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IFFO RS
Global Standard for Responsible Supply
of Marine Ingredients

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Global Standard for Responsible Supply of Marine Ingredients Fishery Assessment Methodology and Template Report V2.0



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IFFO RS Fishery Assessment Peer Review

Fishery Under Assessment	Subdivision 25-29 and 32, Central Baltic Sea, excluding Gulf of Riga. Baltic countries: Denmark, Sweden and Latvia.
Date	September 2019
Assessor	Jim Daly

Application details and summary of the assessment outcome				
Name: FF Skagen A/S and others				
Address:				
Country: Denmark, Latvia		Zip:		
Tel. No.:		Fax. No.:		
Email address:		Applicant Code		
Key Contact:		Title:		
Certification Body Details				
Name of Certification Body:		SAI GLOBAL LTD		
Assessor Name	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval	Whole fish/ By-product
Jim Daly	Vito Romito	3	Re-approval	Whole fish
Assessment Period	2019			

Scope Details	
Management Authority (Country/State)	EU; Denmark: Ministry of Food, Agriculture and Fisheries; Latvia: National Board of Fisheries of the Ministry of Agriculture; Russia: Federal Agency for Fishery
Main Species	Herring <i>Clupea harengus</i>
Fishery Location	Subdivision 25-29 and 32, Central Baltic Sea, excluding Gulf of Riga. Baltic countries: Denmark, Sweden and Latvia.
Gear Type(s)	Primarily pelagic trawl, some demersal trawling
Outcome of Assessment	
Overall Outcome	PASS
Clauses Failed	NONE



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Peer Review Evaluation	APPROVE
Recommendation	PASS

Assessment Determination

The EU component of the Baltic Sea herring fishery is managed within the CFP framework and as such is subject to research, control and enforcement typical of European fisheries. The EU landing obligation in 2015 began to cover small and large pelagic species in the Baltic.

Preliminary investigations indicate that stocks of Western Baltic spring-spawning herring and Central Baltic herring are mixing in Subdivisions 24-26 (Figure 2). This is not taken into account in the current assessment (2017 Report) but should be investigated further. Species misreporting of herring has occurred in the past and there are again indications that it is a problem in some nations. For the herring stock in the Central Baltic assessments have generally shown an overall upwards revision in SSB and a downwards revision in fishing mortality (F). Assessments provide an estimate of the status of the biological stock relative to a reference point or proxy.

Although the EU component of the fishery is managed largely in line with ICES advice (and therefore implicitly follows MSY and precautionary approaches), there is ostensibly an agreement in place that the Russian quota is 10% of the TAC. Reported landings (EU fleets) were well below the TAC from 1992-2002 but since then have been close to the TAC.

ICES now provides a great deal of integrated advice at ecosystem level, in support of the shift towards a more holistic approach to managing Europe's seas. Little is currently known at the regional scale about the sensitivity of different Baltic Sea organisms and communities to fishery-induced impacts. A qualitative approach to address this was elaborated by ICES in 2016. A mechanistic, quantitative assessment procedure based on biological principles is now under development.

The ICES Working Group on Bycatch of Protected Species (WGBYC) met in Iceland (May 2018). Highlights from the 2018 meeting included a review of ongoing bycatch mitigation research projects and a review of the compiled inventory of various sampling programmes providing information on bycatch of protected species.

An MSC certification assessment process for the Baltic Sea herring pelagic trawl and purse seine fishery has been launched. In July 2019 the CAB announced an additional consultation period to provide stakeholders the opportunity to submit any new information that they may have in relation to this fishery.

Sprat in the Baltic is considered, in its most recent stock assessment, to have a biomass above the limit reference point.

Central Baltic herring has not yet been assessed for the IUCN Red List and is not on the current list of CITES endangered species (websites accessed 03.09.19).

Central Baltic herring is approved by the assessment team for the production of fishmeal and fish oil under the IFFO-RS v 2.0 by-products standard.

Peer Review Comments



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The Central Baltic Sea Herring fishery is managed as part of the EU CFP framework and under a Multi Annual Plan with MSY exploitation objectives. ICES assessed that fishing pressure on the stock is above FMSY and below Fpa and Flim, while spawning stock size is above MSY Btrigger, Bpa, and Blim.

In addition, the effects of the fishery on bycatch and habitats appear to be limited, based on available data. The ecosystem dynamics of this fishery are intrinsically linked with cod and sprat and managers are currently addressing this further.

The Peer Reviewer agrees that Central Baltic herring should be approved by the assessment team for the production of fishmeal and fish oil under the IFFO-RS v 2.0 by-products standard.

Notes for On-site Auditor

Note: This table should be completed for whole fish assessments only.

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

Species-Specific Results

Category	Species	% landings	Outcome (Pass/Fail)	
Category A	Herring (<i>Clupea harengus</i>)	95	A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
Category B				
Category C	Sprat (<i>Sprattus sprattus</i>)	5	PASS	
Category D				

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

HOW TO COMPLETE THIS ASSESSMENT REPORT

This assessment template uses a modular approach to assessing fisheries against the IFFO RS standard.

Whole Fish

The process for completing the template for a **whole fish** assessment is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table, to determine which categories of species are present in the fishery.



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2. ALL ASSESSMENTS: Complete clauses M1, M2, M3: Management.
3. IF THERE ARE CATEGORY A SPECIES IN THE FISHERY: Complete clauses A1, A2, A3, A4 for **each** Category A species.
4. IF THERE ARE CATEGORY B SPECIES IN THE FISHERY: Complete the Section B risk assessment for **each** Category B species.
5. IF THERE ARE CATEGORY C SPECIES IN THE FISHERY: Complete clause C1 for **each** Category C species.
6. IF THERE ARE CATEGORY D SPECIES IN THE FISHERY: Complete Section D.
7. ALL ASSESSMENTS: Complete clauses F1, F2, F3: Further Impacts.

A fishery must score a pass in **all applicable clauses** before approval may be recommended. To achieve a pass in a clause, the fishery/species must meet **all** of the minimum requirements.



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By-products

The process for completing the template for **by-product raw material** is as follows:

1. **ALL ASSESSMENTS:** Complete the Species Characterisation table with the names of the by-product species and stocks under assessment. The ‘% landings’ column can be left empty; all by-products are considered as Category C and D.
2. **IF THERE ARE CATEGORY C BYPRODUCTS UNDER ASSESSMENT:** Complete clause C1 for **each** Category C by-product.
3. **IF THERE ARE CATEGORY D BYPRODUCTS UNDER ASSESSMENT:** Complete Section D.
4. **ALL OTHER SECTIONS CAN BE DELETED.** Clauses M1 - M3, F1 - F3, and Sections A and B do not need to be completed for a by-product assessment.

By-product approval is awarded on a species-by-species basis. Each by-product species scoring a pass under the appropriate section may be approved against the IFFO RS Standard.

SPECIES CATEGORISATION

The following table should be completed as fully as the available information permits. Any species representing more than 0.1% of the annual catch should be listed, along with an estimate of the proportion of the catch each species represents. The species should then be divided into Type 1 and Type 2 as follows:

- **Type 1 Species** can be considered the ‘target’ or ‘main’ species in the fishery. They make up the bulk of annual landings and are subjected to a detailed assessment.
- **Type 2 Species** can be considered the ‘bycatch’ or ‘minor’ species in the fishery. They make up a small proportion of the annual landings and are subjected to relatively high-level assessment.

Type 1 Species must represent 95% of the total annual catch. Type 2 Species may represent a maximum of 5% of the annual catch (see Appendix B).

Species which make up less than 0.1% of landings do not need to be listed (NOTE: ETP species are considered separately). The table should be extended if more space is needed. Discarded species should be included when known.

The ‘stock’ column should be used to differentiate when there are multiple biological or management stocks of one species captured by the fishery. The ‘management’ column should be used to indicate whether there is an adequate management regime specifically aimed at the individual species/stock. In some cases it will be immediately clear whether there is a species-specific management regime in place (for example, if there is an annual TAC). In less clear circumstances, the rule of thumb should be that if the species meets the minimum requirements of clauses A1-A4, an adequate species-specific management regime is in place.

NOTE: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it **cannot** be approved for use as an IFFO RS raw material. This applied to whole fish as well as by-products.

TYPE 1 SPECIES (Representing 95% of the catch or more)

Category A: Species-specific management regime in place.

