data	Collection - M	inimum Requirements	
AI	A1.1	Landings da	ta are collected such that the fishery-wide removals of this species are known.	PASS
	A1.2	Sufficient ac estimated.	ditional information is collected to enable an indication of stock status to be	PASS
			Clause outcome:	PASS
The me	echanis	ms for collect	ing and analysing landings data and other fishery information supporting the stock a	ssessment
process	s are lar	gely unchange	ed since the 2022 re-assessment. A summary is provided here for convenience, with upda	ates where
relevar	nt. Pleas	e refer to the	full report for details.	
A1.1 La	andings	data are colle	ected such that the fishery-wide removals of this species are known.	
The EU catches each m	Fisheri s (target tember	es Control Sys t species and k state who the	tem, through the Fisheries Control Regulation (EC Regulation No 1224/2009) requires th bycatch) are recorded in logbooks by vessel captains and transmitted to the competent a n provide it to the Commission. Landings data are collected and A1.1 is met.	at data on uthority of
A1.2 Su	ufficient	t additional in	formation is collected to enable an indication of stock status to be estimated.	
In addit Group from th include problet Howev to enab	tion to c (WGBF/ ne ICES es a sec m which er, effor ole an ir	commercial ca AS) utilises on multispecies r tion covering n is challengir rts are underv ndication of sto	tch data, the stock assessment carried out annually by the ICES Baltic Fisheries Assessmer e acoustic survey indices (the Baltic International Acoustic Survey (BIAS)); and natural in model (ICES 2023). The model assumes discards and bycatch are negligible. The 2023 can the quality of the assessment, which notes that misreporting of herring and sprat is a ring to quantify, and which introduces an unquantifiable level of uncertainty into the as vay to estimate the levels of misreporting (ICES 2023). Sufficient additional information i pock status to be estimated, and A2.1 is met.	nt Working mortalities tch advice in ongoing ssessment. s collected
Refere	nces			
Counci complia	l Regula ance wi	tion (EC) No 1 th the rules of	224/2009 of 20 November 2009 establishing a Community control system for ensuring the common fisheries policy. <u>https://eur-lex.europa.eu/eli/reg/2009/1224/oj/eng</u>	
ICES (2) advice https://	023) He provide <mark>/doi.o</mark> rg	rring (<i>Clupea</i> d in May 2023 g/10.17895/ice	<i>harengus</i>) in subdivisions 25–29 and 32, excluding the Gulf of Riga (central Baltic Sea). Re 3. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.25–2932. es.advice.23310368	eplacing
Links				

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

Δ2	Stock Assessment - Minimum Requirements							
AZ	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	PASS					
		of the species.						

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A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	PASS
A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	PASS
A2.4	The assessment is subject to internal or external peer review.	PASS
A2.5	The assessment is made publicly available.	PASS
	Clause outcome:	PASS

The stock assessment process is largely unchanged since the 2022 re-assessment. Although the stock was benchmarked in 2023, producing changes which affect other parts of this assessment (see A3), these changes do not affect the outcome of clause A2. A summary of the conclusions of the 2022 re-assessment is provided below with updates where relevant, please refer to the full report for details.

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.

Herring in the Central Baltic Sea is subjected to an annual stock assessment carried out by the ICES Baltic Fisheries Assessment Working Group (WGBFAS). The most recent assessment was conducted in 2023 using the data sources listed in A1.2, above. This included all international landings including removals by the Russian fleet (ICES 2023). An annual stock assessment is conducted and A2.1 is met.

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

The WGBFAS stock assessment provides an indication of the status of the stock relative to target and limit reference points. These reference points were updated in 2023 as a result of a full benchmarking of the stock. The new reference points are listed in the table below; key amongst these for the purpose of this MT assessment are the management plan target reference point MAP MSY B_{trigger}, set at B_{30%} (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). Prior to 2023, reference points were expressed as absolute values, but these were updated to relative values in the 2023 benchmarking.

The 2023 stock assessment projected that SSB in 2024 would be 46% of the target reference point level, and stated, "spawningstock size is below MSY $B_{trigger}$, B_{pa} , and B_{lim} " (ICES 2023). The assessment provides an indication of stock status relative to reference points, and A2.2 is met.



Figure 1: Central Baltic herring, relative spawning biomass and current reference points (ICES 2023)

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Framework	Reference point	Value	Technical basis	Source
MSV	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)
approach	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)
	Blim	0.15 x B ₀	Relative value. Set at 15% of B ₀ .	ICES (2023b)
Precautionary approach	Bpa=MSY Btrigger	B30%	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 \ge B_{lim} with 95% probability.	ICES (2023a)
	MAP MSY B _{trigger}	B _{30%}	MSY B _{trigger}	ICES (2023a)
	MAP Blim	0.15 x B ₀	B _{lim}	ICES (2023a)
	MAP F _{MSY}	F _{B30%}	F _{MSY}	ICES (2023a)
Management plan	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 FPOS.	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 $B_{trigger}$.

