IFFO RS Limited

T: +44 (0) 2030 539 195
E: Standards@iffors.com
W: www.iffors.com

Unit C, Printworks | 22 Amelia Street
London, SE17 3BZ | United Kingdom

Global Standard for Responsible Supply of Marine Ingredients

Fishery Assessment Methodology and Template Report V2.0

Fishery Under Assessment	**Albacore Tuna *Thunnus alalunga* Atlantic, Mediterranean Ocean Stocks**
Date	**October 2019**
Assessor	**Jim Daly**

Application details and summary of the assessment outcome				
Name: Pelagia Killybegs, Pelagia (UK) Ltd				
Address:				
Country: Ireland		**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	Conor Donnelly	0.5	SURV 1	By-product
Assessment Period	2018			

Scope Details	
Management Authority (Country/State)	ICCAT
Main Species	Albacore Tuna *Thunnus alalunga*
Fishery Location	Atlantic. Mediterranean Oceans
Gear Type(s)	Longlines, trolling and bait boats, trawlers
Outcome of Assessment	
Overall Outcome	PASS
Clauses Failed	NONE
Peer Review Evaluation	APPROVE
Recommendation	PASS

Assessment Determination

Management is coordinated by the International Commission for the Conservation of Atlantic Tunas (ICCAT). ICCAT currently has 50 contracting members, including the EU. ICCAT coordinates fishery science, including stock assessments, and management efforts for several Atlantic tunas including albacore.

ICES Standing Committee on Research and Statistics (SCRS) last met in Madrid (2018). The status of the north and south Atlantic albacore stocks is based on the most recent assessment conducted in 2016. The next assessment is due in 2020. The Mediterranean Stock was also assessed.

Reference points have been calculated for northern, southern and Mediterranean stocks, including SSBMSY, BMSY, FMSY and Flim. Assessments are based primarily on catch and CPUE data. Fishery removals of the species in the fishery under assessment are included in the stock assessment process.

Northern Stock:
The probability of the stock currently being in the green area of the Kobe plot (not overfished and not undergoing overfishing, F<FMSY and B>BMSY) is 96.8% while the probability of being in the yellow area (overfished, B<BMSY) is 3.2%. The probability of being in the red area (overfished and undergoing overfishing, F>FMSY and B<BMSY) is 0%.

Southern Stock:
There is 3% probability for the stock to be both overfished and experiencing overfishing, 31% probability for the stock to be either overfished or experiencing overfishing but not both, and 66% probability that biomass is above, and fishing mortality below the Convention objectives.

Mediterranean Stock:
Despite high uncertainty results would seem to indicate that recent median biomass levels are at about BMSY, and median fishing mortality levels below FMSY. The probability to be in the red, yellow and green parts of the Kobe plot is 35.7%, 15.8% and 48,5%, respectively.

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

Albacore tuna (Global Stock) has been listed as Near Threatened (NT, Threat decreasing) and is not on the current list of CITES endangered species (websites accessed 26.09.19)

Albacore tuna (Atlantic, Mediterranean Stocks) 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
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)	
Category A			A1	
			A2	
			A3	
			A4	
Category B				
Category C	Albacore Tuna *Thunnus alalunga*	N/A		
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
Albacore Tuna	*Thunnus alalunga*	North Atlantic, South Atlantic	N/A	ICCAT & Contracting parties	C

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		**Albacore Tuna** ***Thunnus alalunga***	
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

Albacore in the Atlantic are considered by ICCAT to be two separate stocks, a northern and southern stock. Additionally, there is a third stock, in the Mediterranean, which is included in the ICCAT stock assessment and management process. ICES Standing Committee on Research and Statistics (SCRS) met in Madrid (2018). The status of the North and South Atlantic albacore stocks is based on the most recent assessment conducted in 2016. The next assessment is due in 2020. Assessments undertaken by SCRS underpin scientific advice for management provided to the Commission.

Reference points have been calculated for northern and southern stocks, including SSBMSY, BMSY, FMSY and Flim. Assessments are based primarily on catch and CPUE data (R1). The ICCAT report (2016) states that there is substantial uncertainty on current stock status in both (southern and northern) fisheries. During the 2016 stock assessment meeting some new information on biology was made available to the group. However, the biological parameters for both stocks remain the same as in previous assessment.