Category B: No species-specific management regime in place.



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TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS)

Category C: Species-specific management regime in place.

Category D: No species-specific management regime in place.

Common name	Latin name	Stock	% of landings	Management	Category
Herring	<i>Clupea harengus</i>	Subdivisions 22-32, Baltic Sea	95	EU	A
Sprat	<i>Sprattus sprattus</i>	Subdivisions 22-32, Baltic Sea	5	EU	C

MANAGEMENT

The two clauses in this section relate to the general management regime applied to the fishery under assessment. 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		PASS
M1.2	There is an organisation responsible for collecting data and assessing the fishery		PASS
M1.3	Fishery management organisations are publically committed to sustainability		PASS
M1.4	Fishery management organisations are legally empowered to take management actions		PASS
M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making		PASS
M1.6	The decision-making process is transparent, with processes and results publically available		PASS
Clause outcome:			PASS

Evidence

M1.1:

Denmark and Latvia are Member States of the European Union, and therefore in Community waters implement the Common Fisheries Policy (CFP). In force since 1983, the CFP aims to reconcile resource conservation with the preservation of income and jobs in coastal zones that offer few alternatives in terms of production or employment. It therefore covers not just resources but also markets and structures. With regard to resource management, the CFP regulations comprise:

- A traditional management tool based on TACs and quotas;
- Technical measures relating to gear or catch;
- Effort-related management, based on vessel engine power and the number of days at sea.

The CFP also provides for the introduction of measures to rebuild, over a period of several years, stocks threatened in terms of sustainable harvesting, and for recourse to effort-related management rules to supplement TACs and quotas.

The CFP is periodically reviewed and reformed. The last reform came into effect in January 2014 and introduced multi-annual plans which contain goals and tools for fish stock management and the roadmap to achieving objectives in a sustainable and inclusive way.

Baltic Sea Multi-annual Plan (BSAP 2016):

Regulation (EU) 2016/1139 established a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks. The plan defines ranges of fishing mortality levels on the basis of which the Council will define annual catch limits. In cases where a spawning stock would be at too low a level, safeguard measures must be taken and the level of fishing mortality reduced. The Commission is also empowered to adopt delegated acts for fisheries technical measures based on recommendations elaborated jointly at regional level by Member States concerned. A map of the Baltic Sea is provided (Figure 1):



Figure 1 Map of the Baltic Sea **R1**

Baltic Sea Multi-annual Plan (Update):

The most recent amendment (EU 2018/976) regarded fishing mortality ranges and safeguard levels for certain herring stocks in the Baltic Sea. The scientific evaluation of the Bothnian Sea herring stock and the Bothnian Bay herring stock conducted in 2017 by ICES showed that those two stocks are similar. As a consequence, ICES combined the two stocks into one, changed the boundaries of its geographic distribution area and re-estimated MSY fishing mortality ranges, as well as relevant conservation reference points.

Denmark:

The responsible authority for monitoring and enforcing EU and national conservation policies is the Danish Agrifish Agency, which is a part of the Ministry of Food, Agriculture and Fisheries, under the 1999 Fisheries Act. The Agency carries out inspection at sea and landings, as well as verification of EU marketing standards.

The Ministry also works for Danish fisheries and aquaculture through:

- Regulation and inspections of the fishing industry
- Support for research in fisheries and aquaculture production
- Support for the development of fisheries, the fish industry, fishery harbours and aquaculture
- Fish management and fishing license arrangements for recreational fisheries



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The Danish National Institute of Aquatic Resources (DTU Aqua) at the Technical University of Denmark conducts research and provides advice on fisheries research to all stakeholders.

Latvia

The fisheries administration in Latvia is through the National Board of Fisheries of the Ministry of Agriculture, responsible for the overall management of the fisheries sector, quota management, sector development, strategies and legislation. The Board deals with issues related to fisheries science and restocking of fish resources, fish processing and trading issues, and represents Latvian fisheries interests in various EU institutions and international organizations (FAO, NAFO, etc.).

State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out fishing controls in marine waters under Latvian jurisdiction. An action plan was agreed with the EU in 2013 to address shortcomings in Latvia's national fisheries control system. Fishing Law (12.04.1995) sets the basis for fisheries legislation in Latvia through institutions responsible for fisheries management and control, as well as rules on fish resource management.

Baltic Sea Advisory Council (BSAC):

The Baltic Sea Advisory Council (BSAC) was set up in March 2006. Following CFP reform a new regulation was adopted in which the role and function of Advisory Councils has been included. The main aim of the BSAC is to prepare and provide advice on management of Baltic Sea fisheries in order to achieve a successful running of the EU's CFP. The BSAC consists of organisations representing fisheries and other interest groups affected by the CFP (e.g. environmental, organisations, and sports and recreational fisheries organisations).

Russia's Federal Agency for Fishery (Rosrybolovstvo) is a federal executive body responsible for control (oversight) in fisheries and conservation of marine biological resources in Russia. The Agency exercises its powers also in those cases covered by international treaties. Russia operate an autonomous quota in the assessment area annually; usually around 10% of the TAC awarded to the EU fleets.

There are organisations responsible for managing the fishery **R2-R9; R26;R29; R32**

M1.2:

The primary provider of scientific information and advice at the national level within Denmark is the National Institute of Aquatic Resources at the Technical University of Denmark (DTU Aqua). DTU Aqua's stated mission is to conduct research, provide advice, educate at university level and contribute to innovation in sustainable exploitation and management of aquatic resources. DTU Aqua directly advises the Danish Ministry of Food, Agriculture and Fisheries and other public authorities. Scientists based in Latvia's Ministry also contribute to stock advice on the species.

International science:

Science-based fishery management advice at the international level is provided by the International Council for the Exploration of the Sea (ICES). ICES is a network of more than 1,600 scientists from 200 institutes (including DTU Aqua), linked by an intergovernmental agreement (the ICES Convention) to add value to national research efforts. Scientists working through ICES gather information about the marine ecosystem. Besides filling gaps in existing knowledge, this information is developed into unbiased, non-political fishery management advice.

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



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Baltic Sea Advisory Council:

Also relevant to the management of sprat in the Baltic Sea is the Baltic Sea Advisory Council (BSAC). As previously stated the main objective of the BSAC is to provide advice on the management of Baltic fisheries, through its membership of representatives of the fishing industry and other non-governmental groups affected by the CFP, including NGOs, consumers and others.

There are organization (s) responsible for collecting data and assessing the fishery **R4-R5;R8**

M1.3:

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

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

The CFP contributes to the protection of the marine environment, to the sustainable management of all commercially exploited species, and in particular to the achievement of good environmental status by 2020, as set out in Regulation (EU) No 1380/2013.

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

The Baltic Sea Multiannual Plan (MAP) references and endorses several regulations addressing the issue of sustainability:

- The United Nations Convention on the Law of the Sea provides for conservation obligations, including the maintaining or restoring of populations of harvested species at levels which can produce the maximum sustainable yield (MSY).
- At the World Summit on Sustainable Development at Johannesburg in 2002, the Union and its Member States committed themselves to act against the continued decline of many fish stocks. It is necessary to adapt exploitation rates of cod, herring and sprat in the Baltic Sea so as to ensure that the exploitation of those stocks restores and maintains them above levels that can produce MSY.

Denmark and Latvia are Member States of the European Union, and therefore in Community waters implement the CFP.

As part of DTU Aqua’s mission statement they conduct research, provide advice and contribute to innovation in sustainable exploitation and management of aquatic resources.

Fishery management organisations are publicly committed to sustainability.

R3,R5-R6; R26

M1.4:

Denmark and Latvia are Member States of the European Union, and therefore in Community waters implement the CFP. Through Regionalisation a balanced representation of local stakeholders know best how to apply EU



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rules in their respective areas. The main aim of the BSAC is to prepare and provide advice on the management of Baltic Sea fisheries in order to achieve a successful running of the EU's CFP.

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

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

The Danish basic regulation on fisheries mentions several considerations in the allocation of fishing opportunities and addresses the balance between available resources and fishing capacity.

In Latvia fishing opportunities are allocated to companies on the basis of historical fishing rights. The National Board of Fisheries allocates quotas to the vessels fishing outside coastal waters and controls their utilization. Fishing Law (12.04.1995) sets the basis for fisheries legislation in Latvia and institutions responsible for fisheries management and control, as well as rules on fish resources management.