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

The results of the WGBFAS stock assessment are summarised in catch and effort advice published by ICES annually. The 2023 advice states that "when the EU multiannual plan (MAP) for the Baltic Sea is applied, catches in 2024 that correspond to the F ranges in the plan are between 41 706 (corresponding to F_{MSY} lower × SSB2024/MSY Btrigger) and 52 549 * tonnes (corresponding to F_{MSY} × SSB₂₀₂₄/MSY Btrigger)" (ICES 2023). The stock assessment provides an indication of an appropriate level of fishery removals, and A2.3 is met.

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

The Guide to ICES Advisory Framework and Principles (ICES 2020) sets out the process by which ICES carries out scientific activities and provides fishery management advice. The process is designed to be transparent, independent and produce peer-reviewed recommendations. Advice is provided based on ten key Principles, of which Principle seven states that "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". The herring stock assessment was most recently benchmarked in 2023. The assessment is peer reviewed, and A2.4 is met.

A2.5 The assessment is made publicly available.



All the stock assessment information used to produce this MarinTrust assessment report was publicly available. Specifically, information is published in the WGBFAS report (ICES 2022b) and the catch advice (ICES 2023). 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 2020). The stock assessment is publicly available, and A2.5 is met.

References

ICES (2020) Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, Guide to ICES Advice. <u>https://doi.org/10.17895/ices.advice.7648</u>

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

ICES (2023b) Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 5:58. 606 pp. https://doi.org/10.17895/ices.pub.23123768

LINKS				
MarinTrust Standard clause	1.3.2.1.2, 1.3.2.1.4, 1.3.1.2			
FAO CCRF	12.3			
GSSI	D.5.01, D.6.02, D.3.14			

Λ2	Harve	st Strategy - Minimum Requirements					
AJ	A3.1	There is a mechanism in place by which total fishing mortality of this species is restricted.	PASS				
	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	PASS				
	may exceed this by up to 10% ONLY if the stock status is above the limit reference point or pro-						
	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).					
		Clause outcome:	PASS				

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

Total fishing mortality is restricted through the implementation of catch quotas. In EU waters a TAC is set, and is generally based on the ICES advice which in turn is guided by the EU Baltic Sea MAP (Regulation (EU) 2016/1139 as amended). Total removals by the Russian fleet are restricted by a Russian autonomous quota. There is a mechanism in place to restrict total fishing mortality, and A3.1 is met.

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.

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, and has only exceeded the upper boundary of the advice twice, in 2019 and 2023, and only by small amounts. In the years since 2018 for which total catch estimates are available, the total catch has only exceeded the upper boundary of the range of recommendations once, in 2019, by around 4%. Prior to the implementation of the MAP, catches had been consistently lower than the ICES advice since 2013.

Total fishery removals do not regularly exceed the range of catch recommendations provided by ICES, and A3.2 is met.



Year	ICES advice	Catch corresponding to the advice	Agreed TAC	ICES catch SDs 25–29 and 32	ICES catch
2015	MSY approach (F _{MSY} = 0.26)	< 193 000	186 351^^		174 94
2016	MSY approach (F _{MSY} = 0.22)	≤ 201 0 00	206 605^^		190 64
2017	MSY approach (F _{MSY} = 0.22)	≤ 216 000	220 629^^		199 42
2018	MAP target F ranges: Flower 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 73
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 95
2020	MAP target F ranges: Flower to Fupper (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 52
2021	Management Plan	111 852 (range 83 971– 138 183)	126 051^^		128 96
2022	Management Plan	71 939 (range 52 443– 87 581)	80 753^^		83 411^^
2023	Management Plan	95 643 (range 70 130– 95 643)	97 822^^		
2024	Management Plan	52 549 (range 41 706– 52 549)			

Table 3: Central Baltic herring, ICES advice, TACs and catches, All weights in tonnes (ICES 2023

* 1987–2003 including Gulf of Riga herring.

** TAC for subdivisions 22–29Sand 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.

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).

The ICES advice states that the stock is substantially below the LRP; notes 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 states that the stock will likely remain under LRP even with zero fishing in 2024. However, despite this, the ICES headline advice recommends a quota of up to 52,549t; if this advice is followed, the fishery will be open despite SSB being below the limit reference point.

The MT whole fish assessment guidance for this clause states, "Management measures should specify the actions to be taken in the event that the status of the stock under consideration drops below levels consistent with achieving management objectives that allow for the restoration of the stock to such levels within a reasonable timeframe". With this in mind, the fishery assessment team considered the following additional evidence (ICES 2023):

1. SSB is below the limit reference point in 2023 due to a change in the limit reference point definition. There has been no sudden drop in stock size and fishing pressure was below F_{MSY} in 2022.



