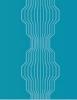


IFFO RSGlobal Standard for Responsible Supply of Marine Ingredients



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



IFFO RSGlobal Standard for Responsible Supply of Marine Ingredients



Fishery Under Assessment	Mackerel Scomber scombrus (France)
Date	February 2019
Assessor	Jim Daly

Application details an	nd summary of the as	sessment outcom	ie				
Name: Copalis Indus	trie						
Address:							
Country: France		Zip:					
Tel. No.:		Fax. No.:					
Email address:		Applicant Code					
Key Contact :		Title:					
Certification Body D	etails						
Name of Certification	n Body:	SAI Global Ltd	l				
Assessor Name	Peer Reviewer	Assessment Days	Initial/Surveillar approval	nce/Re-	Whole fish/ By- product		
Jim Daly	Virginia Polonio	0.5	Surv 2		By-product		
Assessment Period	2018						

Scope Details	
Management Authority (Country/State)	EU, France
Main Species	Mackerel Scomber scombrus
Fishery Location	EU Waters NE Atlantic FAO 27 (Figure 1)
Gear Type(s)	Trawl (pelagic and bottom), purse seine, gillnet, handline
Outcome of Assessment	
Overall Outcome	PASS
Clauses Failed	NONE
Peer Review Evaluation	Agree
Recommendation	Approve

Assessment Determination

Member States of the European Union implement the Common Fisheries Policy (CFP) in their waters (**Figure 1**). At the national level in France the Directorate for Maritime Fisheries and Aquaculture of the Ministry of Ecology, Sustainable Development and Energy ("Direction des Pêches Maritimes et de l'Aquaculture" or DPMA) adopts every two years a national control plan for fishery products. At the regional level, Interregional Directorates for the Sea ("Directions Interrégionales de la Mer" or DIRM) and Directorates for the Sea ("Directions de la Mer" or DM, competent in overseas departments) define interregional or regional plans for the control of fisheries, based on the general orientations provided in the national plan

The most recent Common Fisheries Policy (CFP) reform process was completed in 2013 and came into effect from the 1st January 2014, key changes included:

- The introduction of an objective to 'ensure high long-term fishing yields for all stocks 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 now bans discarding in all EU waters, with some exceptions.
- An overhaul of the management structure, including increased regionalisation and more extensive stakeholder consultation

Following the September 2018 ICES assessment the mackerel stock is estimated to be below MSY Btrigger (but above Blim) in 2018, for the first time since 2007 (**Figure 2**). Fishing mortality (F) has declined from high levels in the mid-2000s, but increased again after 2012, and remains above FMSY.

As Mackerel, in its most recent stock assessment, was determined to have a biomass above the limit reference point (Blim), the species currently passes the IFFO-RS by-product assessment (Clause C 1.2). However this decision will be reviewed by the IFFO-RS assessment team following publication in 2019 of the revised Action Plan for the North East Atlantic Mackerel Stock and publication of any additional ICES advice. There is an ongoing need for coastal states to set quotas and management measures in line with scientific advice and also to revise the way the stock is assessed.

High fishing pressure (nearly twice FMSY and above Fpa in recent years) combined with low recruitments in 2015 and 2016 have resulted in SSB going below MSY Btrigger in 2018. Short-term projections show that this will remain the case in 2019 and 2020 (ICES 2018).

For the NE Atlantic stock (**Figure 2, Table 1**) reference points have been determined based on the MSY and precautionary approaches, and in relation to an international management plan. Time series estimates of fishing mortality and SSB are available.

ICES advises that when the MSY approach is applied, catches in 2019 should be no more than 318,403 tonnes. The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy).

ICES has been requested by the European Commission to provide a description of the main mixed fisheries technical and biological interactions known in the Baltic Sea, the North Sea and Atlantic (**Figure 1**). ICES is requested to describe species caught together in mixed fisheries taking account of spatial, gear, fleet and temporal dimensions as appropriate. When provided, this information will be used to support and add to existing stock assessment models and contribute to future management plan objectives for mackerel.