Fishery management organisations are legally empowered to take management actions

R2,R6-R9, R26-R28;R30

M1.5:

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

Advice provided by ICES includes stock assessments and deeper analysis on which the Commission bases both its annual recommendations for setting TACs and quotas, and more long-term proposals on how fisheries in European waters can be managed sustainably.

Increasingly ICES also provides a great deal of integrated advice at ecosystem level, in support of the shift towards a more holistic approach to managing Europe's seas. The BSAC also provides advice on the management of Baltic fisheries and consists of organisations representing fisheries and other interest groups affected by the CFP (e.g. environmental, organisations, and sports and recreational fisheries organisations).

In 2016 the BSAC recommended setting catch levels for Baltic stocks including sprat. Recommendations are set after consideration of biological advice and were presented to the Joint Working Group of the Baltic Sea Advisory Council in June 2015.

There is a consultation process through which fishery stakeholders are engaged in decision-making
R4,R8,R10

M1.6:

ICES provides annual stock assessment and management advice in relation to the Baltic Sea sprat fishery via its Baltic Fisheries Assessment Working Group (WGBFAS). Results are published annually on the ICES



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website. Sprat quotas for the EU fleet in the assessment area are available annually on DG Mare's website or through the EU's Eurolex server.

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

R4, R10, R16-R19, R26

References

R1: European Commission DG MARE: Baltic Sea MAP:

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

R2: EU Common Fisheries Policy overview: http://ec.europa.eu/fisheries/cfp/index_en.htm

R3: EU Common Fisheries Policy reform: http://ec.europa.eu/fisheries/reform/index_en.htm

R4: ICES, "Who we are": <http://www.ices.dk/explore-us/who-we-are/Pages/Who-we-are.aspx>

R5: DTU Aqua, "Mission, vision and tasks": http://www.aqua.dtu.dk/english/About/Mission_vision

R6: The Danish Agrifish Agency <http://agrifish.dk/about-us/>

R7: The State Environmental Service (SES), Ministry of Environmental Protection and Regional Development, Republic of Latvia <http://www.vvd.gov.lv/eng/about-us/>

R8: Baltic Sea Advisory Council, "about": <http://www.bsac.dk/ooizzCMS/DA/aboutthebsrac>

R9: Commission Delegated Regulation (EU) 2017/1575 of 23 June 2017 amending Delegated Regulation (EU) 2015/242 laying down detailed rules on the functioning of the Advisory Councils under the common fisheries policy https://eur-lex.europa.eu/eli/reg_del/2017/1575/oj

R10: STECF home page: <https://stecf.jrc.ec.europa.eu/>

Standard clauses 1.3.1.1, 1.3.1.2



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M2	Surveillance, Control and Enforcement - Minimum Requirements		
M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations		PASS
M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken		PASS
M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing		PASS
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.		PASS
Clause outcome:			PASS
Evidence			
M2.1:			
<p>Each Member State maintains an official website on fishery related control and reporting issues which are of benefit to the Commission, other Member States and the masters of fishing vessels in connection with the recovery of cod stocks in the Baltic.</p> <p>National websites contain <i>inter alia</i> information on:</p> <ul style="list-style-type: none"> • Description of control services and the resources available; • National control action programmes; • List of authorised vessels holding a special permit for fishing for cod in the Baltic Sea; • Fishing effort limitation schemes; • Contact details for the submission of logbooks and landing declarations when landing in that Member State • Lists of designated ports for landing of certain species and addresses for fulfilling notification requirements <p>Member States must apply effective, proportionate and dissuasive sanctions against natural or legal persons engaged in IUU or other illegal activities.</p> <p>The Danish Agrifish Agency is the competent authority with responsibility of enforcement of sanctions and penalties with respect to the prosecution of fishery rules in Denmark. State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out fishing controls in marine waters under Latvian jurisdiction.</p> <p>The European Fisheries Control Agency (EFCA) mission is to promote the highest common standards for control, inspection and surveillance under the CFP. Its primary role is to organise coordination and cooperation between national control and inspection activities so that the rules of the CFP are respected and applied effectively.</p> <p>Joint Deployment Plans (JDP's) are established for fisheries/areas considered a priority by the Commission and the Member States concerned. They can refer either to European Union waters for which a Specific Control</p>			



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and Inspection Programme (SCIP) has been adopted or to International waters under the competence of a Regional Fisheries Management Organisation (RFMO), where EFCA is requested to coordinate the implementation of the European obligations under an International Control and Inspection Scheme.

In 2019 (Jan-Mar) a JDP was undertaken in EU Waters Subdivisions 22-32 (Baltic Sea) with the participation of inspection services and assets from competent authorities in Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden.

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

R11-R15

M2.2:

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

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

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

The Danish Agrifish Agency is the competent authority with responsibility of enforcement of sanctions and penalties with respect to the prosecution of fishery rules in Denmark. State Environmental Service (SES), part of the Ministry of Environmental Protection and Regional Development, carries out fishing controls in marine waters under Latvian jurisdiction.

A Latvian Administrative Penalty Code exists and is applied for violations of fishing rules. Where repeated violation of fishing regulations occurs or fishing occurs without authorization fines range from 700€ up to 14,000€, gear can be confiscated and fishing licenses suspended for up to three years.

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

R7; R11;R13; R27-R29

M2.3:

Joint Deployment Plans (JDP's) undertaken in 2018 in the Baltic involved competent authorities for fisheries control and protection vessels from Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden. The Report (Jan-Dec 2018) noted that a total of 3,172 inspections ashore were reported by Member



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States concerned, including 5 transport inspections. Inspection teams detected 50 apparent infringements on 49 fishing vessels.

A total of 33,143t of sprat were controlled during landings inspections. During the reporting period Member States reported 984 inspections at sea with a total of 20 apparent infringements detected on 16 fishing vessels. A total of 3,367t of Sprat were controlled during inspections at sea. No infringements were detected during landings inspections.

The % of at sea inspected F/V with apparent infringements was 1.6%; the % of on-land inspected F/V with apparent infringements was 1.5%.

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

R15

M2.4:

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

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

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

In Denmark since 2009, the EU has operated a scheme with realtime closures in the Northsea and Skagerrak in areas with presence of juvenile cod, haddock, whiting and saithe. Information from the Danish Fishing Agency (in English) regarding national implementation of EU legislation is currently under development on their website and not available during the time of drafting of this report.

In Latvia the Marine Environmental Board of the Ministry of Environment carries out fishing control in marine waters under Latvian jurisdiction, issues fishing licences, operates a vessel monitoring satellite centre and monitors fish landing at ports.



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

R13-R15; R26;R30

References

R11 European Fisheries Control Agency: About: <https://www.efca.europa.eu/en/content/objectives-and-strategy>

R12 JDP-BS-2019-01 (the Baltic Sea campaign): <https://www.efca.europa.eu/en/content/reports-2019-1>

R13 Fisheries control authorities in the Baltic Sea area: 2pp

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

R14 CFP control and enforcement overview: http://ec.europa.eu/fisheries/cfp/control/index_en.htm

R15 JDP-BS-2018-01 (Baltic Sea): <https://www.efca.europa.eu/sites/default/files/atoms/files/2018%20-%20THE%20BALTIC%20SEA%20JOINT%20CAMPAIGN%20-%202012M%20REP%20WEB.pdf>

R16 BSAC recommendations for the fishery in the Baltic Sea in 2016, July 2015:

http://www.bsac.dk/archive/Dokumenter/Recommendations/2015/BSAC_2015_4BSACRecommendationsFishery2016FINAL.pdf

Standard clause 1.3.1.3

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

Species Name		Herring (<i>Clupea harengus</i>)	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	YES
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	YES
Clause outcome:			PASS
Evidence			
A1.1:			
Central Baltic herring one of the largest herring stock assessed by WGBFAS, it comprises a number of spawning components. This stock complex experienced a high biomass level in the early 1970s but has declined since then. The proportion of the various spawning components has varied in both landings and in stock. The southern components (Figure 2) in which individuals are growing to a relatively larger size, has declined and during the last years the more northerly components, in which individuals reach a maximum size of only about 18-20 cm, are dominating in the landings.			
The latest stronger year classes were the 2002, 2007 and 2011 year-class, respectively. The 2014 year class was estimated in 2017 to be the fourth highest of the whole time series. This estimate has since been downgraded (ICES 2019).			