- 2. The catch recommendation made by ICES is predicted to rebuild the stock to above the LRP by 2025 with a probability of 69-71%. It also represents a reduction of 41-45% relative to the previous year.
- 3. The catch recommendation made by ICES is based on the Multi-Annual Plan (MAP) for the fishery, which has been assessed by ICES and found to be precautionary. Additionally, the advice itself is considered precautionary by ICES.
- 4. The MAP would lead to the closure of the fishery under some circumstances; those being, if any level of fishing is projected to lead to SSB being below the LRP in the following year with a greater than 50% probability.

Taken together, the situation appears to meet the requirements set out in the MT guidance; namely, that a rebuilding plan is in place, which is expected to rebuild the stock within a reasonable timeframe. A revision to the stock LRP has meant that a biomass level which was considered healthy last year is now considered over-exploited. In response, the TAC recommendation has been cut by nearly half, to a level which is expected to lead to the stock size rising to above the LRP level by the following year. The assessment team concludes that A3.3 is 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

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. <u>https://eur-lex.europa.eu/legal-</u> content/en/TXT/?uri=CELEX%3A32016R1139

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

ΛΛ	Stock	Stock Status - Minimum Requirements				
~+	A4.1	The stock is at or above the target reference point, OR IF NOT:				
		The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS			
Clause outcome: PASS						
A4.1 Th	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.

This clause is closely related to A3.3, and follows much of the same logic. The MT whole fish assessment guidance for this clause states that "A Fail is awarded if the stock is below the limit reference point and fishing is occurring with no evidence of stock rebuilding within a specified timeframe". As noted in A3.3 above, while the stock is below the LRP and fishing is recommended



to occur, there is evidence that the stock will rebuild within 2 years. That SSB is below the LRP at all is a consequence of the revision of the reference points for this stock, and the significant cut in recommended catch reflects efforts to rebuild the stock.

Overall, the assessor considers A4.1 to be met, due to the specific circumstances which have led to the stock being below the LRP, and the response of ICES to these events.

References

Links

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

LINKS				
MarinTrust Standard clause	1.3.2.1.4			
FAO CCRF	7.2.1, 7.2.2 (e)			
GSSI	D6 01			



Species Name			Sprat	
Λ1	Data Collection - Minimum Requirements			
A1.1 Landings da		Landings da	ta are collected such that the fishery-wide removals of this species are known.	
	A1.2 Sufficient additional information is collected to enable an indication of stock status to be		DASS	
		estimated.		FA33
			Clause outcome:	PASS

The mechanisms for collecting and analysing landings data and other fishery information supporting the stock assessment process are largely unchanged since the 2022 re-assessment. A summary is provided here for convenience, with updates where relevant. Please refer to the full report for details.

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

The EU Fisheries Control System, through the Fisheries Control Regulation (EC Regulation No 1224/2009) requires that data on catches (target species and bycatch) are recorded in logbooks by vessel captains and transmitted to the competent authority of each member state who then provide it to the Commission. Landings data are collected and A1.1 is met.

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

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 2023). The model assumes discards and bycatch are negligible. The 2023 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 2023). Sufficient additional information is collected to enable an indication of stock status to be estimated, and A2.1 is met.

References

Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy. <u>https://eur-lex.europa.eu/eli/reg/2009/1224/oj/eng</u>

ICES (2023). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, spr.27.22–32. <u>https://doi.org/10.17895/ices.advice.21820581</u>

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

Δ2	Stock A	ssessment - Minimum Requirements	
AL	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.	
	A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	PASS
	A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	PASS
	A2.4	The assessment is subject to internal or external peer review.	PASS
	A2.5	The assessment is made publicly available.	PASS
		Clause outcome:	PASS

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The stock assessment process is largely unchanged since the 2022 re-assessment, although the stock was benchmarked in 2023, producing changes in the assessment model itself. These changes do not affect the outcome of this MT assessment. A summary of the conclusions of the 2022 re-assessment is provided below with updates where relevant, please refer to the full report for details.

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.

Sprat in the Baltic Sea is subjected to an annual stock assessment carried out by the ICES Baltic Fisheries Assessment Working Group (WGBFAS). The most recent assessment was conducted in 2023 using the data sources listed in A1.2, above. This included all international landings including removals by the Russian fleet (ICES 2023). An annual stock assessment is conducted and A2.1 is met.