Mackerel is described as a species of least concern (IUCN Red List) and is not on the current list of CITES endangered species (websites accessed 14.02.19).

Mackerel from the assessment area is approved by the assessment team for the production of fishmeal and fish oil under the IFFO-RS v 2.0 standard (by-products).

Peer Review Comments

Agree a provisional approval subject to a revision of ICES advice when published and a review of management measures on setting quotas and reference points for the fishery.

Notes for On-site Auditor

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

Species-Specific Results

Category	Species	% landings	Outcome (Pass/Fail)
			A1
Catagory			A2
Category A			A3
			A4
Category B			
Category C	Mackerel (S.scombrus)	N/A	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.
- 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.

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.

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
Mackerel	S.scombrus	NE Atlantic	N/A	EU, France	С

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.

Spec	ies N	ame	Mackerel Scomber scombrus					
C1	C1 Category C Stock Status - Minimum Requirements							
	C1.1 Fishery removals of the species in the fishery under assessment are included in the P							
		stock assessment process, OR are considered by scientific authorities to be negligible.						
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass F						
	above the limit reference point (or proxy), OR removals by the fishery under							
		assessment	are considered by scientific authorities to be negligible.					
	•		Clause outcome:	PASS				

Evidence

C1.1:

Member States of the European Union implement the Common Fisheries Policy (CFP) in their waters. 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 Total Allowable Catches (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 most recent CFP reform process was completed in 2013 and came into effect from the 1st January 2014, key changes include:

- The introduction of an objective to 'ensure high long-term fishing yields for all stocks 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 now bans discarding in all EU waters, with some exceptions.
- An overhaul of the management structure, including increased regionalisation and more extensive stakeholder consultation.

The primary authorities with responsibility for implementing the CFP at the National level in France are the Directorate for Maritime Fisheries and Aquaculture of the Ministry of Ecology, Sustainable Development and Energy ("Direction des Pêches Maritimes et de l'Aquaculture" or DPMA).

Mackerel is managed as a large number of distinct stocks in EU waters, each of which is subject to an annual TAC and a variety of other management measures. The specific nature of management mechanisms in place and the nature (and effectiveness) of management plans varies between management units:

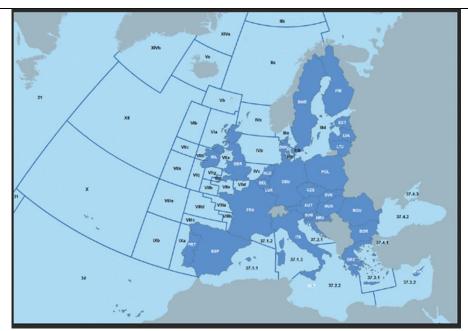


Figure 1: Northeast Atlantic ICES Areas (adapted from Collinsseafoods.co.uk) R1

Fisheries management in EU waters is supported by the International Council for the Exploration of the Sea (ICES). ICES utilises the best available scientific information collected by 20 member countries and others, and develops advice for the majority of commercially fished stocks in European waters. Unfortunately management areas (for quota purposes) do not always correspond with ICES assessment areas.

The stock has been benchmarked and is now subject to an age-based analytical assessment. The input data include catch data, tagging data and three survey indices. Reference points have been determined based on the MSY and precautionary approaches, and in relation to the international management plan. Time series estimates of fishing mortality and SSB are also available. New assessments have been designed to take into account uncertainty in the available data, including historical catches prior to 2000 and the lack of egg survey data prior to 1992.

Discarding is known to take place (0.25% of the total catch in weight in 2017), but is only quantified for part of the fisheries; the proportion of the landings covered cannot be calculated. Partial discard estimates are included in the assessment and overall discarding in recent years is assumed negligible.

Fishery removals of the species in the fishery under assessment are included in the stock assessment process. The species passes Clause C1.1.