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A mixture of central Baltic herring (Subdivisions 25-27, 28.2, 29, and 32) and Gulf of Riga herring (Subdivision 28.1) is caught in the central Baltic Sea. In the assessment and ICES advice the central Baltic herring stock is considered to be caught both in and outside the central Baltic Sea.

Discards are considered low; by-catch of sprat and juvenile cod is unknown. Fishery-dependent and independent data are collected for the stock. In general, the level of research appears to be sufficient for the informed management of the stock.

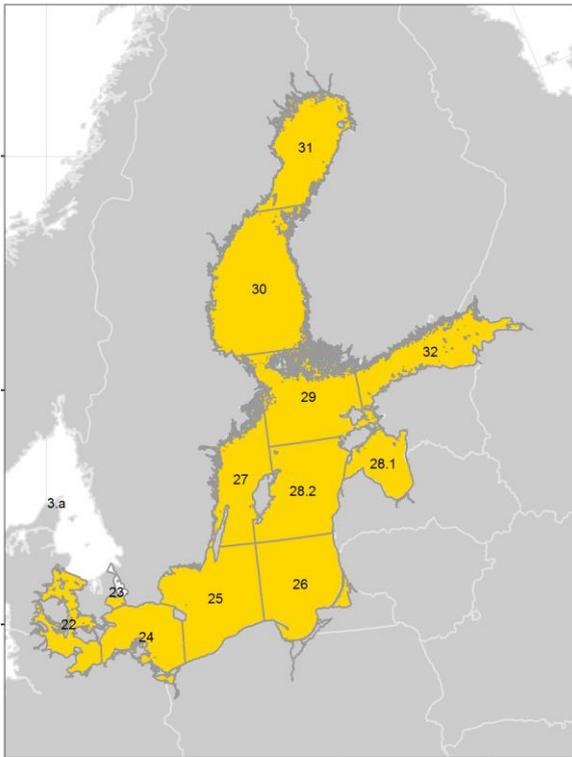


Figure 2 Geographical area covered by ICES advice (in yellow) **R17**

A1.2:

Stock abundance estimates from the Baltic International Acoustic October Survey (BIAS) were available to tune the XSA (1991-latest year, ages 1-8+). The tuning index covers the area of Sub D 25-27, 28.2 and 29. All available data covering the southern and northern part of SD 29 are used within the compilation. As in previous years, estimates for the years 1993, 1995 and 1997 were excluded due to an incomplete coverage of the standard survey area.

The consistency of the survey data at-age was checked by plotting survey numbers at each given age against the numbers of the same year class at age 1. Including the 2018 data showed only small differences on the strength of the internal consistency compared to last year.

Sufficient additional information is collected to enable an indication of stock status to be estimated **R17-R18**

References



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R17 ICES Baltic Sea Ecoregion - Fisheries overview 2018

https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2018/2018/BalticSeaEcoregion_FisheriesOverviews_2018_November.pdf

R18 ICES Baltic sea herring advice May 2019:

<http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/her.27.25-2932.pdf>

Standard clause 1.3.2.1.1



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A2 Stock Assessment - Minimum Requirements		
A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.	YES
A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	YES
A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	YES
A2.4	The assessment is subject to internal or external peer review.	YES
A2.5	The assessment is made publicly available.	YES
Clause outcome:		PASS
<p>Evidence</p> <p>A2.1: A stock assessment is conducted at least once every 3 years. Discard data have not generally been available for inclusion in stock assessments, although efforts are underway to remedy this in future. Discards are estimated to be negligible in most countries, as undersized and lower quality fish can be used for fishmeal production. The most recent ICES advice on the stock has not included discards or bycatch in their assessment. It is expected that misreporting of catches occurs, as estimates of species composition of clupeid catches are imprecise in some mixed pelagic fisheries. This is taken into account when assessing sprat stocks.</p> <p>Commercial catches (international landings, age distributions from catch sampling); one survey acoustic index (BIAS); natural mortalities from multispecies model (SMS) have been provided until 2011. For 2012–2018 natural mortalities are based on regression of M against eastern Baltic cod SSB; fixed maturity ogive.</p> <p>R18</p> <p>A2.2: Spawning-stock biomass (SSB) has shown an increasing trend since 2001 and has been above MSY Btrigger since 2007. Fishing mortality has shown an increasing trend since 2013 and has been above FMSY since 2016. Recruitment in 2015 is estimated to be the highest of the whole time-series. In the last four years recruitment has been below or on average:</p>		

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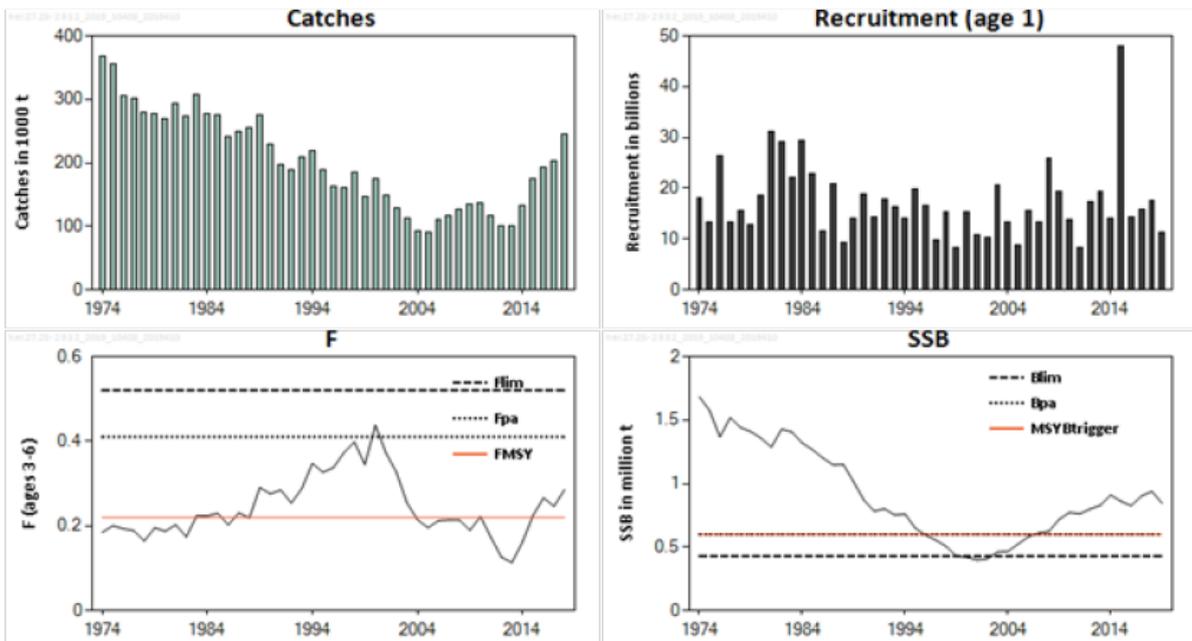


Figure 3: Herring in subdivisions 25–29 and 32, excluding the Gulf of Riga. Summary of the stock assessment. (SSB in 2019 is predicted). **R18**

ICES assess that fishing pressure on the stock is above FMSY but below Fpa and Flim, while spawning stock size is above MSY Btrigger, Bpa, and Blim:

Table 1: Herring in Subdivisions 25–29 and 32, excluding the Gulf of Riga. State of the stock and fishery relative to reference points **R18**

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

A high variability between years in the survey index, in particular in the last years due to the large year class of 2014, is the likely cause of the downward revision of SSB and upward revision of fishing mortality for the recent years. However, applying stochastic models (in this case SAM) to the data shows that these revisions are within the uncertainty bounds of these SAM estimates.

Preliminary investigations indicate that Stocks of western Baltic spring-spawning herring and central Baltic herring are mixing in Subdivisions 24-26 (Figure 2). This is not taken into account in the current assessment



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but should be investigated further. Species misreporting of herring has occurred in the past and there are again indications that it is a problem in some nations.

FMSY ranges in the EU Baltic Sea multiannual plan (MAP) are consistent with ranges provided by ICES. These were evaluated to result in no more than 5% reduction in long-term yield compared with MSY. ICES advice according to the MAP is based on the provisions of the plan and is considered precautionary.