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

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

Framework	Reference point	Value	Technical basis	Source
MCV	MSY B _{trigger}	541 000	B _{pa}	ICES (2023a)
approach	F _{MSY}	0.34	Stochastic simulations with Beverton–Holt and segmented regression stock-recruitment model	ICES (2023a)
Dressutianen	B _{lim}	459 000	Biomass that produces half of the maximal recruitment in the Beverton–Holt stock-recruitment relationship	ICES (2023a)
Precautionary	B _{pa}	541 000	$B_{lim} \times exp (1.645 \times \sigma)$, where $\sigma = 0.1$	ICES (2023a)
approach	F _{lim}	0.58	Consistent with B _{lim}	ICES (2023a)
	F _{pa}	0.35	F_{p05} ; the F that leads to SSB $\ge B_{lim}$ with 95% probability	ICES (2023a)
	MAP MSY B _{trigger}	541 000	MSY B _{trigger}	ICES (2023a)
	MAP Blim	459 000	B _{lim}	ICES (2023a)
	MAP F _{MSY}	0.34	F _{MSY}	ICES (2023a)
Management plan	MAP target range F _{lower}	0.26–0.34	Consistent with the ranges that result in $a \le 5\%$ reduction in long-term yield compared with MSY	ICES (2023a)
	MAP target range F _{upper}	0.34–0.35	Consistent with the ranges that result in a $\leq 5\%$ reduction in long-term yield compared with MSY, constrained by F_{p05}	ICES (2023a)

Table 4: Sprat in Subdivisions 22-32, reference points, values, and their technical basis. Weights in tonnes (ICES 2023).

The 2023 stock assessment predicted that SSB at spawning time in 2023 would be 903,773t, and the 2023 catch advice states that "Spawning-stock size is above MSY B_{trigger}, B_{pa}, and B_{lim}" (ICES 2023). The assessment provides an indication of stock status relative to reference points, and A2.2 is met.





Figure 2: Sprat in Subdivisions 22-32, estimated SSB relative to current reference points (established in 2023). SSB in 2023 is predicted (ICES 2023).

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

The results of the WGBFAS stock assessment are summarised in catch and effort advice published by ICES annually. The 2023 advice states that "when the EU multiannual plan (MAP) for the Baltic Sea is applied, catches in 2024 that correspond to the F ranges in the plan are between 191 075 tonnes and 247 704 tonnes. According to the MAP, catches higher than those corresponding to FMSY (241 604 tonnes) can only be taken under conditions specified in the plan, whilst the entire range is considered precautionary when applying ICES advice rule" (ICES 2023). The stock assessment provides an indication of an appropriate level of fishery removals, and A2.3 is met.

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

The Guide to ICES Advisory Framework and Principles (ICES 2020) sets out the process by which ICES carries out scientific activities and provides fishery management advice. The process is designed to be transparent, independent and produce peer-reviewed recommendations. Advice is provided based on ten key Principles, of which Principle seven states that "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". The sprat stock assessment was most recently benchmarked in 2023. The assessment is peer reviewed, and A2.4 is met.

A2.5 The assessment is made publicly available.

All the stock assessment information used to produce this MarinTrust assessment report was publicly available. Specifically, information is published in the WGBFAS report (ICES 2022b) and the catch advice (ICES 2023). 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 2020). The stock assessment is publicly available, and A2.5 is met.

References

ICES (2020) Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, Guide to ICES Advice. <u>https://doi.org/10.17895/ices.advice.7648</u>

ICES (2023) Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, spr.27.22–32. <u>https://doi.org/10.17895/ices.advice.21820581</u>

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

ICES (2023b) Baltic Fisheries Assessment Working Group (WGBFAS). ICES Scientific Reports. 5:58. 606 pp. https://doi.org/10.17895/ices.pub.23123768

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

Λ2	Harve	st Strategy - Minimum Requirements		
A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.				
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.				
	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).	PASS	
		Clause outcome:	ΡΔςς	

The harvest strategy applied to this stock is largely unchanged since the 2022 re-assessment, notwithstanding the stock assessment benchmarking which occurred in 2023. This section summarises the conclusions of the 2022 re-assessment with updates where relevant; for full details please refer to the re-assessment report.

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

Total fishing mortality is restricted through the implementation of catch quotas. In EU waters a TAC is set, and is generally based on the ICES advice which in turn is guided by the EU Baltic Sea MAP (Regulation (EU) 2016/1139 as amended). Total removals by the Russian fleet are restricted by a Russian autonomous quota. There is a mechanism in place to restrict total fishing mortality, and A3.1 is met.

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.

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 it exceeded the upper boundary of the advice by a small amount in 2018 and 2019, and by a larger amount in 2020. Total catch estimates also exceeded the upper boundary of the advice in these three years, by around 3% (2018), 2% (2019), and 17% (2020). The catch advice has not been exceeded since 2020, and total catches have been substantially lower than the upper boundary of the advice. Throughout this period, estimated SSB has been substantially larger than the current target and limit reference points.

