



MarinTrust Standard V2

Whole fish Fishery Assessment

*WF07 – Gulf of Riga Herring, FAO 27,
ICES 3.d.28.1*

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name(s): Marine Ingredients Denmark- FF Skagen A/S			
Country: Denmark			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor Name	CB Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Sam Dignan	5	Re-approval
Assessment Period	July 2023 – July 2024		
Scope Details			
Management Authority (Country/State)		EU	
Main Species		Herring (<i>Clupea harengus</i>) Sprat (<i>Sprattus sprattus</i>)	
Fishery Location		Gulf of Riga, FAO27, ICES 3.d.28.1	
Gear Type(s)		Pelagic trawl, purse seine	
Outcome of Assessment			
Overall Outcome		PASS	
Clauses Failed		NONE	
CB Peer Review Evaluation			
Fishery Assessment Peer Review Group Evaluation			
Recommendation			

Table 2. Assessment Determination

Assessment Determination
Herring and sprat in ICES 3.d.28.1, hereafter known the Gulf of Riga, are targeted exclusively by Latvian and Estonian vessels operating pelagic gears. The proportion of each in the catch varies, but in recent years sprat has been the most prevalent species. Catches of herring in the Gulf of Riga originate from two stocks; the bulk is from the Gulf of Riga herring stock, but smaller quantities are also taken from the Central Baltic stock which is fished throughout the region. Other species are also caught as bycatch, and previous MT assessment reports have included a significant number of Type 2 species. However, recent catch data suggests that the only other species regularly representing more than 0.1% of the catch is smelt; future surveillance assessments of this fishery should revisit the data to ensure this remains the case. Herring, sprat and smelt are all categorised by the IUCN as Least Concern, and none appears on the CITES appendices. Sprat and both herring stocks are managed using stock assessments relative to established reference points. Smelt is not subjected to stock assessment nor are reference points established. The fishery operates under the EU Common Fisheries Policy, and meets all of the Management requirements regarding responsible organisations and control and enforcement. Gulf of Riga herring was assessed under Category A. It is subject to an annual stock assessment by ICES, the most recent of which was conducted in 2023. A full benchmark of the stock was also carried out in 2023. Sufficient information is collected to enable a reliable assessment of the stock, and stock size is currently estimated to be well above the reference point level. Catches are consistently in line with the ICES advice. Baltic sprat was also assessed under Category A, similarly undergoes stock assessment every year, most recently in 2023, and was also benchmarked in 2023. Biomass is thought to be well above the reference point level. Catches do sometimes exceed the advice; however this has become less pronounced since the introduction of the Multi-Annual Plan (MAP) in 2018, and has only once exceeded the advice by more than 10%. Central Baltic herring was assessed under Category C, and was also benchmarked and underwent stock assessment in 2023. As a result of the benchmarking, the reference points for the stock were revised upwards, resulting in a biomass estimate substantially lower than the limit reference point level. Despite this, ICES has advised the fishery remain open and the TAC is likely to be set above zero in 2024. Taken at surface value, this does not meet the requirements of C; however, there are a number of mitigating factors, as follows: 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 FMSY- 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. Taking the above into account, the assessor concludes that the fishery does meet the MT requirements as set out in the guidance, primarily because a rebuilding plan which is expected to recover the stock to above the limit reference point within 2 years is in place. Smelt was assessed under Category D. It achieved a Productivity Score of 1.57 and a Susceptibility Score of 2.5, leading to a PASS rating on Table D3.

There is no substantial evidence that the fishery is likely to have a significant impact on ETP species, and no interactions with ETP species have been recorded. The pelagic gears used are very unlikely to interact with seabed habitats. Herring and sprat are both recognised as being important prey species within the Baltic Sea ecosystem, and the quotas recommended by ICES take this important role into account.

Overall, the fishery meets the MarinTrust requirements and should be re-approved for use as a source of raw material.

Fishery Assessment Peer Review Comments

The situation with regards to the stock status of the sole Category C species (stock) in this fishery is more complicated than usual.

C1.2 requires that the species be considered, in its most recent stock assessment, to have a biomass above the limit reference point or removals by the fishery under assessment be negligible. Clearly, removals here are non-negligible so the second part of the clause is not relevant.

I agree therefore that, reading the requirement alone, it would appear not to be met. That said, the assessor quotes the following passage from MT's whole fish assessment guidance¹ as appearing to offer a way forward for the fishery:

"The standard requires that management measures 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 time frame".

Unfortunately, I am disinclined to agree that the guidance as written allows for the approach proposed because the passage quoted is only the first part of a paragraph which continues:

"This requires the specification in advance of decision rules that mandate remedial management actions to be taken if target reference points are exceeded and/or limit reference points are approached or exceeded or the desired directions in key indicators of stock status are not achieved. For example, decreasing fishing mortality (or its proxy) if the stock size approaches its limit reference point. This is a central component of the Precautionary Approach."

The quoted section would therefore appear to be relevant only to management's specification of actions in advance of an event where a stock is approaching its limit and does not allow for a stock to be approved when below its limit in contravention of C1.2.

The wording of requirement C1.2 is very explicit in not allowing approval of a stock under its limit which is further strengthened by the fact that a species failing Category C may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Given the poor status of the Central Baltic herring stock, I believe a clarification from MT would be required for it to be 'approvable' against requirement C1.2. In the absence of such a clarification, the mitigating factors put forward by the assessor are not relevant.

Note that overall, I would consider the approach proposed by the assessor sensible, I am just not convinced that it allowed for by the requirements and associated guidance as currently written. Were it to be permissible, I would be happy to agree with the assessor's recommendation to approve as there are no other issues of substantive concern in the remainder of the report.

¹ MarinTrust Standard V2 Whole Fish Fishery Assessment Interpretation and Guidance Document (Version 2.1, January 2022): https://www.marin-trust.com/sites/marintrust/files/2022-08/ID3%20-%20MarinTrust%20Wholefish%20fishery%20assessment%20guidance%20V2.1_0.pdf

ADDITIONAL CLARIFICATION ADDED (25 September 2023):

The fact that another report adopting the proposed approach has recently been approved and published by Marin Trust², gives the required degree of comfort that the stock under assessment here is indeed ‘approvable’ against requirement C1.2.