The ICES advice rule is used, i.e. F is adjusted by the factor SSB/MSY $B_{trigger}$ when SSB is below MSY $B_{trigger}$. For this stock, the SSB in 2019 is above MSY $B_{trigger}$. In such a situation, catch scenarios applicable under the MAP correspond to fishing mortalities between F_{lower} and F_{upper} . However, according to the MAP, catches corresponding to F higher than FMSY (i.e. Column B of Annex I in the MAP) can only be taken under conditions specified in the MAP i.e. if 1) on the basis of scientific advice or evidence, it is necessary for the achievement of objectives laid down in the MAP in mixed fisheries or 2) it is necessary to avoid harm to a stock caused by intra- or inter-species stock dynamics, or 3) finally in order to limit year-to-year variations in fishing opportunities.

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

R18

A2.3:

Under the EU landing obligation, which entered into force in 2015, up to 9% interspecies quota transfers are allowed for stocks that are considered to be within safe biological limits. Quota transfers were not considered in the latest ICES catch advice for this stock. To achieve FMSY exploitation, any transfer under this regulation should be accounted for in setting the TAC.

In the assessment and advice the central Baltic herring stock is considered to be caught both in and outside the central Baltic Sea. The TAC (sum of EU and Russian autonomous quotas) is set for herring caught in the central Baltic management area, which includes also a small amount of Gulf of Riga herring caught in the central Baltic Sea but excludes central Baltic herring caught outside the central Baltic Sea.

The TAC proposed for the central Baltic area is based on advised catches for the central Baltic herring stock, plus the assumed catch of the Gulf of Riga herring taken in the central Baltic, minus the assumed catch of herring from the central Baltic stock taken in the Gulf of Riga. The values of the latter two are given by the average over the last five years:

- Central Baltic herring assumed to be taken in the Gulf of Riga in 2020 (Subdivision 28.1) is 4,377 tonnes (average 2013-2018);
- Gulf of Riga herring assumed to be taken in Subdivision 28.2 in 2019 is 314 tonnes (average 2013-2018).



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Following the ICES MSY approach (here identical to MAP FMSY), catches from the central Baltic herring stock in 2020 should be no more than 173, 975 tonnes. The corresponding TAC in the central Baltic management area for 2020 would be calculated as 173, 975 tonnes + 314 tonnes - 4377 tonnes = 166, 912 tonnes.

Catches higher than those corresponding to FMSY (173, 975 tonnes) can only be taken under the conditions specified in the MAP, whilst the entire range is considered precautionary when applying the ICES advice rule. This advice applies to all catches from the stock, including those taken in Subdivision 28.1.

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

R18

A2.4:

Expert groups such as the Baltic Fisheries Assessment Working Group (WGBFAS) provide scientific advice and summaries of information on the herring fishery. The latest report was published in 2018. Working Groups conduct analyses that underpin ICES advice. Working Groups are guided by steering groups; all terms of reference are reviewed and signed off by science and advisory committees.

Fisheries overviews summarize fishing activities at ICES ecoregions, including which countries are catching what species, various fishing methods being used, and how stocks are managed. The most recent Baltic Sea ecosystems overview was published in Nov 2018.

Assessments are subject to internal or external peer review.

R17; R19

A2.5:

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

Assessments are made publicly available on the ICES website.

R20

References

R19 ICES 2019 Baltic Fisheries Assessment Working Group (WGBFAS) Herring in the Baltic Sea:

<http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/Fisheries%20Resources%20Steering%20Group/2019/WGBFAS/1%20WGBFAS%202019.pdf>

R20 ICES TAF : <https://www.ices.dk/marine-data/assessment-tools/Pages/transparent-assessment-framework.aspx>

Standard clause 1.3.2.2, 1.3.2.1.2, 1.3.2.1.4



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A3	Harvest Strategy - Minimum Requirements		
	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
Evidence			
A 3.1-A3.3:			
<p>Member States having a direct management interest are Denmark, Germany, Estonia, Latvia, Lithuania, Poland, Finland and Sweden. Management and control measures (such as the setting of TAC's for Member States are outlined in the EU MAP (2016). Third Countries that have been allocated a quota for sprat include Russia and Finland. The quota allocated to Russia (2018) for this stock was 29,500t.</p> <p>The CFP includes provisions to limit, and historically reduce, total fishing capacity through a combination of subsidizing fishery exits and restricting new entries. The entry-exit regime, which applies to the majority of EU Member State vessels, is one of the main pillars of the European-wide fishing capacity management system. As a general rule, the capacity of EU fleets cannot increase with respect to its levels on 1 January 2003 for those EU 15 Member States and on their accession date for Member States which acceded to the Community after 2003.</p>			



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Table 2: Herring in Subdivisions 25–29 and 32, excluding the Gulf of Riga. ICES advice, TACs, and catches. All weights are in tonnes. **R18**

Year	ICES advice	Catch corresponding to advice	Agreed TAC	ICES catch SDs 25–29+32	ICES catch
1995*	TAC	394000	560000**	221000	
1996*	TAC	394000	560000**	195000	
1997*	No advice	-	560000**	208000	
1998*	No advice	-	560000**	212000	
1999*	Proposed $F_{pa} = (0.17)$	117000	476000**	178000	
2000*	Proposed $F_{pa} = (0.17)$	95000	405000**	208000	
2001*	Proposed $F_{pa} = (0.17)$	60000	300000**	188000	
2002*	$F < F_{pa}$	< 73000	Not agreed**	168000	
2003*	$F < F_{pa}$	< 72000	143000**	154000	
2004	$F < F_{pa}$	< 80000	171000**		93000
2005	$F < F_{pa}$ (single-stock exploitation boundaries)	< 130000	130000***		92000
2006	$F < F_{pa}$ (single-stock exploitation boundaries)	< 120000	128000***		110000
2007	$F < F_{pa}$ (single-stock exploitation boundaries)	< 164000	133000^A		116000
2008	$F < F_{pa}$ (single-stock exploitation boundaries)	< 194000	153000^A		126154
2009	$F < F_{pa}$ (single-stock exploitation boundaries)	< 147000	143609^A		134126
2010	$F < F_{pa}$ (single-stock exploitation boundaries)	< 103000	139776^AA		136706
2011	MSY framework ($F = 0.19$)	< 95000	120020^AA		116785
2012	MSY transition ($F = F_{pa} = 0.19$)	< 92000	93317^AA		100893
2013	MSY transition ($F = F_{pa} = 0.19$)	< 117000	101480^AA		100954
2014	MSY approach	< 164000	132225^AA		132700
2015	MSY approach ($F_{MSY} = 0.26$)	< 193000	186351^AA		174433
2016	MSY approach ($F_{MSY} = 0.22$)	≤ 201000	206605^AA		192056
2017	MSY approach ($F_{MSY} = 0.22$)	≤ 216000	220629^AA		202517
2018	MAP target F ranges: F_{lower} to F_{upper} ($F = 0.16-0.28$), but F higher than $F_{MSY} = 0.22$ only under conditions specified in MAP	200236–331510, but catch higher than 267745 only under conditions specified in MAP	258855^AA		244365
2019	MAP target F ranges: F_{lower} to F_{upper} ($F = 0.16-0.28$), but F higher than $F_{MSY} = 0.22$ only under conditions specified in MAP	115591–192787, but catch higher than 155333 only under conditions specified in MAP	200360^AA		
2020	MAP target F ranges: F_{lower} to F_{upper} ($F = 0.16-0.28$), but F higher than $F_{MSY} = 0.22$ only under conditions specified in MAP	130546–214553, but catch higher than 173975 only under conditions specified in MAP			

* 1987–2003 incl. Gulf of Riga herring.

** TAC for subdivisions 22–29S and 32.

*** TAC for subdivisions 25–28(2), 29, and 32.

^A EU TAC for subdivisions 25–28(2), 29, and 32.

^^ TAC is calculated as EU (subdivisions 25–28(2), 29, and 32) + Russian autonomous quotas.



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There is a mechanism in place by which total fishing mortality of this species is restricted. Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment:

R13-R14; R18-R19;R26

References

Standard clause 1.3.2.1.3



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A4	Stock Status - Minimum Requirements		
	A4.1	<p>The stock is at or above the target reference point, OR IF NOT:</p> <p>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:</p> <p>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.</p>	PASS
Clause outcome:			PASS
Evidence			
<p>A 4.1: Spawning-stock biomass (SSB) decreased until 2001 and then increased, and it has been above MSY Btrigger since 2007. Fishing mortality (F) increased until 2000 and then decreased, remaining below FMSY (2004-2014). F has been above FMSY since 2015. Recruitment in 2015 is estimated to be the highest of the whole time-series.</p> <p>The stock is at or above the target reference point.</p>			
R18; R26			
References			
<i>Standard clause 1.3.2.1.4</i>			



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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. In a by-product assessment, Category C species are those which are subject to a species-specific management regime, and are usually targeted species in fisheries for human consumption.