It is clear that there is an issue in this fishery with total international quota being set above the ICES advice. However, the assessor considers A3.2 to be met for the following key reasons:

- Catch has only exceeded the advice by more than 10% in one of the past 6 years, since advice has been based on the MAP.
- In years when catch has exceeded the advice by less than 10%, and in all other recent years, SSB has been estimated to be well above the limit reference point.
- Quotas and total catches have been trending towards the centre of the ICES catch advice range, and have been relatively close to the centre of the range since 2021.



Table 5: Sprat in Subdivisions 22-32, ICES advice, agreed TAC and ICES estimates of total catch (ICES 2023)

Year	ICES advice	Catch corresponding to advice	Agreed TAC	ICES catch
2015	MSY approach	< 222 000	240 200**	247 300
2016	MSY approach (F = 0.26)	≤ 205 000	243 000**	247 200
2017	MSY approach (F = 0.26)	≤ 314 000	303 593**	288 500
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**	312 188
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**	317 650
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**	274 060
2021	Management plan	247 952 (range 181 567–316 833)	268 458**	284 890
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**	
2024	Management plan	241 604 (range 191 075–247 704)		

* EU autonomous quota and does not include Russian Federation catches.

** TAC is calculated as EU + Russian Federation autonomous quotas.

^ Russia Federation landings were not officially reported to ICES, but an estimate is included.

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).

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.

References

ICES (2023) Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, spr.27.22–32. <u>https://doi.org/10.17895/ices.advice.21820581</u>

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. <u>https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32016R1139</u>

Standard clause 1.3.2.1.3 Links



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

	Stock	Status Minimum Dequirements			
A4	SLOCK	Status - Minimum Requirements			
	A4.1	The stock is at or above the target reference poi	int, OR IF NOT:		
		The stock is above the limit reference point or p	roxy and there is evidence that a fall below the		
		limit reference point would result in fishery clos	ure OR IF NOT:	PASS	
		The stock is estimated to be below the limit refe	prence point or proxy, but fishery removals are		
		ne stock is estimated to be below the initi refe	stence point of proxy, but ishery removals are		
		promoted.		DAGG	
			Clause outcome:	PASS	
A4.1 Tł	ne stock	is at or above the target reference point, OR IF N	NOT:		
-					
The sto	ock is ab	ove the limit reference point or proxy and there	is evidence that a fall below the limit reference poi	nt would	
result i	n fisher	y closure OR IF NOT:			
The sto	ock is est	timated to be below the limit reference point or	proxy, but fishery removals are prohibited.		
T I2				TI	
The mo	ost recer	nt ICES catch advice states that Spawning-stock	Size is above IVISY Btrigger, Bpa, and Blim (ICES 2023).	i nerefore,	
the fish	nery mee	ets the first option of this clause, and A4.1 is met.			
Refere	nces				
	022) C	ent (Connettus connettus) in subdivisions 22, 22 (Polti			
ICES (2	023) Spr	at (Sprattus sprattus) in subdivisions 22–32 (Balti	c Sea). In Report of the ICES Advisory Committee, 20	23. ICES	
Advice 2023, spr.27.22–32. <u>https://doi.org/10.17895/ices.advice.21820581</u>					
Links	Links				
MarinT	MarinTrust Standard clause 1.3.2.1.4				
FAO CO	FAO CCRF 7.2.1, 7.2.2 (e)				
GSSI	GSSI D6 01				



CATEGORY B SPECIES

Category B species are those which make up greater than 5% of landings in the applicant raw material, but which are not subject to a species-specific research and management regime sufficient to pass all Category A clauses. If there are no Category B species in the fishery under assessment, this section can be deleted.

Category B species are assessed using a risk-based approach. The following process should be completed once for each Category B species.

If there are estimates of biomass (B), fishing mortality (F), and reference points

It is possible for a Category B species to have some biomass and fishing mortality data available. When sufficient information is present, the assessment team should use the following risk matrix to determine whether the species should be recommended for approval.

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
	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)

TABLE B(A) - F, B AND REFERENCE POINTS ARE AVAILABLE



If the biomass / fishing pressure risk assessment is not possible

Initially, the resilience of each Category B species to fishing pressure should be estimated using the American Fisheries Society procedure described in Musick, J.A. (1999). This approach is used as the resilience values for many species and stocks have been estimated by FishBase and are already available online. For details of the approach, please refer to Appendix A. Determining the resilience provides a basis for estimating the risk that fishing may pose to the long-term sustainability of the stock. Table B(b) should be used to determine whether the species should be recommended for approval.

Table B(B) - No reference points available. B = current biomass; B_{av} = long-term average biomass; F = current fishing mortality; F_{av} = long-term average fishing mortality.

