



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	European/common squid (<i>Loligo vulgaris</i>)
	Geographical area:	FAO 27 Atlantic, Northeast (ICES Divisions 4a – c, 6a, 7a, b, d – h, j)
	Country of origin of the product:	France
	Stock:	Squid in ICES Divisions 4a – c, 6a, 7a, b, d – h, j)
Date	30 July 2021	
Report Code	BP146	
Assessor	Sam Dignan	
Country of origin of the product - PASS	France	
Country of origin of the product - FAIL	Not applicable	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country:		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification Limited	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Sam Dignan	Géraldine Criquet	0.5	Surveillance 2
Assessment Period	To July 2021		

Scope Details	
Main Species	European/common squid (<i>Loligo vulgaris</i>)
Stock	Squid in ICES Divisions 4a – c, 6a, 7a, b, d – h, j)
Fishery Location	FAO 27 Atlantic, Northeast (ICES Divisions 4a – c, 6a, 7a, b, d – h, j)
Management Authority (Country/ State)	European Union, UK and France
Gear Type(s)	Demersal trawls, Beam trawls
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's recommendation
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>If a 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 RS raw material.</p> <p>Squid is not categorised as Endangered or Critically Endangered on IUCN’s Red List, nor does it appear in the CITES appendices; therefore, byproducts derived from this stock are eligible for approval for use as MarinTrust RS by-product raw material.</p> <p>Squid is a largely unmanaged species with undetermined stock structure. Therefore, for the purpose of this assessment, the squid ‘stock’ assessed is defined by ICES Divisions 4a – c, 6a, 7a, b, d – h, j.</p> <p>The squid stock is not nor is it subject to the type of species-specific management regimes that would mean it being assessed as a Category C species here (e.g. with limit and target reference points etc.); therefore, the squid ‘stock’ under assessment is assessed as Category D.</p> <p>Based on the Productivity and Susceptibility Analysis (PSA) outlined in Table C1 and the threshold outlined in Table D3, the stock PASSES Clause D1.</p> <p>As the stock passes both Clause D1, further analysis is not required, and the by-product covered by squid in ICES Divisions 4a – c, 6a, 7a, b, d – h, j is recommended for APPROVAL for the production of fishmeal and fish oil under the current MarinTrust RS v 2.0 by-product standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified squid in ICES Divisions 4a – c, 6a, 7a, b, d – h, j as category D, reference points are undefined to assess status of the stock relative to.</p> <p>With an average productivity score of 1.57 and an average susceptibility score of 1.75, it PASSES the PSA as per Table D3.</p> <p>Therefore, squid in ICES Divisions 4a – c, 6a, 7a, b, d – h, j is APPROVED.</p>
Notes for On-site Auditor

Species Categorisation

NB: 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

By-product 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.

By-product 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)

Table 3 Species Categorisation Table

Common name	Latin name	Stock	Management	Category	IUCN Red List Category ¹	CITES Appendix 1 ²
European/ common squid	<i>Loligo vulgaris</i>	Squid in ICES Divisions 4a – c, 6a, 7a, b, d – h, j)	EU, UK and France	D	Not assessed	No

¹ <https://www.iucnredlist.org/>

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

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.

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. Where a species fails this Clause, it may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

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.
	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.
		Clause outcome:
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.		
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.		
References		
Links		
MARINTRUST Standard clause	1.3.2.2	
FAO CCRF	7.5.3	
GSSI	D.3.04, D5.01	

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	Squid (<i>Loligo vulgaris</i>) in ICES Divisions 4a – c, 6a, 7a, b, d – h, j)	
Productivity Attribute		Value	Score
Average age at maturity (years)		<1 year (Sealifebase)	1
Average maximum age (years)		3.5 years	1
Fecundity (eggs/spawning)		1,441 – 14,886 (lower more precautionary score = 2)	1/2
Average maximum size (cm)		Max length: 64.0 cm ML male/unsexed; 32 cm ML (female) (Sealifebase)	1
Average size at maturity (cm)		9 cm – 23 cm mantle length (Sealifebase)	1
Reproductive strategy		Demersal egg layer (corresponds to ‘Demersal spawner’)	2
Mean trophic level		3.5	3
Average Productivity Score			1.57
Susceptibility Attribute		Value	Score
Overlap of adult species range with fishery		Occurs in Eastern Atlantic; from approximately 20 degrees S to 55 degrees N; around the British Isles, North Sea; Mediterranean Sea. <25% of species distribution occurs in area under assessment.	2
Distribution		Not scored	–
Habitat		Benthopelagic	1
Depth range		Depth range 0 m – 500 m, usually 20 m – 250 m	1
Selectivity		Species 1 to 2 times mesh size	2
Post-capture mortality		Most dead or retained	2
Average Susceptibility Score			1.75
PSA Risk Rating (From Table D3)			PASS
Compliance rating			PASS