Notes for On-site Auditor

² <https://www.marin-trust.com/sites/marintrust/files/approved-raw-materials/WF09%20Herring%20%20Sprat%20ICES%203d%2025-29%2032%20Denmark%20Surveillance%20Assessment%20June%202023.%20Final.pdf>

Table 3 General Results

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

Table 4 Species- Specific Results

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

Category	Species	% landings	Outcome (Pass/Fail)	
Category A	Herring (Gulf of Riga)	33-40%	A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
	Sprat	52-64%	A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
Category B	No Category B stocks			
Category C	Herring (Central Baltic)	1-5%	PASS	
Category D	Smelt	0-7%	PASS	

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ³	% of landings ⁴	Management	Category
Herring	<i>Clupea harengus</i>	Gulf of Riga	Least Concern ⁵	33-40%	Yes	A
		Central Baltic		1-5%	Yes	C
Sprat	<i>Sprattus sprattus</i>	Baltic Sea	Least Concern ⁶	52-64%	Yes	A
Smelt	<i>Osmerus operlanus</i>	n/a	Least Concern ⁷	0-7%	No	D

Species categorisation rationale

The most recent MSC surveillance report for this fishery⁸ includes catch composition data across the entire Unit of Assessment for 2014-2021; and for within the Latvian component of the fishery for the years 2015-2021. As this MT assessment covers the entire pelagic trawl fishery, the former data are more relevant; however, the results are broadly similar. The data for the entire MSC UoA can be summarised for the most recent years as follows:

Year	Total Catch (t)	Herring	Sprat	Cod	Eelpout	Smelt	Flounder	Four-horned sculpin
2017	8,451	78.9%	16.4%	<0.1%	<0.1%	4.6%	<0.1%	<0.1%
2018	8,612	76.9%	10.7%	<0.1%	<0.1%	12.4%	<0.1%	<0.1%
2019	23,136	40.9%	52.5%	<0.1%	<0.1%	6.6%	<0.1%	<0.1%
2020	18,294	34.8%	63.8%	<0.1%	<0.1%	0.1%	<0.1%	<0.1%
2021	22,540	43.0%	55.0%	<0.1%	<0.1%	1.8%	0.2%	<0.1%

Catches of herring in the Gulf of Riga primarily originate from the Gulf of Riga herring stock; however, a proportion belong to the Central Baltic herring stock. The most recent ICES catch advice for Gulf of Riga herring⁹ includes estimates of the proportion of each catch for every year since 1977. The following table summarises the prevalence of each stock in the catch, firstly as a proportion of the herring catch; and then as a proportion of the total overall catch described in the table above.

Year	GoR herring as % of herring catch	Central Baltic herring as % of herring catch	GoR herring as % of total catch	Central Baltic herring as % of total catch
2017	87.7%	12.3%	69.2%	9.7%
2018	86.7%	13.3%	66.7%	10.2%
2019	88.6%	11.4%	36.2%	4.7%
2020	96.2%	3.8%	33.5%	1.3%
2021	91.8%	8.2%	39.5%	3.5%
2022	93.9%	6.1%	n/a	n/a

Taken together, this information can be used to reach the following conclusions:

³ <https://www.iucnredlist.org/>

⁴ Values here shown for the most recent three years for which data are available – 2019-2021.

⁵ <https://www.iucnredlist.org/species/155123/4717767>

⁶ <https://www.iucnredlist.org/species/198583/143833310>

⁷ <https://www.iucnredlist.org/species/15631/4924600>

⁸ Bureau Veritas, 2022. NZRO Gulf of Riga Herring and Sprat trawl fishery, 2nd Surveillance Report, 6th May 2022.

<https://fisheries.msc.org/en/fisheries/nzro-gulf-of-riga-herring-and-sprat-trawl-fishery/@assessments>

⁹ ICES. 2023. Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES

Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>

- The majority of the catch in recent years has been sprat. Even in previous years when the proportion of sprat has been lower, it is consistently more than 10% of the total catch. Therefore sprat is a Type 1 species for this MT assessment.
- The proportion of herring in the catch has declined in recent years, but it consistently represents at least 30% of landings. Of the two herring stocks present in the region, GoR herring is consistently the larger component in the catch, and is clearly a Type 1 species for this MT assessment.
- Since 2018, Central Baltic herring has represented less than 5% of landings. For the purposes of this re-assessment, it has been treated as a Type 2 species; however, future surveillance assessments should revisit the catch composition data to determine whether this remains appropriate, or whether the proportion of Central Baltic herring in the catch has returned to the higher levels seen previously.
- Smelt sometimes represents a significant proportion of the catch and sometimes does not. In recent years the proportion of smelt has been lower, and for the purposes of this re-assessment it has been treated as Type 2. However, as with Central Baltic herring, future surveillance assessments should revisit the data to ensure this remains appropriate.
- Although some have been included in previous MT assessments, the low prevalence of four species in the catch means they should no longer be assessed. These are cod, eelpout, flounder and four-horned sculpin. None appears to regularly represent more than 0.1% of the catch.

Both type 1 stocks – sprat and GoR herring – are managed relative to reference points and were assessed under Category A. Central Baltic herring is also managed relative to reference points and was assessed under Category C. Smelt is not managed relative to reference points and does not appear to be subjected to stock assessments; it was therefore assessed under Category D.

MANAGEMENT

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

M1	Management Framework – Minimum Requirements	
	M1.1	There is an organisation responsible for managing the fishery.
	M1.2	There is an organisation responsible for collecting data and assessing the fishery.
	M1.3	Fishery management organisations are publicly committed to sustainability.
	M1.4	Fishery management organisations are legally empowered to take management actions.
	M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.
	M1.6	The decision-making process is transparent, with processes and results publicly available.
Clause outcome:		PASS
The herring and sprat pelagic trawl fishery in the Gulf of Riga is carried out exclusively by Latvia and Estonia (ICES 2023).		
M1.1 There is an organisation responsible for managing the fishery. Fisheries in Latvia and Estonia, and in 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. The CFP therefore sets out the policies and procedures by which member states manage their fisheries (EC 2018). Responsibility for fisheries management in Estonia falls under several Ministries and other organisations. The Ministry of Rural Affairs and Agriculture is responsible for the management of commercial fishing, including issuing permits for commercial fishing, managing a national registry of fishing vessels and catch accounting (Agri 2023). The Kliimaministeerium (Ministry of the Environment) “prepares and implements policies on protection and use of fishery resources including reproduction of fish stocks and protection and restoration of spawning grounds and habitats”, and also issues permits for scientific research and special purpose fishing (Kliimaministeerium 2023). Monitoring of fishing activities is carried out by the Environmental Inspectorate. Fisheries management in Latvia falls under the Ministry of Agriculture, which is “responsible for developing policy and management for the fisheries sector, including surveillance of sustainable use of fish resources, restocking and research, as well as managing of fishing rights in the territorial sea and high seas” (ZM 2023). There are organisations responsible for managing the fishery, and M1.1 is met. M1.2 There is an organisation responsible for collecting data and assessing the fishery. The primary organisation responsible for coordinating and analysing the data relevant to the management of the Gulf of Riga pelagic trawl fishery is the International Council for the Exploration of the Sea (ICES). ICES is an intergovernmental marine science organisation which provides frequent analytical and advisory services for the management of fisheries, primarily in the Atlantic but also in the Baltic, Arctic, Mediterranean, Black Sea and North Pacific (ICES 2023a). ICES carries out an annual stock assessment of both the Gulf of Riga herring and Baltic sprat stocks, along with periodic benchmarking exercises to ensure the stock assessment processes and their underpinning assumptions remain appropriate (which occurred most recently for both stocks in 2023). As a key output of the stock assessment process, ICES produces a recommendation for the appropriate level of fishery removals in the coming fishing season (ICES 2023b). There are organisations responsible for collecting data and assessing the fishery. Requirement M1.2 is met. M1.3 Fishery management organisations are publicly committed to sustainability.		

Objective 1 of the CFP, as set out in Regulation (EU) No. 1380/2013 is to “ensure that fishing and aquaculture activities are environmentally sustainable in the long-term and are managed in a way that is consistent with the objectives of achieving economic, social and employment benefits, and of contributing to the availability of food supplies”.