Resilience	High	Medium	Low	Very Low
B unknown	Fail	Fail	Fail	Fail
B < B _{av}	Fail	Fail	Fail	Fail
$B > B_{av}$ and $F > F_{av}$	Pass	Fail	Fail	Fail
B = B _{av} and F or F _{av} unknown	Pass	Fail	Fail	Fail
$B = B_{av}$ and $F < F_{av}$	Pass	Pass	Fail	Fail
B > B _{av} and F or F _{av} unknown	Pass	Pass	Fail	Fail
$B > B_{av}$ and $F < F_{av}$	Pass	Pass	Pass	Fail



Assessment Results

Spe	cies Name			
R1	Species Name			
DT	Table used (Ba, Bb)			
	Outcome			
Refere	References			
Links	Links			
MarinTrust Standard clause 1.3.2.2, 4.1.4		1.3.2.2, 4.1.4		
FAO CCRF		7.5.1		
GSSI		D.5.01		

CATEGORY C SPECIES

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

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

Spe	ecies	Name					
C1	Catego	ory C Stock Status - Minimum Requirements					
CI	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.						
	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.					
		Clause outcome:					
C1.1 F	ishery	removals of the species in the fishery under assessment are included in the stock assessment process, OR are					
consid	dered by	y scientific authorities to be negligible.					
C1.2 1	he spe	cies is considered, in its most recent stock assessment, to have a biomass above the limit reference point (o					
proxv). OR re	movals by the fishery under assessment are considered by scientific authorities to be negligible.					
J	,,						
Deferences							
Refere	ences						
Links							
511172							



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



CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific

D1	Species Name			
	Productivity Attribut	e Value	Score	
	Average age at maturity (years)			
	Average maximum age (years)			
	Fecundity (eggs/spawning)			
	Average maximum size (cm)			
	Average size at maturity (cm)			
	Reproductive strategy			
	Mean trophic level			
		Average Productivity Score		
	Susceptibility Attribu	te Value	Score	
	Availability (area overlap)			
	Encounterability (the position of the s	tock/species		
	within the water column relative to the	ne fishing gear)		
	Selectivity of gear type			
	Post-capture mortality			
	Average Susceptibility Score			
		PSA Risk Rating (From Table D3)		
		Compliance rating		
	Further justification for susceptibility	scoring (where relevant)		
	For susceptibility attributes, please pr	ovide a brief rationale for scoring of parameters whe	re there may be	
	uncertainty affecting your decision			
Refere	nces			
Standa	rd clauses 1.3.2.2			

management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.



Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk. score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)	
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap	
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 with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species	
Selectivity of gear type	Individuals < size a at maturity are rarely caught	Individuals < size a at maturity are regularly caught.	Individuals < size a at maturity are frequently caught	
Potential of the gear to retain species	b Individuals < size at maturity can escape or avoid gear.	Individuals < half the size at b maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.	
Post-capture mortality (PCM) The chance that, if captured, a species would be released and	Evidence of majority released post- capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.	



that it would be in a		
condition permitting		
subsequent survival		



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

D4	Spe	cies Name		
	Impac	ts On Species Categorise	ed as Vulnerable by D1-D3 - Minimum Requirements	
	D4.1 The potential impacts of the fishery on this species are considered during the management			
		process, and reasonab	le measures are taken to minimise these impacts.	
	D4.2	There is no substantia species.	al evidence that the fishery has a significant negative impact on the	
	-		Outcome:	
D4.1: reason	D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts. D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
Refere	References			
Marin	Truct Ct	andard clause	1222 414	
Iviarin	CDE	andard clause	7 5 1	
CSSI	CKF		7.3.1 D = 01	
1650			U.S.UI	



FURTHER IMPACTS

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

C1	Impacts on ETP Species - Minimum Requirements			
LT.	F1.1 Interactions with ETP species are recorded.			
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	PASS	
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	PASS	
		Clause outcome:	PASS	

There have been no substantial changes in the aspects of the fishery relevant to the requirements of this clause. A summary of the conclusions of the 2022 re-assessment is provided below for convenience, but for full details please refer to the full assessment report⁷.

Since the re-assessment, a more recent report from the ICES Working Group on Bycatch of Protected Species (WGBYC) has become available. The contents of this report do not change the outcomes of the MT assessment, but the relevant parts are summarised below.

F1.1 Interactions with ETP species are recorded.

There is a requirement for EU member states to record ETP bycatch initially through Council Regulation (EC) 812/2004 (which was focused on cetaceans, although member states also provided information on other species) and from 2019 through the technical Conservation Measures Regulation (EU Regulation 2019/1241) (Annex XIII sets out monitoring requirements for marine mammals, reptiles and seabirds) and the Habitats and Birds Directives (1992/43/EC and 2009/47/EC) also require monitoring of bycatch of species protected under the Directives (ICES, 2020). Information collected through these mechanisms is collated and assessed by the ICES WGBYC (ICES 2023). Interactions with ETP species are recorded, and F1.1 is met.