References

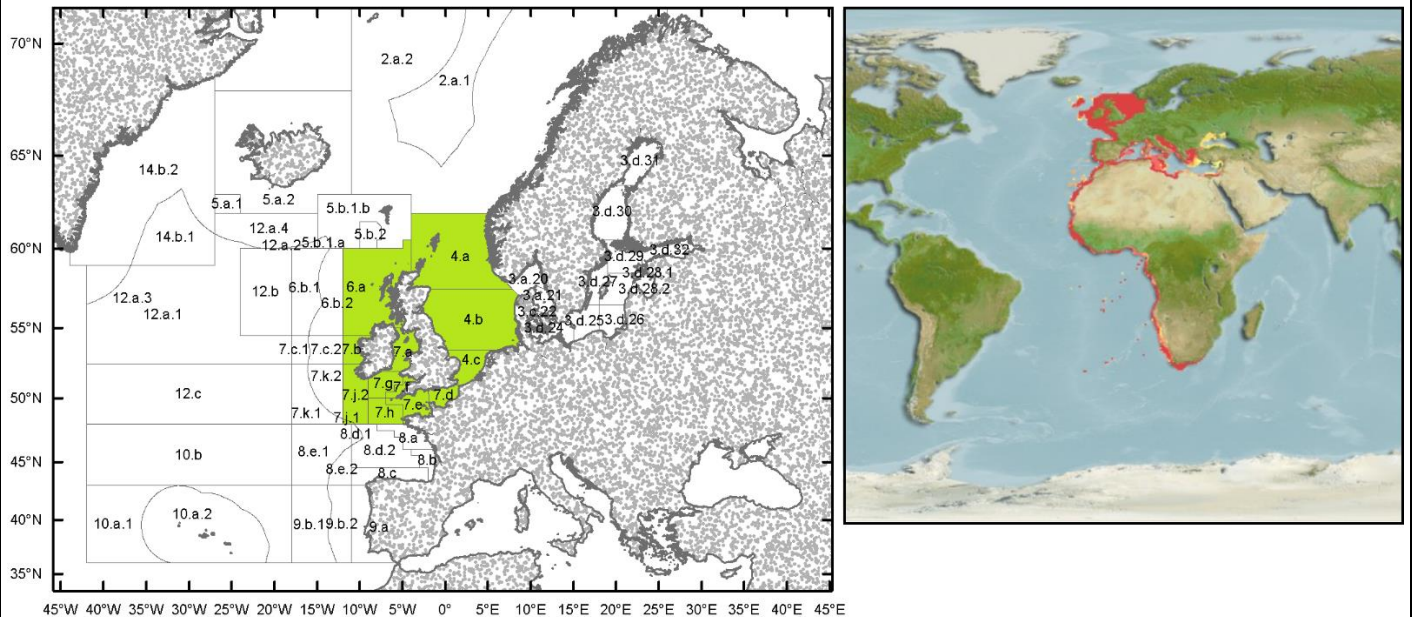


Table. Range of fishery under assessment (left) and distribution of *Loligo vulgaris*.

MarLIN The Marine Life Information Network, Common squid (*Loligo vulgaris*): <https://www.marlin.ac.uk/species/detail/1111>

Sealifebase, *Loligo vulgaris*: <https://www.sealifebase.ca/summary/Loligo-vulgaris>

Coelho, M.L, Quintela, J., Bettencourt, V., Olavo, G. & Villa, G.1992. Population structure, maturation patterns and fecundity of the squid *Loligo vulgaris* from southern Portugal [https://doi.org/10.1016/0165-7836\(94\)90097-3](https://doi.org/10.1016/0165-7836(94)90097-3)

Morato, Telmo & Lemey, Emile & Menezes, Gui & Pham, Christopher & Brito, Joana & Soszynski, Ambre & Pitcher, Tony & Heymans, Johanna. (2016). Food-Web and Ecosystem Structure of the Open-Ocean and Deep-Sea Environments of the Azores, NE Atlantic. *Frontiers in Marine Science*. 3. 10.3389/fmars.2016.00245

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 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	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	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.		
			Clause outcome:
Evidence			
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.			
References			
Links			
MARINTRUST Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	