



BYPRODUCT FISHERY ASSESSMENT TEMPLATE REPORT

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TABLE 1 APPLICATION DETAILS AND SUMMARY OF THE ASSESSMENT OUTCOME

	Species:	Red mullet <i>Mullus surmuletus</i>		
	Geographical area:	North East Atlantic		
Fishery Under Assessment	Country of origin of the product:	France		
	Stock:	 i) Subarea 4 and divisions 7.d and 3.a and ii) Subareas 6 and 8 and divisions 7.a-c, e-k and 9.a 		
Date	February 2021			
Report Code		BP17		
Assessor		Conor Donnelly		
Country of origin of the product - PASS	France			
Country of origin of the product - FAIL				

Application details a	nd summary of the a	ssessment outcome	
Name:			
Address:			
Country: France		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Detail	s	-	
Name of Certification	n Body:	Global Trust Certi	fication
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Conor Donnelly	Virginia Polonio	0.5	Surveillance
Assessment Period	February 2021		

Scope Details	
Main Species	Red mullet <i>Mullus surmuletus</i>
Stock	i) Subarea 4 and divisions 7.d and 3.a and ii) Subareas 6 and 8 and divisions 7.a-c, e-k and 9.a
Fishery Location	North East Atlantic
ManagementAuthority (Country/ State)	EU
Gear Type(s)	Danish seine, otter trawl, others
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's determination
Recommendation	APPROVE

Fishery Assessment TEMPLATE April 2020





TABLE 2. ASSESSMENT DETERMINATION

Assessment Determination

If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as MARINTRUST raw material. Red mullet *Mullus surmuletus* does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, red mullet in Subarea 4 and divisions 7.d and 3.a and red mullet in Subareas 6 and 8 and divisions 7.a-c, e-k and 9.a is eligible for approval for use as MARINTRUST by-product raw material.

This by-product stock has no species-specific management regime in place and consequently is assessed as a category D stock using a productivity-susceptibility analysis (PSA).

The stock passed the PSA so the by-product covered by this report is **APPROVED** for the production of fishmeal and fish oil under the current MARINTRUST v2 by-product standard.

Peer Review Comments

The peer review agrees with the determination. The two stocks assessed in this report i) Subarea 4 and divisions 7.d and 3.a and ii) Subareas 6 and 8 and divisions 7.a-c, e-k and 9.a have not a species-specific management system and therefore, due to the lack of scientific information a PSA approach has been used for both stock.

The stock passed the PSA so the by-product covered by this report is **APPROVED** for the production of fishmeal and fish oil under the current MARINTRUST v2 by-product standard.

Notes for On-site Auditor



SPECIES CATEGORISATION

<u>NB</u>: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as an MARINTRUST raw material.

IUCN Redlist Category

Byproduct material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

Byproduct material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

Common name	Latin name	Stock	Management	Category	IUCN Red List Category ¹	CITES Appendix 1 ²
Red mullet	Mullus surmuletus	North East Atlantic. Two stocks in this area: i) Subarea 4 and divisions 7.d and 3.a and ii) Subareas 6 and 8 and divisions 7.a-c, e- k and 9.a	No	D	Least concern (<u>Global</u> , Mediterranean), Data deficient (<u>Europe</u>)	Not listed

TABLE 3 SPECIES CATEGORISATION TABLE

¹ <u>https://www.iucnredlist.org/</u>

² <u>https://cites.org/eng/app/appendices.php</u>



CATEGORY D SPECIES

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

D1	Species Name	Red mullet <i>Mullus surmuletus</i>				
	Productivity Attribute	Value				
	Average age at maturity (years)	1.48				
	Average maximum age (years)	6.2				
	Fecundity (eggs/spawning)	19640 - 83448				
	Average maximum size (cm)	26.7				
	Average size at maturity (cm)	16.1				
	Reproductive strategy	Non-guarders, a determinate spawne				
		are pelagic				
	Mean trophic level	3.5				
		Average Pr				
	Susceptibility Attribute	Value				
	Overlap of adult species range with fishery	France				
	Distribution	Throughout region				
	Habitat	Demersal				
	Depth range	5 – 409m				
	Selectivity	Up to 4m length				
	Post-capture mortality	Most dead or retained				
		Average Sus				
		PSA Risk Rating				
		Co				
leferences						
roductivity & sus	ceptibility attributes (except fecundity): https://www.fis	hbase.se/summary/Mullus-surmuletus.html				
-	putes (fecundity): Amin, Amal & Madkour, Fedekar & Abu rom the Egyptian Mediterranean Sea (Port Said). Internatio					
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https://www.researchgate.net/publication/290992825 Reproductive biology of Mullus surmuletus Linnaeus 1758 from th