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. A Category C species does not meet the minimum requirements of clause C1 should be re-assessed as a Category D species.

Species Name		Sprat (<i>Sprattus sprattus</i>)	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	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
Evidence			
C1.1:			
Commercial catch data have been collected for several decades, and total landings estimates are available for every year back to the early 1970s. The most recent benchmark assessment (ICES) for Baltic sprat was carried out in 2013. ICES has provided scientific advice to managers of the stock since 1988, and every year since 1991.			
Discard data have not generally been available for inclusion in stock assessments, although efforts are underway to remedy this in future. Discards are estimated to be negligible in most countries, as undersized and lower quality fish can be used for fishmeal production. The most recent ICES advice on the stock has not included discards or bycatch in their assessment.			
It is expected that misreporting of catches occurs, as estimates of species composition of clupeid catches are imprecise in some mixed pelagic fisheries. This is taken into account when assessing sprat stocks.			
Fishery removals of the species in the fishery under assessment are included in the stock assessment process.			
R21			
C1.2: Spawning-stock biomass (SSB) is well above MSY Btrigger. The recent increase in SSB is attributable to the strong year class of 2014. The 2015-2018 year classes are estimated at below or close to average. Fishing mortality (F) has declined but has remained above FMSY since 1994:			

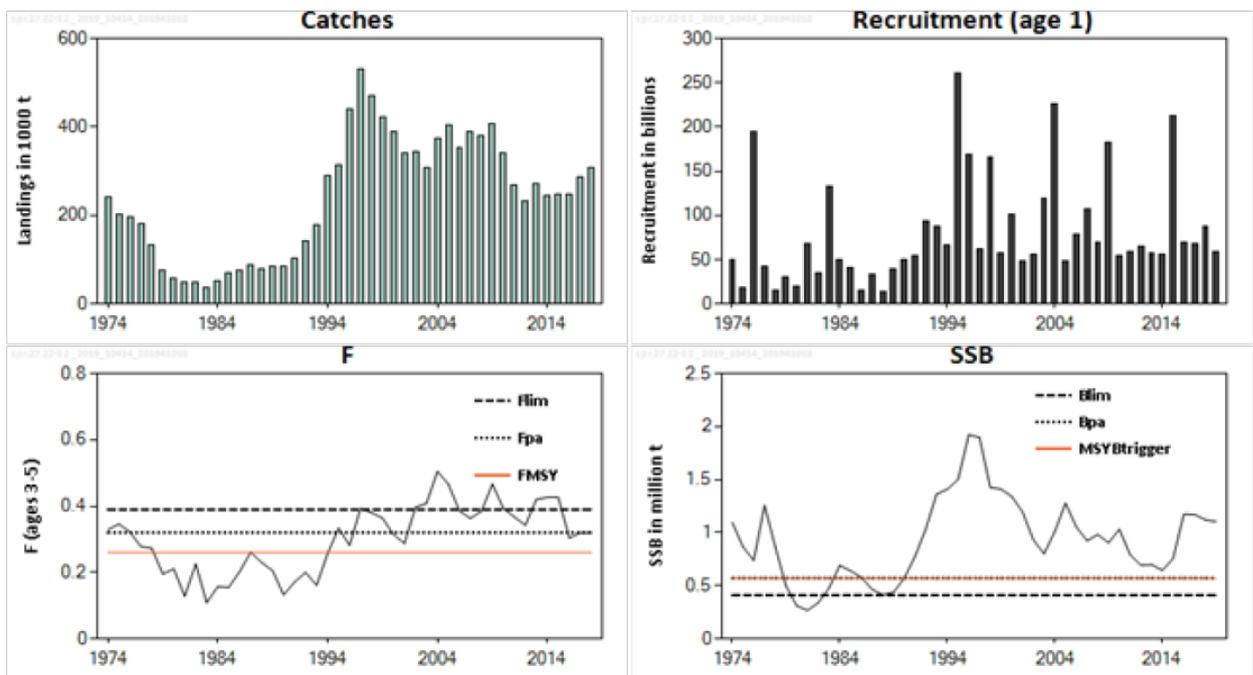
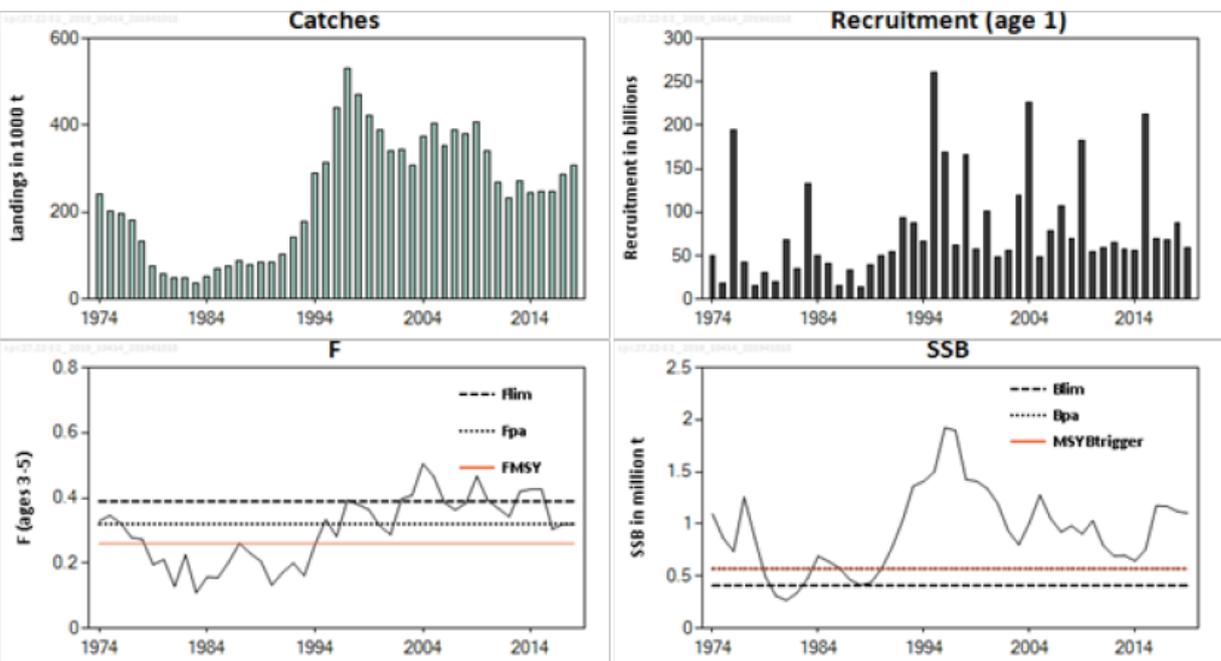


Figure 4: Sprat in subdivisions 22–32. Summary of the stock assessment. SSB at spawning time in 2019 is predicted **R21**

ICES assess that fishing pressure on the stock is slightly above FMSY at Fpa and below Flim, while spawning stock size is above MSY Btrigger, Bpa, and Blim:

Table 3: Sprat in subdivisions 22–32. State of the stock and fishery relative to reference points **R21**





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FMSY ranges in the EU Baltic Sea multiannual plan (MAP) are consistent with ranges provided by ICES. These were evaluated to result in no more than 5% reduction in long-term yield compared with MSY. ICES advice according to the MAP is based on the provisions of the plan and is considered precautionary.

The ICES advice rule is used, i.e. F adjusted by the factor SSB/MSY $B_{trigger}$ when SSB below MSY $B_{trigger}$. For this stock, the SSB in 2019 is above MSY $B_{trigger}$. In this situation, catch scenarios applicable under the MAP correspond to fishing mortalities between F_{lower} and F_{upper} .