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

As at the time of the 2022 re-assessment, interactions with ETP species are considered very rare. The most recent WGBYC report indicates that pelagic gears in the Baltic Sea reported no interactions with sharks, seabirds or turtles in 2021 (ICES 2022, Table 5.1). Previously, the WGBYC has assessed the bycatch risk posed by different fishing gears to protected species in the Baltic Seas using expert judgement. Each combination of protected species and gear type was assigned a simple 1 to 3 (lower-higher risk) score. Pelagic trawls were scored at '1', except for seals and harbour porpoise which were scored at '2' based on a record from Poland of one porpoise bycatch from a pelagic trawl (ICES 2018). The available evidence continues to suggest that the fishery has minimal interaction with ETP species, and F1.2 is met.

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

Pelagic trawlers are not thought to produce significant bycatch of ETP in the offshore fishery in the Baltic Sea, but there is some evidence of occasional interaction. Measures are in place to minimise mortality including area closures (e.g. offshore from the mouth of the Oder), 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. Even though the fishery is thought unlikely to interact with ETP species, general measures to protect such species are in place and F1.3 is met.

References

materials/WF09 Denmark Central%20Baltic%20herring%20%20Baltic%20sprat Final%20July%202022.pdf MarinTrust Fishery Assessment Peer Review

⁷ <u>https://www.marin-trust.com/sites/marintrust/files/approved-raw-</u>



ICES, 2018. Report from the Working Group on Bycatch of Protected Species (WGBYC), 1–4 May 2018, Reykjavik, Iceland. ICES CM 2018/ACOM:25. 128 pp

ICES, 2020d. Road map for ICES bycatch advice on protected, endangered, and threatened species. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, section 1.6. <u>https://doi.org/10.17895/ices.advice.6022</u>

ICES (2022). Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. 4:91. 265 pp. https://doi.org/10.17895/ices.pub.21602322

ICES (2023). WGBYC home page. <u>https://www.ices.dk/community/groups/Pages/WGBYC.aspx</u>

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

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

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

The pelagic trawl gears used in this fishery are not intended to make contact with the sea bed, and in order to avoid damage vessels will attempt to avoid such interactions wherever possible. 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". For fisheries in the region which interact with seabed habitats, measures are in place to manage and mitigate impacts via mechanisms such as the HELCOM Baltic Sea Action Plan (BSAP), the requirements associated with Natura 2000 sites, and the technical measures set out in EU regulation. Potential habitat interactions are considered in the management process, and F2.1 is met.

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

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. No new evidence has been encountered since the 2022 re-assessment to indicate this is not still the case, and F2.2 is met.

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

Pelagic gears such as those used in this fishery are highly unlikely to cause significant habitat disruption. However, within the broader fisheries management structures present in the Baltic, measures are in place to protect habitats. Habitats are provided protection through the Natura 2000 network established under the EU Birds and Habitats Directives (2009/147/EC; 92/43/EEC). This is a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right. Under Article 6 of the Habitats Directive, Member States are required to establish the necessary conservation measures, including, if necessary, management plans for these sites and the impact of any 'plans or projects' likely to have a significant effect on the sites subject to assessment. The Technical Measures Regulation



(Regulation (EU) 2019/1241) also sets out technical measures which can protect habitats including regional measures under Article 15 and powers to introduce real-time closures and moving-on provisions. Even though the fishery is thought very unlikely to interact with seabed habitats, habitat protection measures applied to fisheries in general are in place, and F2.3 is met.

References

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01992L0043-20130701</u>

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147

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

Links	
MarinTrust Standard clause	1.3.3.2
FAO CCRF	6.8
GSSI	D.2.07, D.6.07, D3.09

E2	Ecosystem Impacts - Minimum Requirements			
r5	F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.			
	F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.	PASS	
	F3.3	If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.	PASS	
		Clause outcome:	PASS	

There have been no substantial changes in the aspects of the fishery relevant to the requirements of this clause. A summary of the conclusions of the 2022 re-assessment is provided below for convenience, but for full details please refer to the full assessment report⁸. Some minor changes of note have been introduced through the publishing of an updated ICES Ecosystem Overview for the Baltic Sea (ICES, 2022). While these do not change the assessment outcomes, they are included in the summary below.

F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.

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. The regular management advice published by ICES includes an ecoregion overview for the Baltic Sea (ICES, 2022), which summarises the most up to date understanding of the Baltic ecosystem and the ways in which this knowledge influences the management advice. These include noting the likely current and future impacts of climate change, and the shifts in the food web which have occurred since the late 1980s. The broader ecosystem continues to be considered in the management process, and F3.1 is met.