C1.2:

Mackerel (*Scomber scombrus*) in subareas 1-8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters):

Reference points and state of the stock are shown in Table 1 (**Ref R2**):

		Fishing pressure					Stock size				
		2015	2016		2017			2016 2017 20		2018	
Maximum sustainable yield	F _{MSY}	8	8	8	Above		MSY B _{trigger}	•	•	8	Below trigger
Precautionary approach	F_{pa}, F_{lim}	•	•	0	Increased risk		B _{pa} ,B _{lim}	•	•	0	Increased risk
Management plan	F _{MGT}	_	_	_	Not applicable		B _{MGT}	_	_	l _	Not applicable

The spawning-stock biomass (SSB) is estimated to have increased in the late 2000s to reach a maximum in 2011 and has been declining since then (**Table 1**). The stock is estimated to be below MSY Btrigger in 2018, for the first time since 2007. The fishing mortality (F) has declined from high levels in the mid-2000s, but increased again after 2012, and remains above FMSY. There has been a succession of large year classes since the early 2000s, but the 2015 and 2016 year classes are estimated to be below average (**Figure 2**):

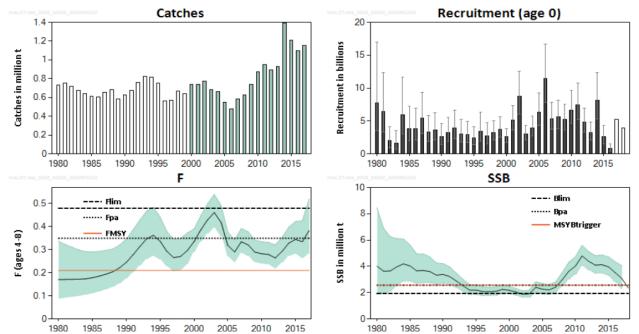


Figure 2: Mackerel in subareas 1–8 and 14, and in Division 9.a. Summary of the stock assessment. Unshaded catches prior to 2000 are years that have been down-weighted because of considerable underreporting. The recruitment value for 2018 is the geometric mean of recruitments from 1990 to 2016. Confidence intervals (95%) are included. **R2**

ICES assesses that fishing pressure on the stock is above FMSY and between Fpa and Flim; and spawning-stock size is below MSY Btrigger and between Bpa and Blim.

The advised catch is lower than last year's advice because:

- there has been a downward revision of the SSB compared to last year's assessment;
- the current assessment shows estimated SSB is declining, and due to a combination of high fishing pressure and below average recent recruitments, short term projections show that the SSB will continue to decrease in 2018 and 2019;
- the resulting SSB in 2019 will be below MSY Btrigger which implies that the advice should be based on a fishing mortality that is reduced from FMSY.

ICES advises that when the MSY approach is applied, catches in 2019 (North East Atlantic) should be no more than 318,403 tonnes.

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy). The species passes Clause C1.2

References

R1 Northeast Atlantic ICES Areas https://www.bing.com/images/search/collinsseafoods.co.uk

R2 ICES Advice: Mackerel (Scomber scombrus) in subareas 1-8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters):

http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2018/2018/mac.27.nea.pdf

R3 IUCN RED LIST S.scombrus http://oldredlist.iucnredlist.org/search

R4 CITES CHECKLIST S.scombrus http://checklist.cites.org/#/en

R5 Anon. 2017. Agreed record of conclusions of fisheries consultations between Norway, the European Union and the Faroe Islands on the management of mackerel in the northeast Atlantic for 2018, London, 11 October 2017. 8 pp. http://www.ices.dk/community/groups/Documents/EU-Nor-Faroe%20Agreed%20Record%20for%20Mackerel%20Oct%202017.pdf

R6 Directorate for Maritime Fisheries and Aquaculture of the Ministry of Ecology, Sustainable Development and Energy (France) https://lannuaire.service-public.fr/gouvernement/administration-centrale-ou-ministere 171836

Standard clauses 1.3.2.2