According to the MAP, catches corresponding to F higher than FMSY can only be taken under conditions specified in the MAP. It should only be possible to fix fishing opportunities to the upper limit if, on the basis of scientific advice or evidence, it is necessary for the achievement of the objectives laid down in this Regulation in mixed fisheries or necessary to avoid harm to a stock caused by intra- or inter-species stock dynamics, or in order to limit the year-to-year variations in fishing opportunities.

The species is considered, in its most recent stock assessment, to have a biomass above limit reference point (or proxy) **R21**

References

R21 ICES advice (2019) Sprat (*Sprattus sprattus*) Subdivisions 25–29 and 32 (central Baltic Sea, excluding Gulf of Riga) <http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/spr.27.22-32.pdf>

Standard clauses 1.3.2.2

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
Evidence:		
F1.1:		
Recording of the catch of seabirds and mammals has been undertaken in some Baltic Sea fisheries, usually where there is perceived risk of such bycatch. Seabirds can become entangled in gillnets or hooked on longlines. Seals can be caught in submerged trap nets and harbour porpoises entangled in gillnets. Pelagic trawlers or purse seines in general are not known to cause significant bycatch of birds or mammals in the offshore fishery.		
Regular reports are provided on HELCOM's Baltic Sea Action Plan (BSAP) the objective of which is to restore good ecological status of the Baltic marine environment by 2021. HELCOM report that seals are generally		



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protected, but hunting is permitted in some countries, restricted to populations above a limit reference level and with a positive growth rate.

The Working Group on Bycatch of Protected Species (WGBYC) met in Iceland (May 2018). Highlights from the 2018 meeting included a review of ongoing bycatch mitigation re-search projects, bycatch risk assessments for harbour porpoise and common dolphin and a review of the compiled inventory of various sampling programmes providing information on bycatch of protected species.

Member States are obliged to conform to EU Regulation 1004/2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector (Data Directive) and support for scientific advice regarding the common fisheries policy by submitting data on observer programmes where fisheries are known to interact with ETP species. Information has been provided by ICES to the EU on the effects of fishing gears on bird populations in the Baltic. The obligation for all stakeholders to record fishing gear interactions with ETP species is monitored by EFCA and National Fisheries Control authorities during inspections at sea and in port.

Interactions with ETP species are generally recorded.

R22-R23; R31

F1.2-F1.3

At least four species of marine mammals can be found in the Baltic Sea: Grey seal; Harbour seal; Ringed seal and a small population of Harbour porpoise. HELCOM agreed in 2006 on a Recommendation of the 'Conservation of seals in the Baltic Sea'; a regional agreement on joint management principles, management units for the different seal populations, limit reference levels for the respective management unit, and coordinated monitoring programmes.

Seal status is considered not good in most parts of the Baltic Sea according to HELCOM's integrated assessment. Fishing for herring and/or sprat could be impacting seal and porpoise nutrition, but the magnitude compared with other factors is unknown.

The Baltic is an important overwintering ground for seabirds and sea ducks and nine of nineteen species breeding in the area are decreasing in numbers, while the status of many of the rest is uncertain. Ecosystem changes have impacted on the breeding success of the common guillemot whereas bycatch in fishing gear, particularly set nets, has impacted on the numbers of long-tailed ducks, velvet scoters and others. Pelagic trawlers or purse seines are not known to cause any substantive bycatch of seabirds or marine mammals in the offshore fishery in the Baltic Sea.

Further information available on these indicators, monitoring undertaken to date and assessment of ETP species status is available in HELCOM's State of the Baltic Report, updated in 2018 and available at <http://stateofthebalticsea.helcom.fi/biodiversity-and-its-status/>

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

R22-R25; R31



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<p>References</p> <p>R22 HELCOM, 2018. State of the Baltic Sea –Second HELCOM holistic assessment 2011-2016. http://stateofthebalticsea.helcom.fi/</p> <p>R23 Fishsource Baltic Sea Herring: https://www.fishsource.org/stock_page/2039</p> <p>R24 Dagens M et al (2009) Action C1 – Assessing and reducing impact of fishery by-catch on species of community interest. Final report. LIFE Nature project “Marine Protected Areas in the Eastern Baltic Sea” Reference number: LIFE 05 NAT/LV/000100. 48pp http://www.balticseaportal.net/media/upload/File/Deliverables/Action%20reports/C1_final_report.pdf</p> <p><i>Standard clause 1.3.3.1</i></p>
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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

Evidence

F2.1 – F 2.2

Abrasion of the seabed by mobile bottom-contacting fishing gears has been investigated to describe the extent, magnitude, and effects of fishing on benthic habitats. Mobile bottom-contacting gears are primarily used in the southern areas of the Baltic Sea. This assessment covers the Central Baltic Sea herring stock where pelagic trawls are the dominant gears used.

Fishing effort data by fishing gear is sparse. Only Denmark and Lithuania uploaded fishing effort data for 2014 into the Inter-Catch database in 2015. No new fishing effort data were provided in 2016 and 2017. Russia provided updated data on fishing effort and CPUE for Subdivision 26 in 1995–2017.

Pelagic trawling is generally considered to have very limited to no impact on the benthic environment, although some interactions have been reported. The herring fisheries for industrial purposes generally use pelagic or light bottom trawl and thus habitat impacts are low.

Potential habitat interactions are considered in the management decision-making process. There is no substantial evidence that the fishery has a significant negative impact on physical habitats.

R23-R24

F2.3:

There is no substantial evidence that the fishery has a significant negative impact on physical habitats. The EU funded MARELITT Baltic project has been working to reduce the impact of derelict fishing gear (ghost nets) in the Baltic Sea. The project to date has covered many aspects of the problem: mapping, retrieval, recycling



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and prevention. A handbook called the Baltic Sea Blueprint was presented during a recent conference in Sweden. The handbook is a roadmap on how to approach derelict fishing gear in a sustainable way.

The Natura 2000 network is based on the Birds Directive adopted in 1979 (amended in 2009; Directive 2009/147/EC) and the Habitats Directive adopted in 1992 (Directive 92/43/EEC). These directives provide legal protection to sites. By 2013, 64% of Natura 2000 sites in the Baltic Sea had also been designated as HELCOM Marine Protected Areas (MPAs).

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

R25-R26

References

R25 MARELITT Baltic project <https://www.marelittbaltic.eu/>

Standard clause 1.3.3.2

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

Evidence

F3.1:

ICES now provides a great deal of integrated advice at ecosystem level, in support of the shift towards a more holistic approach to managing Europe's seas. Little is known at the regional scale about the sensitivity of different Baltic Sea organisms and communities to fishery-induced impacts. A qualitative approach to address this was elaborated by ICES in 2016. A mechanistic, quantitative assessment procedure based on biological principles is now under development.

The ICES WGBFAS stock annex (2018) for herring includes a section examining the ecosystem components of fishery management. This section primarily considers the effects of the ecosystem on fish populations, in particular environmental influences on spawning and recruitment, and the impact of cod predation on natural mortality rates of herring and sprat.

Information on the impacts of herring removals on the ecosystem appears to be limited, although the MAP notes that there are some indications that interactions between cod, herring and sprat may indicate that higher fishing pressures than currently advised may be sustainable in some areas (although ICES also notes that STECF have advised that more research be conducted). The MAP also includes a number of other commitments to follow the ecosystem approach to fisheries management (EAFM).

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

R19

F3.2:

In the Baltic, multispecies analyses indicate that trade-offs exist between fishing on cod or herring and sprat. Increased fishing pressure on cod may increase the risk of a low cod stock size, thereby reducing cod predation on sprat and herring and allowing greater survival and growth of these two prey species.

Increased fishing pressure on herring and sprat may have a negative impact on the condition and growth of cod (by reducing the forage available for cod) and result in lower cod yields. The magnitude of the interaction between the species depends on spatial and temporal overlap among the three stocks (Figure 5).