The primary Estonian fisheries legislation, the Fishing Act of 19th February 2015, states that the purpose of the Act is to:

1. “ensure conservation and economic use of fish and aquatic plant resources on the basis of internationally recognized principles of responsible fisheries;
2. ensure reproduction capacity of fish and aquatic plant resources and productivity of bodies of water;
3. avoid undesirable changes in the ecosystem of bodies of water.”

The primary Latvian fisheries legislation, the Fishery Law (1995), states that the “Purpose of [the] Law is such management of inland waters, territorial marine waters (hereinafter – the territorial waters), and economic zone waters of the Republic of Latvia, which, by taking into account the necessity of biodiversity preservation, ensures sustainable use of fish resources, protection, propagation, and research thereof for the long-term development of the State fishery sector”.

Fishery management organisations are publicly committed to sustainability, and M1.3 is met.

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

In EU member states fisheries management is generally carried out under the national legislation arising from the implementation and/or transposing of EU regulations, in particular but not limited to Regulation (EU) No 1380/2013. In Estonia, the main fisheries legislation is the Fishing Act of 19th February 2015, as amended, which empowers the Ministry of Rural Affairs and Agriculture to implement the measures of the CFP. In Latvia, the main fisheries legislation is the Fishery Law (1995), as amended, which similarly empowers the Ministry of Agriculture.

Management organisations are legally empowered to take management actions, and M1.4 is met.

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 (BSAC 2023). There is a consultation process in place, and M1.5 is met.

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

All of the information used to produce this MarinTrust assessment report was freely available online. The fisheries management decision-making process is primarily guided by the ICES advice, the basis for and outcomes of which are made available via the ICES website. Decisions and outcomes at the EU level are published on the EC website and elsewhere. The decision-making process is transparent, and M1.6 is met.

References

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- BSAC (2023). Baltic Sea Advisory Council <http://www.bsac.dk/>
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- Estonia, Fishing Act of 19th Feb 2015. <https://www.riigiteataja.ee/en/eli/ee/531072023001/consolide>
- ICES (2023). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>

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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#>

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Links

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

M2	Surveillance, Control and Enforcement - Minimum Requirements	
	M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations.
	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 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

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

Monitoring and enforcement of fisheries compliance in the EU is primarily the responsibility of the individual member states. Within Estonia the relevant authority is the Environmental Inspectorate, as set out in the Fishing Act 2015. In Latvia responsibility falls to the Ministry of Agriculture.

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 2023). The EFCA works in conjunction with the European Border and Coast Guard Agency and the European Maritime Safety Agency to support the various national agencies carrying out coastguard functions.

International control and enforcement activities are coordinated by the EFCA 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.

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

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 (EC 2021). 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 (EC 2021).

Moreover, EU countries are required to have a point system to sanction fishing vessel masters and licence 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 a three-year period will have its fishing licence suspended for up to 12 months (EC 2023).

Both Latvia and Estonia apply the EU regulations, and infringements under either jurisdiction may incur sanctions including fines, gear confiscation, and/or licence suspension.

There are sanctions applied when laws and regulations are broken, and M2.2 is met.

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

The EFCA publishes quarterly reports detailing control and enforcement activities under the Baltic Sea JDP (EFCA 2023a). The most recent report, for the first quarter of 2023 (EFCA 2023b), states that as part of the JDP there were (across the entire Baltic Sea area) 931 inspections conducted ashore, including 4 market inspections, detecting 43 suspected infringements (an infringement rate of 4.1%). Additionally, 189 inspections were carried out at sea, revealing 6 suspected infringements (a rate of 3.2%). Finally, 219 surveillance sightings produced no suspected infringements.

Of the 49 suspected infringements, 38 were categorised as “non-compliance with the recording and reporting obligations”, primarily misreporting catch quantities. Other infringements included fishing without a licence or quota, noncompliant gear, or failure to facilitate safe access of inspectors.

Throughout the compilation of this MT assessment report, no evidence was encountered suggesting widespread non-compliance in the fishery, and available evidence suggests a robust and focussed control and enforcement regime is in place. M2.3 is met.

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

Compliance is monitored through a programme put in place as part of the Baltic Sea JDP. The EFCA states that the objective of the JDP is “to ensure the uniform and effective implementation of conservation and control measures applicable to pelagic and demersal stocks in the Union waters of the Baltic Sea. This concerns in particular the fisheries exploiting cod (including recreational fisheries in the Western Baltic), herring, salmon, sprat and European eel, as well as species under the landing obligation” (EFCA 2023c). In practice, this involves the forms of inspection listed in M2.3 above – inspections at-sea and ashore, and surveillance flights. EU-wide rules also apply, with mandatory VMS, e-logbooks, landing certificates, sales notes, designated ports, and other inspections throughout the supply chain.

Compliance is actively monitored, and M2.4 is met.

References

Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, amending Regulations (EC) No 847/96, (EC) No 2371/2002, (EC) No 811/2004, (EC) No 768/2005, (EC) No 2115/2005, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007, (EC) No 676/2007, (EC) No 1098/2007, (EC) No 1300/2008, (EC) No 1342/2008 and repealing Regulations (EEC) No 2847/93, (EC) No 1627/94 and (EC) No 1966/2006. <http://data.europa.eu/eli/reg/2009/1224/oj>

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EFCA (2023c). Baltic Sea JDP overview. <https://www.efca.europa.eu/en/content/baltic-sea>

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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.**

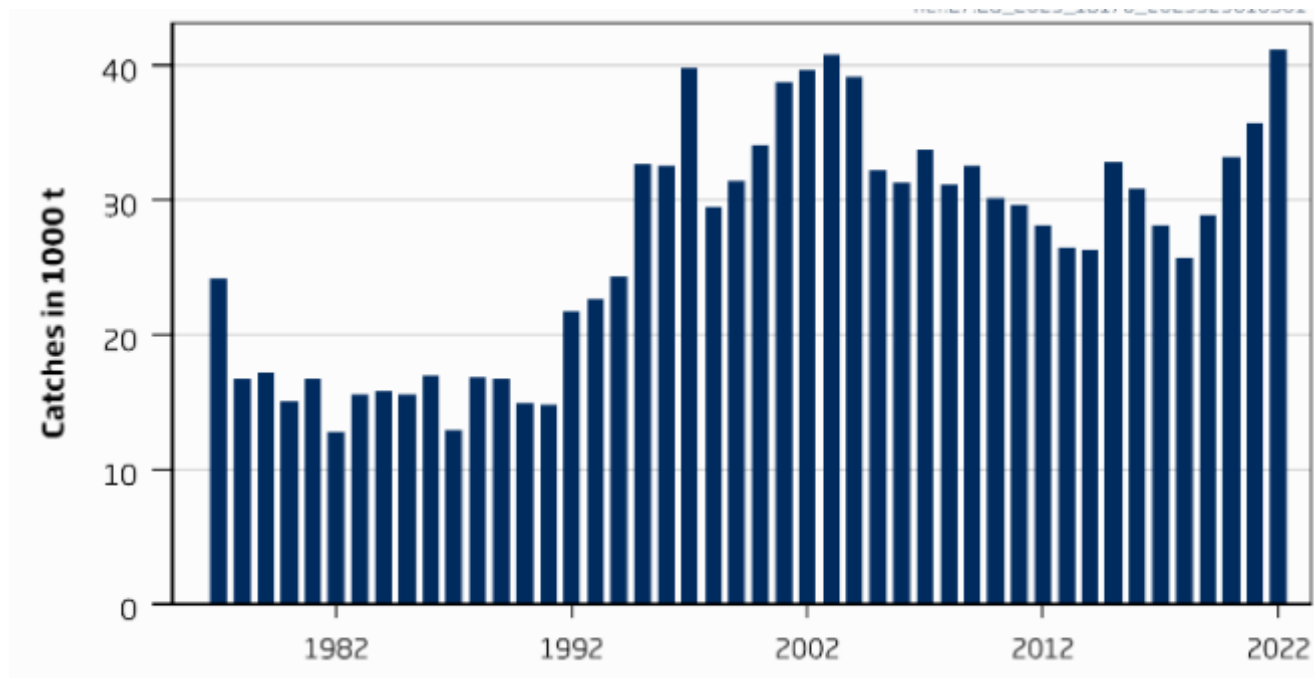
Species Name		Herring (Gulf of Riga)	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	PASS
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	PASS
Clause outcome:			PASS