⁸ <u>https://www.marin-trust.com/sites/marintrust/files/approved-raw-</u>

materials/WF09 Denmark Central%20Baltic%20herring%20%20Baltic%20sprat Final%20July%202022.pdf MarinTrust Fishery Assessment Peer Review



F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.

The most significant potential ecosystem impacts of the fishery arise from the removal of herring and sprat biomass. The ICES ecosystem overview (ICES, 2022) states that since the late 1980's "the open-sea system has been dominated by small pelagic fish, such as sprat", and that "in general, those seabird species eating sprat and herring have increased in number". Prey depletion is not considered to be a determining factor in the health of populations of porpoise, seal or cod populations, all of which predate sprat and herring. There remains no substantial evidence that the fishery has a significant negative impact on the marine ecosystem, and F3.2 is met.

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

Herring and sprat are both considered to be important prey species in the Baltic Sea ecosystem. Predation of sprat is considered in the EU MAP, and factored in when establishing reference points and management regulations such as quotas, area and seasonal restrictions, gear limitations, and controls on the number of vessels in the fishery.

References

ICES (2022). Baltic Sea Ecoregion – Ecosystem overview. In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, Section 4.1, <u>https://doi.org/10.17895/ices.advice.21725438</u>

Links	
MarinTrust Standard clause	1.3.3.3
FAO CCRF	7.2.2 (d)
GSSI	D.2.09, D3.10, D.6.09

SOCIAL CRITERION

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



Appendix A - Determining Resilience Ratings

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

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

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

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



Appendix B - MarinTrust Fishery Assessment Peer Review Template

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

Fishery under assessment	WF09 Herring and Sprat in ICES subareas 25-29 and 32, excluding the Gulf of Riga
Management authority (Country/State)	EU & Denmark
Main species	Herring (Clupea harengus)
Fishery location	ICES 25-29 and 32
Gear type(s)	Pelagic trawl
Overall recommendation. (Approve/ Fail)	PASS

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

Minor findings:

The opening table is missing the client name, email and application code.

Clarification on A3.3

General Comments on the Draft Report provided to the peer reviewer

Summary of Peer Review Outcomes

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

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

Detailed Peer Review Justification

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

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

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust standard, and clearly based on the evidence
presented in the assessment report?
The peer reviewer agrees with all the scoring which has been clearly evidenced throughout.

Certification body response

n/a

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

All sections of the report have been completed with sufficient information and evidence to justify the scoring given.

Certification body response

n/a

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

The species categorisation looks accurate and based on recent reported catches. Certification body response

n/a



3M. Are the scores in "Section M – Management" clearly justified?	YES		
V1.1 There is an organisation responsible for managing the fishery.			
M1.2 There is an organisation responsible for collecting data and assessing the fishery.	YES		
M1.3 Fishery management organisations are publicly committed to sustainability.	YES		
M1.4 Fishery management organisations are legally empowered to take management actions.	YES		
M1.5 There is a consultation process through which fishery stakeholders are engaged in decision-			
making.			
V1.6 The decision-making process is transparent, with processes and results publicly available.	YES		
M2.1 There is an organisation responsible for monitoring compliance with fishery laws and			
regulations.			
M2.2 There is a framework of sanctions which are applied when laws and regulations are			
discovered to have been broken.			
M2.3 There is no substantial evidence of widespread non-compliance in the fishery, and no	YES		
substantial evidence of IUU fishing.			
M2.4 Compliance with laws and regulations is actively monitored, through a regime which may	YES		
nclude at-sea and portside inspections, observer programmes, and VMS.			
All sections of the report have been completed with sufficient information and evidence to justify the scoring			

All sections of the report have been completed with sufficient information and evidence to justify the scoring given.

Certification body response

n/a

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

I agree with the scoring outcome and the rationale is clearly justified.

In regard to A3.3 (sprat & herring), is Russia a signatory of the MAP? If not, stating Russian management measures for the stock would be appropriate. (This comment was raised against herring but is also relevant to sprat and applies to A4 for both species)

Certification body response

Russia is not a signatory to the MAP, and quotas for the Russian fleet are set autonomously. For the purposes of this surveillance assessment, only the management measures applying to the fleet under assessment have been considered, as in the previous MT assessments of this fishery. However, the assessor would welcome clarification regarding the extent to which management measures in other fleets within the same fishery should influence the outcomes of the next full re-assessment.

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

Certification body response

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

Certification body response

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

Certification body response



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

All sections of the report have been completed with sufficient information and evidence to justify the scoring given.

Certification body response

n/a

Optional: General comments on the Peer Review Draft Report

No further comments.

Certification body response

n/a



Glossary

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

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