Restrictions on sprat catches taken in the main cod area could be established as part of an ICES proposed spatial management plan (SMP). Redistribution of the fishery to northern areas (subdivisions 27–32) may also reduce the density-dependent effect i.e. increase growth for clupeids (including herring) in the area:

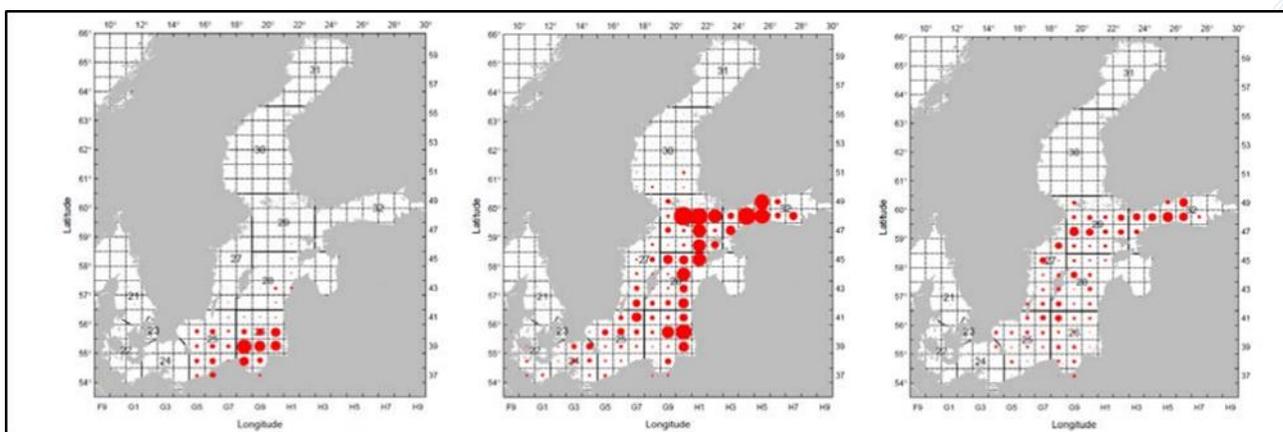


Figure 5 Sprat in subdivisions 22–32. Left panel: Distribution of eastern Baltic Sea cod from the bottom trawl survey (BITS, in number $h-1$) in the 4th quarter 2017; middle panel: Baltic sprat from the acoustic survey (BIAS, numbers) in the 4th quarter 2017; and right panel: Herring in subdivisions 25–29 and 32, excluding the Gulf of Riga, from the BIAS survey (BIAS, numbers) in the 4th quarter 2017. The cod panel includes fish ≥ 30 cm, while herring and sprat panels include ages between 1 and 8. Figures are based on number of individuals; not on biomass. **R21**

Management of the stock is supported by the collection of fishery-dependent and fishery-independent data, and by more general research on ecosystems and species which affect the stock. ICES has provided scientific advice to managers of the stock since 1988, and every year since 1991. Most of the Baltic Sea fish stocks with reference points are fished at or below FMSY. Multispecies analysis indicates that there is a trade-off between fishing on cod, or on herring and sprat in the central Baltic.



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

R18, R21

References

R26 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 <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1139&from=EN>

R27 Denmark Fisheries Act (2004): http://www.fao.org/fishery/shared/faolextrans.jsp?xp_FAOLEX=LEX-FAOC026268&xp_faoLexLang=E&xp_lang=en

R28 Latvian Fishing Law (1995): <http://www.vzp.gov.lv/>

R29 Danish Fishery Agency: Control <https://fiskeristyrelsen.dk/english/fishery-control-and-enforcement/>

R30 Fisheries Control Latvia: http://www.fao.org/fishery/docs/DOCUMENT/fcp/en/FI_CP_LV.pdf

R31 ICES REPORT WGBYC 2018: Report from the Working Group on Bycatch of Protected Species (WGBYC)

http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2018/WGBYC/wgbyc_2018.pdf

R32 Russia's Federal Agency for Fishery (Rosrybolovstvo) <http://government.ru/en/department/243/>

Standard clause 1.3.3.3

IFFO RS Fishery Assessment Peer Review Template

This section comprises a summary of the fishery being assessed against version 2 of the IFFO RS Standard. This information should be drawn from the Application Form, which was submitted to the Certification Body.

Fishery under assessment	Central Baltic Herring <i>Clupea harengus</i> Subdivisions 25-29 & 32 (Denmark, Latvia, Sweden)
Management authority (Country/State)	EU; Denmark: Ministry of Food, Agriculture and Fisheries; Latvia: National Board of Fisheries of the Ministry of Agriculture; Russia: Federal Agency for Fishery
Main species	Herring <i>Clupea harengus</i>
Fishery location	Subdivisions 25-29 & 32, Central Baltic Sea (Denmark, Sweden, Latvia)
Gear type(s)	Primarily pelagic trawl, some demersal trawling



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

Overall the fishery assessment has been conducted in line with the established procedure and provides adequate evidence for the majority of conclusions. However there are two important areas of note:

1. There does not appear to be any reference provided for the catch composition data, which is central to the Species Categorisation process. Either a reference should be provided, or the factory auditor should confirm catch composition during the site visit, or both.
2. The introduction notes that there is “some demersal trawling”. The assessment report currently considers only pelagic gear, and so will need to be expanded if the applicant wishes to use catches from demersal trawls to produce IFFO RS certified material.



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The purpose of the Fishery Assessment Peer Review is to ensure that the contents of the Fishery Assessment Report are accurate, consistent, and supported by the evidence provided by the assessor. The Fishery Assessment Report is conducted by an approved Certification Body Representative with expertise covering the IFFO RS fishery assessment process, and fisheries management in general.

The following elements form the basis of the Fishery Assessment Peer Review evaluation:

A. Review of the full Fishery Assessment study conducted on the fishery raw material to confirm the evaluation against the IFFO RS fishery approval criteria, including the following areas:

- Ensure the fishery under assessment has been accurately characterised using the best available scientific understanding of the biological stock(s) and the catch composition.
- Ensure the species characterisation underpinning the structure of the report is accurate and defensible, including making sure that all relevant species have been included in the assessment.
- Confirm that throughout the report all significant statements and pass/fail ratings are supported by adequate evidence, including references.
- Confirm that the report as a whole has been fully completed according to the process described in the IFFO RS fishery assessment guidance.



Summary of Peer Review Outcomes

This section summarises the outcomes of the peer review process. Peer reviewers should review all of the application documentation with the primary objective of answering the key questions listed in the table below. Reviewers should use their expert knowledge of the IFFO RS fishery assessment process and IFFO RS application process to determine whether the questions should be answered Yes or No. Where the situation is more complicated, reviewers may instead answer “See Notes”. Whichever of the three answers is chosen, additional information may be provided in the relevant section of this template.

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

Detailed Peer Review Responses

Peer reviewers may provide additional explanation as to review outcomes in this section of the report. Reviewers do not need to fill out every section of the detailed responses; if the answer to a Key Question is clear-cut, no additional detail may be necessary. However, where there is complexity, uncertainty, or any other information the Application Committee should be made aware of, the peer reviewer may enter it here.

If any comments are linked to the FAP, reference the section they refer to, to allow the IPAC to find the pertinent information.

Boxes may be extended if more space is required.

<p>1. Is the scoring of the fishery consistent with the IFFO RS standard, and clearly based on the evidence presented in the assessment report?</p> <ul style="list-style-type: none"> The introductory section of the report notes that there is “some demersal trawling”. It should be clarified whether catch from demersal trawls is used by the applicant factories, as the rest of the fishery report focusses only on the pelagic trawls. In particular, demersal trawls are likely to have a different catch composition, and will likely also have more significant impacts on physical habitats.

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

The fishery assessment has been fully completed, notwithstanding the other notes in this peer review report.

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

- The Species Categorisation section of the report does not provide a reference for the catch composition. During the factory assessment the auditor should ensure they confirm the composition of landings at the plant.

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

The scores in this section are accurate.

3A. Are the “Category A Species” scores accurate?

- The evidence for clause A2.1 states that stock assessments are conducted at least every three years, but does not provide the date of the most recent assessment nor any previous assessment. It is clear from other sections that stock assessments are conducted but evidence should be provided under this clause.

3B. Are the “Category B Species” scores accurate?

No Category B species were identified.

3C. Are the “Category C Species” scores accurate?

The scores in this section are accurate.

3D. Are the “Category D Species” scores accurate?

No Category D species were identified.

3F. Are the scores in “Section F – Further Impacts” accurate?

The scores in this section are accurate.

Optional: General comments on the Peer Review Draft Report

- The Assessment Determination and Peer Review Comments sections of the report both conclude that Central Baltic Herring is approved “under the IFFO-RS v 2.0 by-products standard”. However, this is a whole fish assessment report.
- In several places the report refers to “the assessment” (for example, in the assessment determination and in Section A1). The peer reviewer interprets these to be references to the stock assessment, but this could be clearer.