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.

Total catches of herring in the Gulf of Riga in 2022 were 42,976t, of which 18,810t were caught by Estonian vessels and 24,166t were caught by Latvian vessels. Of the 42,976t, 40,340t were from the Gulf of Riga stock and 2,636t were from the Central Baltic stock. An additional 777t of Gulf of Riga herring was caught outside the Gulf of Riga, meaning total catches of Gulf of Riga herring were 41,117t (ICES 2023).

Landings data are collected and A1.1 is met.



Gulf of Riga herring, catches 1997-2022 (ICES 2023)

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 one acoustic survey index (GRAHS); maturity estimates from sampling; and a constant rate of natural mortality. Discards and bycatch are considered to be negligible (ICES 2023). The 2023 catch advice includes a section covering

the quality of the assessment, which notes only that recruitment for 2022 was uncertain and was replaced by a historical median. Although not mentioned in the herring catch advice, the sprat advice which covers sprat in the Gulf of Riga states 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 2023a). Overall, the assessment is considered by ICES to be supported by adequate data collection and analysis, and A1.2 is met.

References

ICES (2023). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>

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

Links

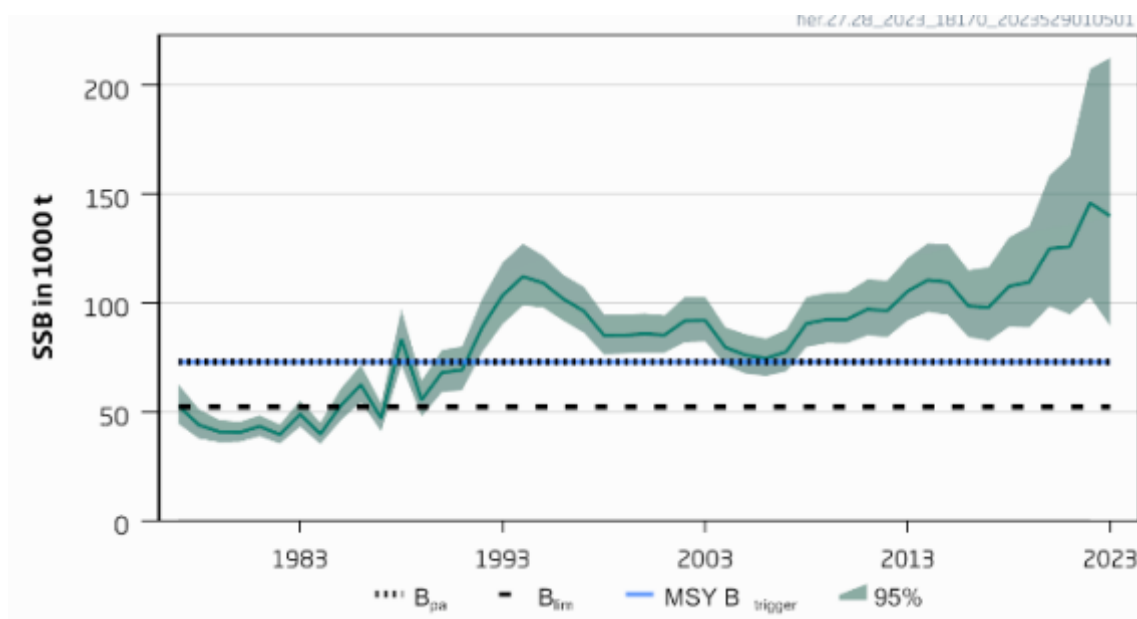
MarinTrust Standard clause	1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	7.3.1, 12.3
GSSI	D.4.01, D.5.01, D.6.02, D.3.14

A2 Stock Assessment - Minimum Requirements		
A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.	PASS
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
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 Gulf of Riga is subjected to an annual stock assessment carried out by the ICES Baltic Fisheries Assessment Working Group (WGBFAS). The most recent assessment was carried out in 2023, following a full benchmarking of the assessment methodology in the same year (ICES 2023a), using the data sources listed in A1.2. 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 as a whole is conducted following the ICES methodology (ICES 2023b). An appropriate stock assessment is conducted annually 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 the full benchmarking of the stock. The new reference points are listed in the table below. Key among these for the purposes of this MT assessment are the target reference points $MSY_{B_{trigger}}$ and $MAP_{MSY_{B_{trigger}}}$, set at 72,907t; and the limit reference points B_{lim} and $MAP_{B_{lim}}$, set at 52,076t (ICES 2023).		

Gulf of Riga herring, reference points and their technical bases (ICES 2023)

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	72 907	B_{pa}	ICES (2023a)
	F_{MSY}	0.28	Stochastic simulations (EqSim) with segmented regression with fixed breakpoint at B_{pa} stock-recruitment model from the full time-series (1977–2021)	ICES (2023a)
Precautionary approach	B_{lim}	52 076	$B_{lim} = B_{pa} / 1.4$	ICES (2023a)
	B_{pa}	72 907	Average SSB based on SSB-recruitment pairs where $SSB \leq \text{median SSB}$ and recruitment $\geq \text{median recruitment}$	ICES (2023a)
	F_{lim}	0.49	Equilibrium scenarios with stochastic recruitment: F value corresponding to 50% probability of ($SSB < B_{lim}$)	ICES (2023a)
	F_{pa}	0.35	$F_{0.95}$. The F that leads to $SSB \geq B_{lim}$ with 95% probability	ICES (2023a)
Management plan	MAP MSY $B_{trigger}$	72 907	MSY $B_{trigger}$	ICES (2023a)
	MAP B_{lim}	52 076	B_{lim}	ICES (2023a)
	MAP F_{MSY}	0.28	F_{MSY}	ICES (2023a)
	MAP target range F_{lower}	0.21–0.28	Consistent with the ranges resulting in no more than 5% reduction in long-term yield compared with MSY	ICES (2023a)
	MAP target range F_{upper}	0.28–0.33	Consistent with the ranges resulting in no more than 5% reduction in long-term yield compared with MSY	ICES (2023a)

The 2023 catch advice indicates that the stock assessment projected an estimated SSB at spawning time 2023 of 139,870t, and states that “spawning-stock size is above MSY $B_{trigger}$, B_{pa} , and B_{lim} ” (ICES 2023). The stock assessment provides an indication of the current status of the stock relative to reference points, and A2.2 is met.