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 at	tribu	ites	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 or<br="" size="">>5 m length</mesh>	
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 - 1.75	1.76 - 2.24	2.25 - 3	
Average Productivity	1 - 1.75	PASS	PASS	PASS	
Score	1.76 - 2.24	PASS	PASS	TABLE D4	
	2.25 - 3	PASS	TABLE D4	TABLE D4	

D4	Species Name					
	Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements					
	D4.1		of the fishery on this species are considered during the management ple measures are taken to minimise these impacts.			
	D4.2	There is no substantia species.	al evidence that the fishery has a significant negative impact on the			
	•	• · ·	Outcome:			
Evider D4.1:		ential impacts of the fi	ishery on this species are considered during the management proces	s, and		
D4.1: reaso	The pot nable mo	easures are taken to mir	ishery on this species are considered during the management proces nimise these impacts. that the fishery has a significant negative impact on the species.	s, and		
D4.1: reaso D4.2 T	The pot nable mo	easures are taken to mir	nimise these impacts.	s, and		
D4.1: reason D4.2 T Refere	The pot nable mo There is r ences	easures are taken to mir	nimise these impacts.	s, and		
D4.1: reason D4.2 T Refere	The pot nable mo There is r ences	easures are taken to mir no substantial evidence	nimise these impacts. that the fishery has a significant negative impact on the species.	s, and		

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SOCIAL CRITERION

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



Appendix B: From MARINTRUST Standard V2.0 Annex 2: Fish By-product Assessment Methodology

Definition of a Fish By-product

A by-product is a useful and marketable product that is not the primary product being produced. A marketable by-product is from a process that can technically not be avoided. This includes materials that may be traditionally defined as waste such as industrial scrap that is subsequently used as a raw material in a different manufacturing process.

"Fish By-products" refers to commodities that are manufactured from fish, including shellfish, and crustaceans in a form that is different than conventional foods and which are intended for human consumption (either directly or as a food ingredient). Fish By-products include, but are not limited to:

- By-products derived from fish, including fish cartilage, fish oils, and fish proteins; and
- By-products derived from the carapaces of crustaceans; but do not include marine plants or marine plant products.

(Canadian Food Inspection Agency Definition)

In addition, a whole fish which is rejected on an intrinsic quality ground e.g. does not meet the specification for human consumption due to physical damage or the quality is substandard. These whole fish shall in these cases be classified as a by-product from the human consumption fishery, and can be used for marine ingredients production.

A whole catch of fish that is rejected by a fish processing factory on economic grounds is not considered to be a fish by-product. This fish can only be used for marine ingredients production if the fishery has been assessed and approved under the requirements of the IFFO Responsible Sourcing Standard.

Why utilise Fish By-products?

FAO Code of Conduct for Responsible Fisheries

General Principles Article 6

6.7 The harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will maintain the nutritional value, quality and safety of the products, reduce waste and minimize negative impacts on the environment.

Responsible fish utilisation Article 11.1

11.1.8 States should encourage those involved in fish processing, distribution and marketing to reduce post-harvest losses and waste.

Benefits of Including Fish By-Products in the MARINTRUST Standard:

1. Improved fish resource utilisation

- 2. Reduction in waste for nutritional value
- 3. 35% of fish by-products are currently used to make quality fishmeal and oil
- 4. Excellent Economic return
- 5. Better compliance with FAO Code of Conduct for Responsible Fisheries

What Fish By-products cannot be used?



1. IUCN

Fishery By-products shall Not be taken from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for certain categories;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

Fish By-product material may be used from the vulnerable category, but it shall incur a fishery surveillance conducted by the certification body prior to it being included in the scope of this standard.

• VULNERABLE (VU) facing a high risk of extinction in the wild.

The Fish By-product material from these species will be acceptable for use in the scope of this standard;

- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.

Fish By-product material may be used from the following category, but it shall incur a fishery surveillance prior to it being included in the scope of this standard;

• DATA DEFICIENT (DD) and NOT EVALUATED (NE)

The fishery surveillance conducted by the certification body will review the following areas:

Stock Assessment

- From a recognised Institution
- Fisheries are recognised as legal
- Fisheries do not contradict scientific opinion

2. FAO Code of Conduct for Responsible Fisheries

In addition the Fish By-products shall not come from fisheries that do not comply with the following criteria;

Fisheries should prohibit dynamiting, poisoning and other comparable destructive fishing practices.
 Fishery material shall not be from IUU fishing activity nor sourced from vessels officially listed as engaging in illegal, unreported and unregulated (IUU) fishing activity.

Sources of Information

- 1. Food Standards Agency
- 2. Canadian Food Inspection Agency
- 3. DEFRA
- 4. GAA Feed mill BAP standard
- 5. EU Commission
- 6. IUCN