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Global Standard for Responsible Supply of Marine Ingredients

Fishery Assessment Methodology and Template Report V2.0

Fishery Under Assessment	**Sprat *Sprattus sprattus* North-East Atlantic**
Date	**January 2018**
Assessor	**Conor Donnelly**

Application details and summary of the assessment outcome				
Name: Pelagia				
Address: Killybegs				
Country:		**Zip:**		
Tel. No.:		**Fax. No.:**		
Email address:		**Applicant Code**		
Key Contact:		**Title:**		
Certification Body Details				
Name of Certification Body:		**SAI Global**		
Assessor Name	**Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/Re-approval**	**Whole fish/ By-product**
Conor Donnelly	Sam Dignan	1	Re-approval	By-product
Assessment Period	2017			

Scope Details	
Management Authority (Country/State)	EU/Common Fisheries Policy
Main Species	Sprat *Sprattus sprattus*
Fishery Location	North-East Atlantic
Gear Type(s)	Pelagic Trawl
Outcome of Assessment	
Overall Outcome	PASS
Clauses Failed	None
Peer Review Evaluation	Approve
Recommendation	Approval

Assessment Determination

There is a robust fishery management framework at the EU level, which is applied specifically to some sprat stocks in the assessment area. In other areas the exploitation of sprat is limited by herring bycatch restrictions. The Pelagic Advisory Council proposes advice on the management of pelagic fish stocks on behalf of fisheries sector and other stakeholders. Sprat is part of an EU Multi-annual Plan (MAP) for pelagic stocks in the Baltic Sea.

A Category C by-product full re-assessment was undertaken for North Sea and Baltic Sea Stocks. For these stocks the assessment team has verified that removals of the species in the fishery are included in the stock assessment process and also that biomass reference points have been considered in the latest assessments.

For the remaining three Stocks (Skagerrak – Kattegat; English Channel, Celtic Sea & West of Scotland) the re-assessment was undertaken using the risk-based Productivity-Susceptibility Analysis (PSA) approach for Category D species. These stocks pass with a medium compliance rating based on calculated susceptibility attributes.

The species has not yet been assessed for the IUCN red list and is not listed on CITES: http://www.iucnredlist.org/search; https://www.cites.org/eng/search/site (accessed 15.02.18)

The assessor recommends that sprat is re-approved (by-product) for this fishery under the IFFO RS Standard.

Peer Review Comments

Agree with determination

Notes for On-site Auditor

Species-Specific Results

Category	Species	% landings	Outcome (Pass/Fail)	
Category A			A1	
			A2	
			A3	
			A4	
Category B				
Category C	Sprat *Sprattus sprattus*		PASS	
Category D	Sprat *Sprattus sprattus*		PASS	

[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]

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.

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
Sprat	*Sprattus sprattus*	ICES Sub Area IV; ICES Sub-Divisions 22-32		EU/Common Fisheries Policy	C
Sprat	*Sprattus sprattus*	ICES Divisions IIIa; VIId,e ; Subarea VI & Divisions VIIa-c and f-k		No Species Specific Management Regime	D

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			
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 (ICES Sub Area IV (North Sea; ICES Sub-Divisions 22-32 (Baltic Sea))
This fishery falls under 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.

The latest reform of the CFP was completed in 2013 and came into effect from 1st January 2014.

Key changes include:

- The introduction of an objective to 'ensure high long-term fishing yields for all stocks by 2015 where possible, and at the latest by 2020' (i.e. movement towards an MSY-based approach).
- The gradual (2015-2019) introduction on a fishery-by-fishery basis of a 'landing obligation', which effectively bans discarding.
- An overhaul of the management structure, including increased regionalisation and more extensive stakeholder consultation.

There is a species specific management regime in place for both stocks involving an annual TAC and quota. Other regulations include minimum mesh size and restrictions on the permitted percentage of herring and mackerel bycatch per trip. Since 2005 EU vessels operating in the fishery have not been allowed to land unsorted catches.

Annual quotas are set for four sprat stocks in the North-East Atlantic. The stocks and their TACs in 2018 are as follows: **IIa, IV**: 0t **IIIa**: 26,624t **VIId,e**: 3,296t

ICES provides stock management advice for sprat in five different management units:

ICES Sub Area IV (North Sea):
There is no management plan for sprat in this area. Reference points are defined for the stock, including MSY *Bescapement, Bpa, and Blim. The advice is based on the MSY Bescapement strategy (with an Fcap), which relies on a prediction of SSB after the fishery has taken place. The spawning-stock biomass (SSB) has been at or above MSY Bescapement since 2013. Fishing mortality (F) has been higher in the last two

years, when compared with 2014 (F) data. Recruitment (R) in 2016 is estimated to be the highest on record, but with substantial uncertainty as it is based on a single survey.

ICES Sub-Divisions 22-32 (Baltic Sea):
AN EU multiannual plan (MAP) in place for stocks in the Baltic Sea includes sprat. The advice is based on the provisions of the plan and is considered precautionary. The 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 and 2016 year classes are estimated slightly below average. Fishing mortality (F) has declined in recent years and is now below FMSY.