Gulf of Riga herring, estimated SSB relative to the reference points established by the 2023 benchmarking (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, the catches in 2024 that correspond to the F ranges in the plan are between 27,696 tonnes and 41,370 tonnes. According to the MAP, catches higher than those corresponding to F_{MSY} (35,902 tonnes) can be taken only under conditions specified in the plan, whilst the entire range is considered precautionary when applying ICES advice rule” (ICES 2023). The stock assessment produces recommendations for the 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 2023) 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 2023c) 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 2023b). The stock assessment is publicly available, and A2.5 is met.

References

ICES (2023). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>

ICES. (2023a) Benchmark Workshop on Baltic Pelagic stocks (WKBALPEL). 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 (2023c) 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

A3 Harvest Strategy - Minimum Requirements			
A3	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 may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.	PASS
	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:			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 use of a TAC, which is generally based on the ICES advice which in turn is based on the Baltic Sea MAP (Regulation (EU) 2016/1139 as amended). TACs have been set within the range recommended by ICES since the implementation of the MAP in 2018, and the TAC appears to be an effective mechanism for limiting catches as total removals from the Gulf of Riga stock have similarly been within the recommended range since that time. The TAC is set for the Gulf of Riga geographically, with the knowledge that some herring taken will belong to the Central Baltic stock, and also that

some herring taken under the Central Baltic TAC will belong to the Gulf of Riga stock. In practice this has led to total catches from the Gulf of Riga herring stock being below the total Gulf of Riga herring TAC since it was first set, in 2003.

There is an effective mechanism in place by which total fishing mortality is restricted, 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.

Removals of Gulf of Riga herring have been below the upper boundary of the ICES advice range since the MAP was implemented in 2018. As noted in A3.1 above, a TAC is set for herring catches in the Gulf of Riga as a whole. In recent years, 4% - 11% of herring catch in the Gulf of Riga has been taken from the Central Baltic stock, meaning the TAC can be set higher than the advice, which is specific to the Gulf of Riga herring stock. Despite this, the TAC has consistently been set within the range recommended by ICES, and – as expected due to catches being taken from two stocks – removals from the Gulf of Riga herring stock have consistently been below the TAC.

Total fishery removals of Gulf of Riga herring have not exceeded the scientific advice since the MAP was put in place in 2018, and A3.2 is met.

ICES advice basis, corresponding catch range, Gulf of Riga TAC, and final catches of herring from the Gulf of Riga stock since 2018, when the ICES advice was first provided on the MAP basis. Note that the catch advice and total catch columns refer specifically to the Gulf of Riga stock; the TAC covers all herring removals in the Gulf of Riga geographical area and therefore is set on the assumption that a proportion of removals will be from the Central Baltic stock (ICES 2023).

Year	ICES advice	Catch from stock corresponding to advice	Agreed TAC for Gulf of Riga	Catches of Gulf of Riga herring stock
2018	MAP target F ranges: F_{lower} to F_{upper} (0.24–0.38), but F higher than $F_{MSY} = 0.32$ only under conditions specified in the MAP	19 396–29 195, but catch higher than 24 919 only under conditions specified in the MAP	28 999	25 747
2019	MAP target F ranges: F_{lower} to F_{upper} (0.24–0.38), but F higher than $F_{MSY} = 0.32$ only under conditions specified in the MAP	20 664–31 237, but catch higher than 26 932 only under conditions specified in the MAP	31 044	28 922
2020	MAP target F ranges: F_{lower} to F_{upper} (0.24–0.38), but F higher than $F_{MSY} = 0.32$ only under conditions specified in the MAP	23 395–35 094, but catch higher than 30 382 only under conditions specified in the MAP	34 445	33 215
2021	Management Plan	35 771 (ranges 27 702–41 423)	39 446	35 758
2022	Management Plan	44 945 (range 34 797–52 132)	47 697	41 117
2023	Management Plan	43 226 (range 33 519–50 079)	45 643	
2024	Management Plan	35 902 (range 27 696–41 370)		

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.

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

References

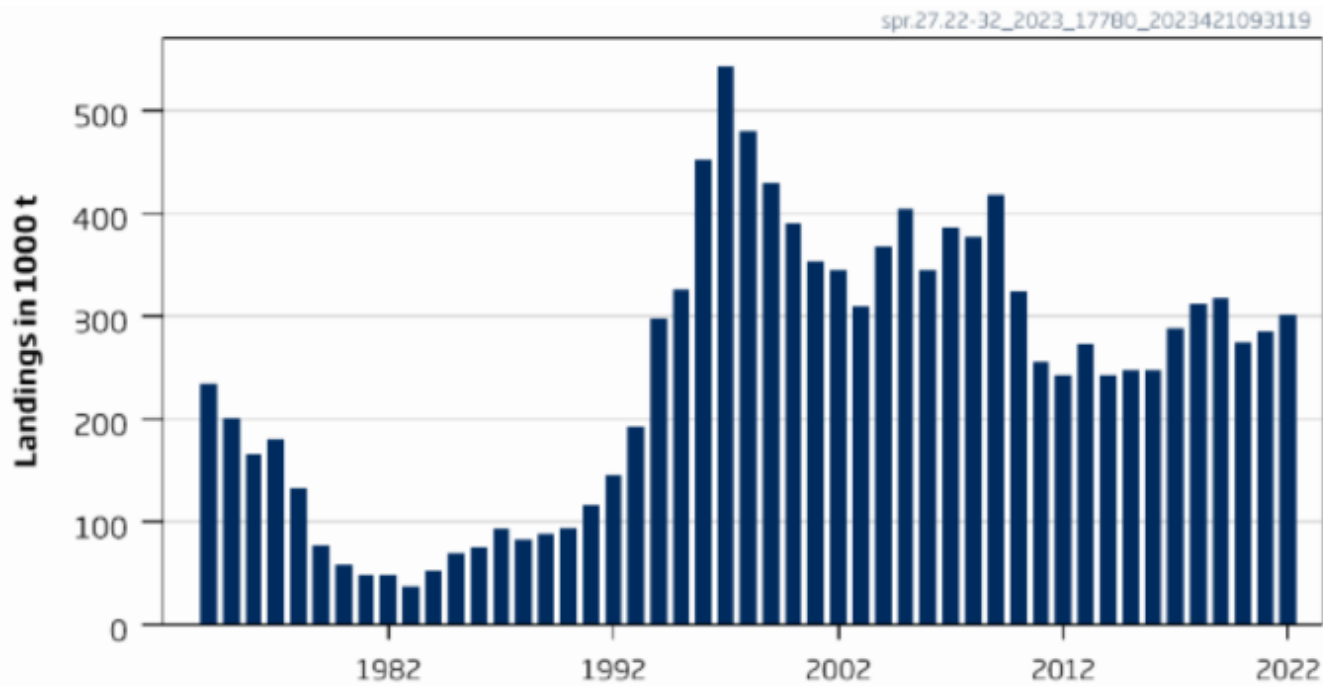
ICES (2023). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>