During the last assessment, the catch series for the Mediterranean stock was revisited and, after revision, some series were included in ICCAT's database. In 2017, reported landings were 2,780 t, below those in the last decade. The majority of the catch came from longline fisheries. Italy is the main producer of Mediterranean albacore, with around 53% of the catch during the last 10 years.

Fishery removals of the species in the fishery under assessment are included in the stock assessment process

C1.2:

Northern Stock:

Peak relative fishing mortality levels in the order of 1.4 were observed in the early 1980s but overfishing stopped in the 1990s current F2014/FMSY ratio (latest assessment) being 0.54. The uncertainty around current stock status has a clear shape determined by the strong correlation between parameters estimated by the production model.

The probability of the stock currently being in the green area of the Kobe plot (not overfished and not undergoing overfishing, F<FMSY and B>BMSY) is 96.8% while the probability of being in the yellow area (overfished, B<BMSY) is 3.2%. The probability of being in the red area (overfished and undergoing overfishing, F>FMSY and B<BMSY) is 0%:

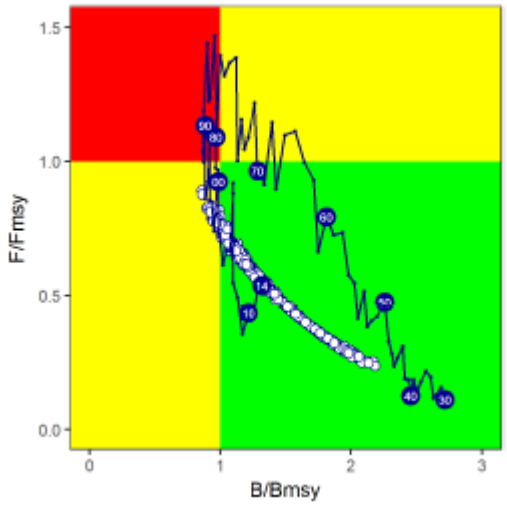

Figure 1a: North Atlantic albacore. Joint trajectories of B/BMSY and F/FMSY over time (1930-2014) and Current stock status according to the Base Case biomass dynamic model. Dots represent the uncertainty on the estimated 2014 stock status. **R1**

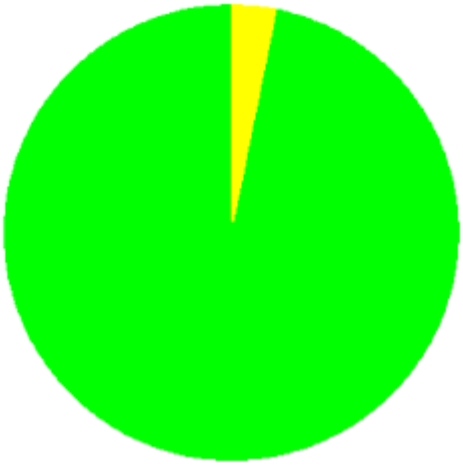

Figure 1b North Atlantic albacore probability of being overfished and overfishing (red, 0%), of being neither overfished nor overfishing (green, 96.8%), and of being overfished (yellow, 3.2%), according to the Base Case. **R1**

Southern Stock:

Southern standardized CPUE trends are mainly for longline fisheries, which harvest mostly adult albacore. Stock status has improved since the last assessment. The median MSY value was 25,901 t (ranging between 15,270 t and 31,768 t), the median estimate of current B/BMSY was 1.10 (ranging between 0.51 and 1.80 t) and the median estimate of current F/FMSY was 0.54 (ranging between 0.31 and 0.87).

Wide confidence intervals reflect the large uncertainty around the estimates of stock status. Considering all scenarios, there is 3% probability for the stock to be both overfished and experiencing overfishing, 31% probability for the stock to be either overfished or experiencing overfishing but not both, and 66% probability that biomass is above, and fishing mortality is below the Convention objectives:

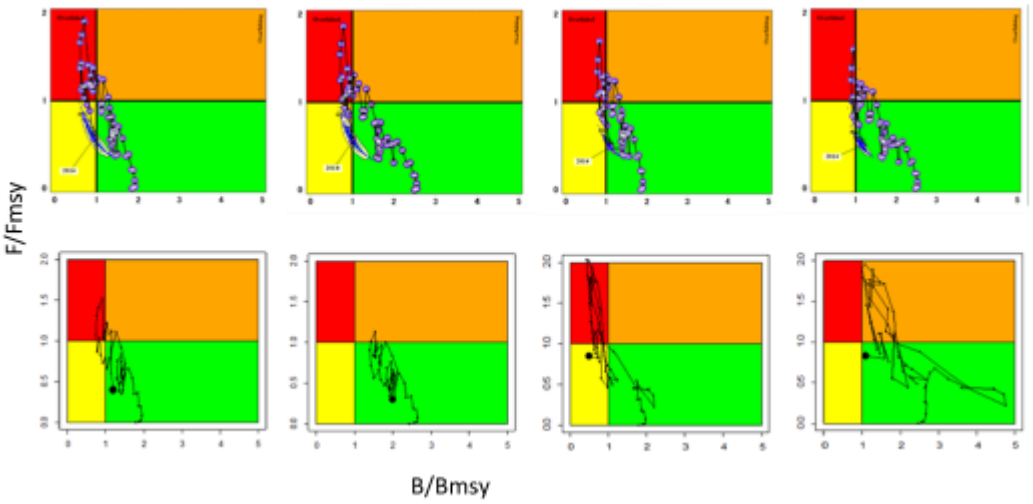

Figure 2a Stock status trajectories of B/BMSY and F/FMSY, as well as uncertainty around the current estimate (Kobe plots) for the base case ASPIC models (upper row) alongside those from the base case BSP runs (bottom row). From left to right, boxes indicate the following scenarios: Equal weight, Schaefer; Equal weight, Fox; Catch weight, Schaefer; Catch weight, Fox. **R1**

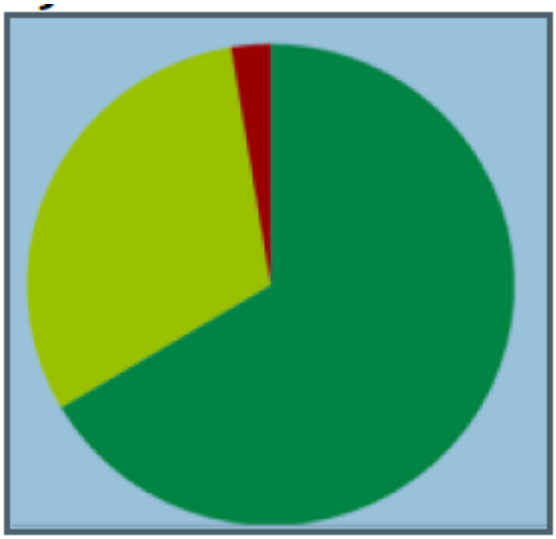

Figure 2b Combined probability of being overfished and overfishing (red, 3%), of being neither overfished nor overfishing (green (66%), and of being overfished or overfishing, but not both (yellow, 31%). **R1**

ICCAT concluded that the available information indicates that both the north and south Atlantic stocks have improved and are in the green area of the Kobe plot.

Mediterranean Stock:
Results of the 2017 assessment, based on the limited information available, show that the status of the stock is highly uncertain with respect to both fishing mortality and biomass. Despite the high uncertainty the results would seem to indicate that recent albacore median biomass levels are at

about BMSY, and median fishing mortality levels are below FMSY. The probability to be in the red, yellow and green parts of the Kobe plot is 35.7%, 15.8% and 48,5%, respectively.

During 2018, only two of three indices were preliminarily updated. The larval index still showed a general decreasing trend in the last years, while the Spanish longline index did not.

In 2017 ICCAT adopted Rec 17-05, according to which, no increase in catch and fishing effort for this stock is allowed until more accurate scientific advice can be provided by the SCRS. Moreover, a time closure of two months (1 October - 30 November), originally aimed at protecting Mediterranean swordfish juveniles, applies to the longline fleet targeting albacore from 2017 onwards. The number of vessels for each CPC (Contracting Party) is limited to the number of vessels authorized to target Mediterranean albacore in 2017.

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

References

R1 ICES STANDING COMMITTEE ON RESEARCH AND STATISTICS (SCRS) (Madrid 2018) 450 pp https://iccat.int/Documents/BienRep/REP_EN_18-19_I-2.pdf
R2 Fishsource Atlantic Albacore https://www.fishsource.org/stock_page/638
R3 ICCAT. 2016. Report of the 2016 ICCAT north and south Atlantic albacore stock assessment meeting. Madeira, Portugal, April 28-May 6, 2016. http://www.iccat.int/Documents/Meetings/Docs/2016_ALB_REPORT_ENG.pdf

Standard clauses 1.3.2.2