ICES Division IIIa (Skagerrak - Kattegat):
No reference points were defined for this stock. Category D assessment undertaken.

ICES Divisions VIId,e (English Channel):
There is no management plan for sprat in this area. No reference points were defined for this stock. Category D assessment undertaken.

Subarea VI and Divisions VIIa-c and f-k (Celtic Sea and West of Scotland)
There is no management plan for sprat in this area. No reference points were defined for this stock. Category D assessment undertaken.

The Pelagic Advisory Council proposes advice on the management of pelagic fish stocks on behalf of the fisheries sector and other stakeholders. There is currently a MSC certified sprat fishery in the Baltic Sea fishery. Sprat in other MSC certified (and under assessment) fisheries are part of multi-species assessments. The exploitation of sprat is limited by herring bycatch restrictions imposed on all fisheries. Other regulations vary between stocks, but include minimum landing sizes.

References

ICES Glossary of acronyms**:** http://www.ices.dk/pages/Glossary.aspx**:**
**MSY Bescapement*: A biomass reference point for short-lived species within the ICES MSY framework where the target is to leave the reference spawning stock biomass to spawn the next year.

About the Common Fisheries Policy: http://ec.europa.eu/fisheries/cfp/index_en.htm

Managing fish stocks: http://ec.europa.eu/fisheries/cfp/fishing_rules/index_en.htm

EU Fishing Quotas 2018: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF (accessed 15.02.18)

ICES Advice *Sprattus sprattus* 2017: (accessed 15.02.18):
ICES Sub Area IV (North Sea):
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/spr.27.4.pdf
ICES Division IIIa (Skagerrak - Kattegat)
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/spr.27.3a.pdf
ICES Sub-Divisions 22-32 (Baltic Sea)
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/spr.27.22-32.pdf
ICES Divisions VIId,e (English Channel)
http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/spr.27.7de.pdf

Subarea VI and Divisions VIIa-c and f-k (Celtic Sea and West of Scotland) http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/spr.27.a-cf-k.pdf ICES (2012) Implementation of Advice for Data-limited Stocks (2012): ICES CM 012/ACOM:68.42 pp.
Standard clauses 1.3.2.2

CATEGORY D SPECIES

In a whole fish assessment, 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. In a by-product assessment, Category D species are those which are not subject to a species-specific management regime. In both cases, 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.

The process for assessing Category D species involves the use of a Productivity-Susceptibility Analysis Productivity-Susceptibility Analysis (PSA) to further subdivide the species into 'Critical Risk', 'Major Risk' and 'Minor Risk' groups. If there are no Category D species in the fishery under assessment, this section can be deleted.

Productivity and susceptibility ratings are calculated using a process derived from the APFIC document "Regional Guidelines for the Management of Tropical Trawl Fisheries, which in turn was derived from papers by Patrick *et al* (2009) and Hobday *et al* (2007). Table D1 should be completed for each Category D species as follows:

- Firstly, the best available information should be used to fill in values for each productivity and susceptibility attribute.
- Table D2 should be used to convert each attribute value into a score between 1 and 3.
- The average score for productivity attributes and the average for susceptibility attributes should be calculated.
- Table D3 should be used to determine whether the species is required to meet the requirements of Table D4. A species which does not need to meet the requirements of D4 is automatically awarded a pass.
- Table D4 should be used to assess those species indicated by Table D3 to determine a pass/fail rating.
- Any Category D species which has been categorised by the IUCN Red List as Endangered or Critically Endangered, or which appears in the CITES appendices, automatically results in a fail.

D1	Species Name:		
	Productivity Attribute	**Value**	**Score**
	Average age at maturity (years)	*<2	1
	Average maximum age (years)	*<10	1
	Fecundity (eggs/spawning)	*6,000-14,000	1
	Average maximum size (cm)	*16	1
	Average size at maturity (cm)	*10	1
	Reproductive strategy	*Broadcast Spawner	1
	Mean trophic level	*3	2
	Average Productivity Score		**1.14**
	Susceptibility Attribute	**Value**	**Score**
	Overlap of adult species range with fishery	>50% stock in area fished	3
	Distribution	No data required	
	Habitat	Pelagic-neritic	1
	Depth range	10-150m	1
	Selectivity	*Mesh size 16-31mm	3
	Post-capture mortality	Alive when hauled	2
	Average Susceptibility Score		**2.00**
	PSA Risk Rating (From Table D3)		**PASS**
	Compliance rating		**Medium**

References

R1 FISHBASE Search: *Sprattus sprattus*: http://www.fishbase.org/Reproduction/Maturity List (accessed 22.02.18)

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

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

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

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

D3		Average Susceptibility Score		
		1.00 – 1.75	1.76 – 2.24	2.25 – 3.00
Average Productivity Score	1.00 – 1.75	PASS	PASS	PASS
	1.76 – 2.24	PASS	PASS	TABLE D4
	2.25 – 3.00	PASS	TABLE D4	TABLE D4

D4	Species Name		
	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			
References			
Standard clause 1.3.2.2			

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.