Standard clause 1.3.2.1.3

Links

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

A4	Stock Status – Minimum Requirements		
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS
Clause outcome:			PASS
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. As noted in A2.2, and illustrated by the graph in the same section, the most recent catch advice states that “spawning-stock size is above $MSY_{Btrigger}$, B_{pa}, and B_{lim}” (ICES 2023). As the stock is currently estimated to be substantially above the target reference point, the first clause of A4.1 is met.			
References			
Links			
MarinTrust Standard clause		1.3.2.1.4	
FAO CCRF		7.2.1, 7.2.2 (e)	
GSSI		D6 01	

Species Name		Sprat	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	PASS
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	PASS
Clause outcome:			PASS
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.			
 Baltic Sea sprat, landings, 1974 – 2022 (ICES 2023)			
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. https://eur-lex.europa.eu/eli/reg/2009/1224/oj/eng ICES (2023). Sprat (<i>Sprattus sprattus</i>) in subdivisions 22–32 (Baltic Sea). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, spr.27.22–32. https://doi.org/10.17895/ices.advice.21820581			
Links			
MarinTrust Standard clause		1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2	

FAO CCRF	7.3.1, 12.3
GSSI	D.4.01, D.5.01, D.6.02, D.3.14

A2

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

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 incorporated all international landings including removals by the Russian fleet (ICES 2023). The stock assessment is conducted according to the methodologies applied to all ICES stock assessments, including regular benchmarking of the stock whereby the methodology is reviewed to ensure it remains appropriate. This includes consideration of the biological and ecological characteristics of the species and the specific stock, and last occurred for Baltic Sea sprat in 2023 (ICES 2023a).

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

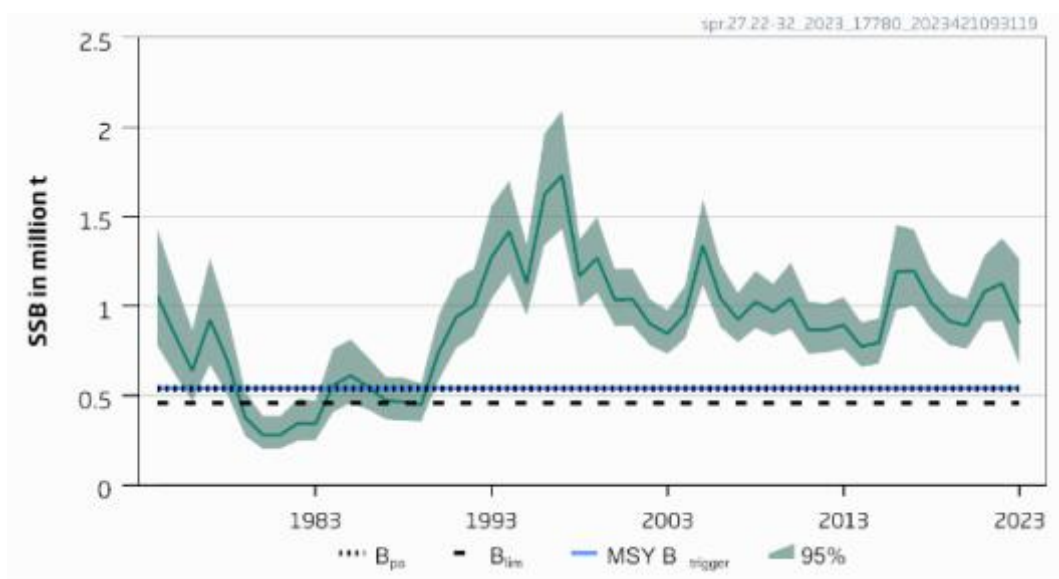
A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

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 the 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).

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

Framework	Reference point	Value	Technical basis	Source
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_{lim}	0.58	Consistent with B_{lim}	ICES (2023a)
	F_{pa}	0.35	F_{p05} ; the F that leads to $SSB \geq B_{lim}$ with 95% probability	ICES (2023a)
Management 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 range F_{lower}	0.26–0.34	Consistent with the ranges that result in a $\leq 5\%$ 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)

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.



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 2023b) 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. <https://doi.org/10.17895/ices.advice.7648>

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. <https://doi.org/10.17895/ices.advice.21820581>

ICES. (2023a) Benchmark Workshop on Baltic Pelagic stocks (WKBALTPEL). 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

A3 Harvest Strategy - Minimum Requirements			
A3	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 may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.	PASS
	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:			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, 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.			

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 ($F = 0.26$)	$\leq 205\ 000$	243 000**	247 200
2017	MSY approach ($F = 0.26$)	$\leq 314\ 000$	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. Commercial fishery removals are likely to be prohibited if stock biomass falls below the limit reference point, and A3.3 is met.

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. <https://doi.org/10.17895/ices.advice.21820581>

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%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

A4 Stock Status – Minimum Requirements			
A4	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS
	Clause outcome:		PASS
	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.			
As discussed in A2.2, the most recent ICES catch advice states that “Spawning-stock size is above MSY B _{trigger} , B _{pa} , and B _{lim} ” (ICES 2023). Therefore, the fishery meets the first option of this clause, and A4.1 is met.			
References			
ICES (2023) Sprat (<i>Sprattus sprattus</i>) in subdivisions 22–32 (Baltic Sea). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, spr.27.22–32. https://doi.org/10.17895/ices.advice.21820581			
Links			
MarinTrust Standard clause		1.3.2.1.4	
FAO CCRF		7.2.1, 7.2.2 (e)	
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.

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

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)

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.

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

Assessment Results

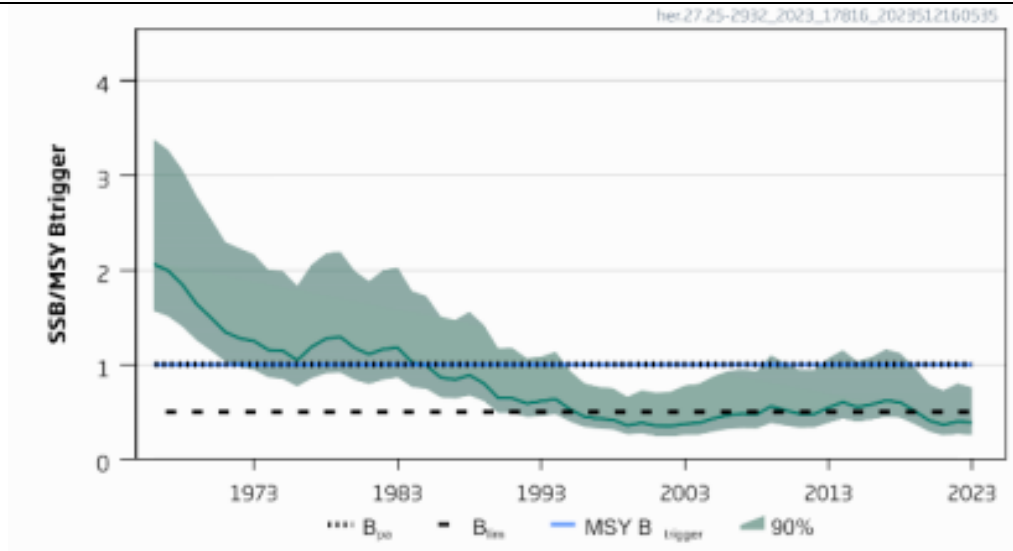
Species Name		n/a
B1	Species Name	
	Table used (Ba, Bb)	
	Outcome	
References		
Links		
MarinTrust Standard clause		1.3.2.2, 4.1.4
FAO CCRF		7.5.1
GSSI		D.5.01

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.

Species Name		Herring (Central Baltic)	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	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.	PASS
	Clause outcome:		PASS
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.			
An annual stock assessment is conducted by the ICES Baltic Fisheries Assessment Working Group (WGBFAS), utilising international commercial catch data including an estimate of Central Baltic herring caught in the Gulf of Riga fishery. It also incorporates one acoustic survey index (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 most recent assessment was conducted in 2023. 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). Central Baltic herring removals by the Gulf of Riga fishery are included in the stock assessment process for Central Baltic herring, and C1.1 is met.			
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.			
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 were set as relative values where previously they were absolute: the management plan target reference point $MAP\ MSY\ B_{trigger}$ was set at $B_{30\%}$ (i.e. 30% of the estimated unexploited biomass); and the limit reference point $MAP\ B_{lim}$ was set at $0.15*B_0$ (i.e. 15% of the estimated unexploited biomass) (ICES 2023). The 2023 stock assessment projected that SSB in 2024 would be 46% of the target reference point level, and stated, “spawning-stock size is below $MSY\ B_{trigger}$, B_{pa}, and B_{lim}” (ICES 2023). Fishery removals are not currently prohibited for this stock, nor is ICES recommending they should be.			



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

The MT whole fish assessment guidance for this clause states, “The standard requires that management measures 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 time frame”. With this in mind, the assessor 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.

Finally, the quantity of Central Baltic herring taken in the Gulf of Riga is relatively small compared to the scale of the fishery as a whole. For example, in 2022, a total of 83,411t of Central Baltic herring were caught (ICES 2023), of which only 2,636t were caught in the Gulf of Riga (ICES 2023a).

The assessor concludes that C1.2 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>
- ICES (2023a). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>

Links

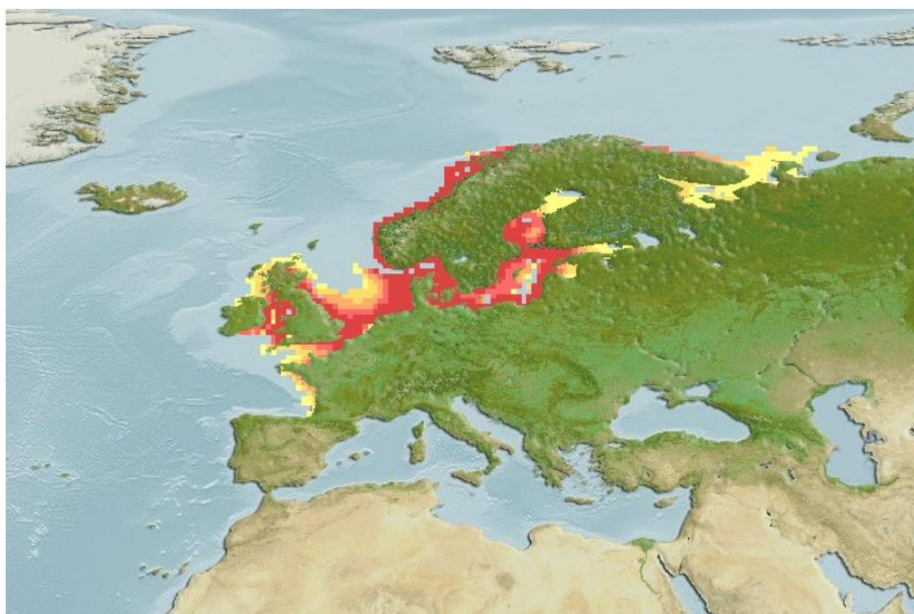
MarinTrust Standard clause	1.3.2.2
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FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

CATEGORY D SPECIES

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

D1	Species Name	Smelt	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	4.7 years	1
	Average maximum age (years)	18.9 years	2
	Fecundity (eggs/spawning)	6,500 – 50,000	2
	Average maximum size (cm)	45cm	1
	Average size at maturity (cm)	22.1cm	1
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	3.5	3
	Average Productivity Score		1.57
	Susceptibility Attribute	Value	Score
	Availability (area overlap)	<10%	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	High overlap	3
	Selectivity of gear type	Retained	3
	Post-capture mortality	Retained	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS
	Further justification for susceptibility scoring (where relevant)		
	For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision		



European smelt, native range. From fishbase, <https://www.fishbase.se/summary/osmerus-eperlanus.html>

References

Fishbase profile, European smelt: <https://www.fishbase.se/summary/osmerus-eperlanus.html>

Standard clauses 1.3.2.2

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 Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at 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 that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

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

D4	Species Name		n/a
	Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements		
	D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.	
	D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.	
Outcome:			
Evidence			
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.			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	

FURTHER IMPACTS

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

F1	Impacts on ETP Species - Minimum Requirements		
	F1.1	Interactions with ETP species are recorded.	PASS
	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
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 Working Group on Bycatch of Protected Species (WGBYC) (ICES 2023). The WGBYC report is not specific to the Gulf of Riga pelagic trawl fishery; however it does provide evidence of the submission of ETP interaction data. The most recent report (ICES 2022) indicates that ETP bycatch event data was submitted by Estonia in 2021 and 2022, and by Latvia in 2019 – 2022. At the time of writing, the Gulf of Riga herring fishery is MSC certified. The 2020 Public Certification Report (PCR) (BV 2020) states that there are no recorded interactions between the Gulf of Riga pelagic trawl fleet and ETP species. This conclusion was reached by comparing both the submitted interaction data, and the results of trawl fishery catch sampling carried out by the Latvian Institute of Food Safety, Animal Health and Environment (BIOR). F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species. 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 low probability of ETP interactions is further indicated by the MSC PCR for the fishery, which notes there are no recorded interactions with any potentially ETP species (BV 2020). Furthermore, the list of potentially-impacted ETP species provided within the report includes only one which falls within the MT definition of an ETP species: the Baltic Sea sub-population of the harbour porpoise (<i>Phocoena phocoena</i>, IUCN Critically Endangered (Hammond <i>et al</i> 2008)). The PCR states that "the harbour porpoise does not occur regularly in the Gulf of Riga, and no interactions with the pelagic trawl fishery in the Gulf of Riga have been recorded" (BV 2020). No other evidence was encountered to refute these conclusions, and therefore there is no substantial evidence that the fishery has a significant negative effect on 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. As noted in F1.2, there is no evidence of interactions between the fishery and any species which fall within the MT 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. F1.3 is met.			
References			

BV (2020). NZRO Gulf of Riga herring and sprat trawl fishery Public Certification Report, Bureau Veritas, July 2020. <https://fisheries.msc.org/en/fisheries/nzro-gulf-of-riga-herring-and-sprat-trawl-fishery/@assessments>

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 (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 [https://ices-library.figshare.com/articles/report/01_WGBYC -
Report from the Working Group on Bycatch of Protected Species/19290758](https://ices-library.figshare.com/articles/report/01_WGBYC_-_Report_from_the_Working_Group_on_Bycatch_of_Protected_Species/19290758)

ICES (2020). 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. <https://doi.org/10.17895/ices.advice.6022>

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. <https://www.ices.dk/community/groups/Pages/WGBYC.aspx>

Links

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

F2

Impacts on Habitats - Minimum Requirements

F2.1	Potential habitat interactions are considered in the management decision-making process.	PASS
F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	PASS
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. 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. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01992L0043-20130701>

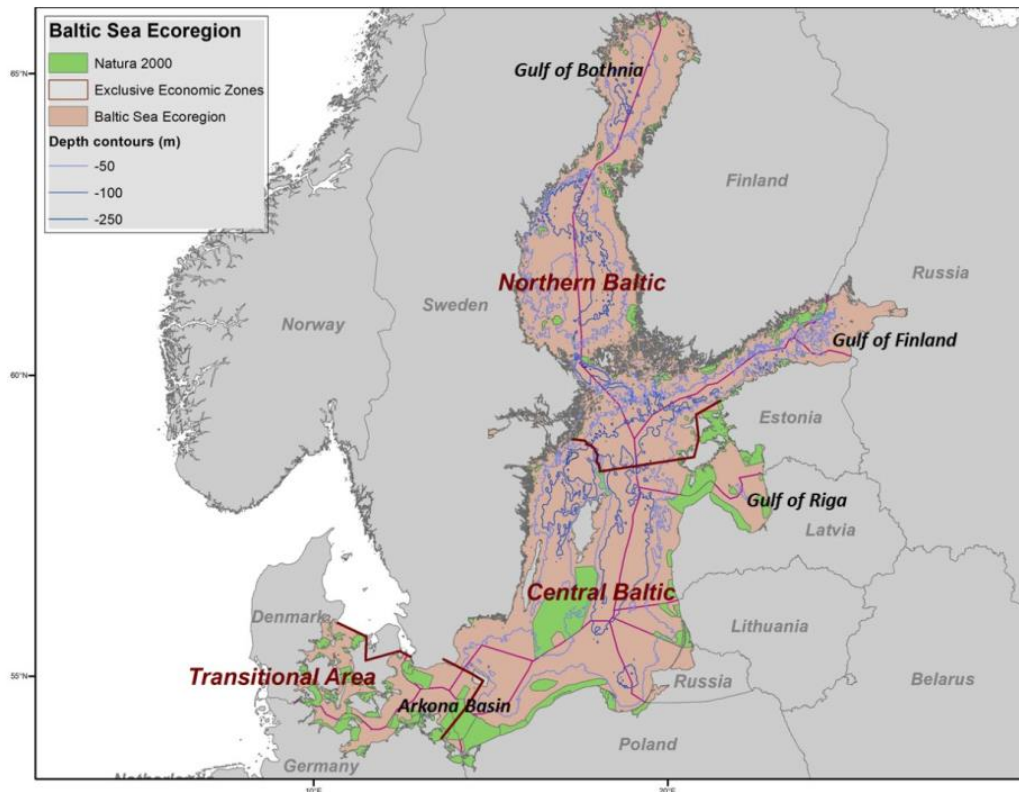
Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147>

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

F3	Ecosystem Impacts - Minimum Requirements		
	F3.1	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.	PASS
	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
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. 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". 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 ICES Baltic Sea ecoregion, showing EEZs and larger Natura 200 sites (ICES 2022)

Key ecosystem aspects identified at the regional level by the Baltic Sea ecoregion overview include:

- Nutrient inputs have decreased but are still above regional goals, and levels of nutrients in the water column and sediments remain high.
- Many deep-water areas have poor or no oxygen.
- Climate-driven changes to water temperature and salinity are likely to have an increasing influence on the Baltic Sea ecosystem.
- There have been shifts in the structure of the food web over the past few decades, including changes to phytoplankton and zooplankton communities; changes in coastal fish communities including an increase in carp and decrease in piscivorous species; changes in seabird populations, including a decline of species feeding on the benthos and an increase in those eating sprat and herring.

In addition to the over-arching consideration afforded to ecosystems at the Baltic Sea level, the specific roles of herring and sprat in the Gulf of Riga ecosystem factors in to the development of the stock assessment process. The objectives of the 2023 benchmarking workshop, which aimed to update the stock assessment methodology, were set in advance, and included the following:

“As part of the assessment methods workshop, knowledge about environmental drivers, including multispecies interactions, and ecosystem impacts should be integrated in the methodology” (ICES 2023).

The benchmarking workshop report provides evidence that ecosystem knowledge was indeed factored into discussions. The Gulf of Riga herring section includes an extensive discussion of “Ecosystem drivers”, stating for example that “the year-class strength of Gulf of Riga herring strongly depends on the severity of winter” (ICES 2023). Further consideration is given to Gulf of Riga herring and sprat specifically in the annual WGBFAS workshop and reports. In the case of sprat, there are ongoing efforts to “develop an F scaling factor...to tune the long-term F_{MSY} and...account for medium-term ecosystem-driven variability in productivity” (ICES 2023a).

The broader ecosystem is considered during the management decision-making process, and F3.1 is met.

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 (ICES 2022). Additionally, the ICES catch recommendations – which as noted in Section A are broadly followed – are calculated with the ecosystem considerations listed in F3.1, above. 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, 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. Natural mortality – primarily due to predation – is factored in to the ICES quota recommendations. Natural mortality levels are estimated for sprat as part of the stock assessment process, using a multispecies assessment model (ICES 2023b). Natural mortality of Gulf of Riga herring is assumed to be constant, but is still factored into the stock assessment process which leads to quota recommendations (ICES 2023c). In both cases, this means that catch recommendations are lower than they would be if natural mortality was not considered, and therefore catches are more conservative due to the important role played by both prey species. F3.3 is met.

References

- ICES (2022). Baltic Sea Ecoregion – Ecosystem overview. In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, Section 4.1, <https://doi.org/10.17895/ices.advice.21725438>
- ICES (2023). Benchmark Workshop on Baltic Pelagic stocks (WKBALPEL). ICES Scientific Reports. 5:47. 350 pp. <https://doi.org/10.17895/ices.pub.23216492>
- 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). Sprat (*Sprattus sprattus*) in subdivisions 22–32 (Baltic Sea). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, spr.27.22–32. <https://doi.org/10.17895/ices.advice.21820581>
- ICES (2023c). Herring (*Clupea harengus*) in Subdivision 28.1 (Gulf of Riga). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, her.27.28. <https://doi.org/10.17895/ices.advice.21820512>
- 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>

Links

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

SOCIAL CRITERION

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

Appendix A - Determining Resilience Ratings

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

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

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

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

Glossary

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

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