MarinTrust Standard V2

By-product Fishery Assessment, FRA06, *Cod (Gadus morhua), France*

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Cod (*Gadus morhua*)
	Geographical area:	FAO 27, Atlantic Northeast
	Country of origin of the product:	France
	Stock:	ICES 6.a
Date	August 2023	
Report Code	FRA06	
Assessor	Blanca Gonzalez	
Country of origin of the product - PASS	France	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Bioceval SAS - Concarneau			
Country: France			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Blanca Gonzalez	Sam Peacock	0.5	Surveillance 1
Assessment Period	August 2023-August 2024		

Scope Details	
Main Species	Cod (*Gadus morhua*)
Stock	ICES 6.a. West of Scotland
Fishery Location	FAO 27, Atlantic Northeast
Management Authority (Country/ State)	EU and UK
Gear Type(s)	Demersal finfish trawl, nephrops fleet, others
Outcome of Assessment	
Peer Review Evaluation	Agree with recommendation
Recommendation	Approve

Table 2. Assessment Determination

Assessment Determination
Cod (*Gadus morhua*) was assessed as a category C species considering that it is a Vulnerable species by the IUCN, it is not in included in any CITES Appendixes, and the EU multiannual plan (MAP) for stocks in the Western Waters and adjacent waters takes by catch of this species into account, setting reference points and annual quotas management purposes (ICES 2022). Cod is subject to annual stock assessment by ICES working group for Celtic Seas Ecoregion (WGCSE). The last assessment was carried out in 2022 using catches data in the model and in the forecast. The spawning-stock size is below MSY $B_{trigger}$, B_{pa}, and B_{lim} and the advice is that there should be zero catch in the years 2023 y 2024 (ICES 2022). As the cod didn´t meet the Category C requirements, the species was evaluated under Category D as indicated by the Marin Trust By-product assessment guidance. In the Productivity-Susceptibility Analysis (PSA) cod was awarded an average productivity score of 1.71 and an average susceptibility score of 2.25, passing against Table D3, indicating that cod is not vulnerable to this fishery. The cod by-product meets the Marin Trust requirements and it should remain approved for use as a raw material. ICES (2022). Cod (Gadus morhua) in Division 6.a (West of Scotland). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.19447889.v1
Fishery Assessment Peer Review Comments
The peer reviewer agrees that it is appropriate to assess this cod stock firstly under Category C. The evidence provided indicates that stock biomass is below the limit reference point, and therefore the assessor has correctly subsequently assessed the stock under Category D. The PSA was conducted correctly and the PR notes that there have been no changes in the stock assessment nor the PSA since the previous byproduct assessment. For these reasons the PR agrees that the byproduct should remain approved.
Notes for On-site Auditor
There are no concerns that requires attention from the on-site assessor.

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 Red list 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]
Cod	*Gadus morhua*	ICES 6.a. West of Scotland	Yes	C	Vulnerable [3]	No

[1] https://www.iucnredlist.org/
[2] https://cites.org/eng/app/appendices.php
3 https://www.iucnredlist.org/species/8784/12931575

CATEGORY C SPECIES

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. Where a species fails this Clause, it should be assessed as a Category D species instead.

Species Name		**Cod (*Gadus morhua*)**	
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.	FAIL
		Clause outcome:	FAIL

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.

Clause is met, considering that:

The stock was last benchmarked in 2020 by The International Council for exploration of the Sea (ICES) working group for the Celtic Seas Ecoregion (WGCSE) (ICES 2022). Last assessment was carried out in 2022 implementing an analytical age-based assessment (SAM) that uses catches data in the model and in the forecast; thus, removals of the species are included in the stock assessment process (ICES 2022) (Figure 1).

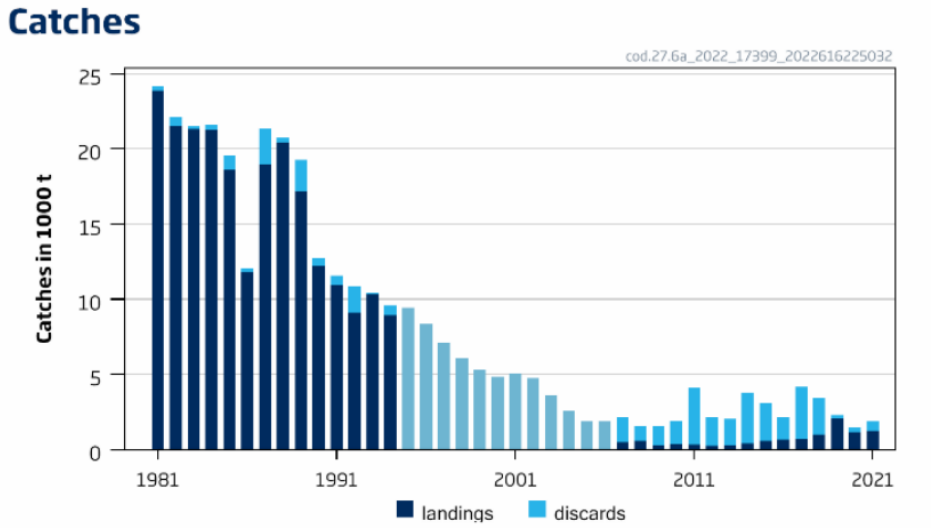

Figure 1. Cod catches in Division 6.a (West of Scotland) (ICES 2022).

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 is NOT met, considering that:

The 2022 cod stock assessment indicates that spawning-stock size is below MSY $B_{trigger}$, B_{pa}, and B_{lim}. The catch advice for 2023 and 2024 is that there should be zero catch (ICES 2022) (Figure 2).

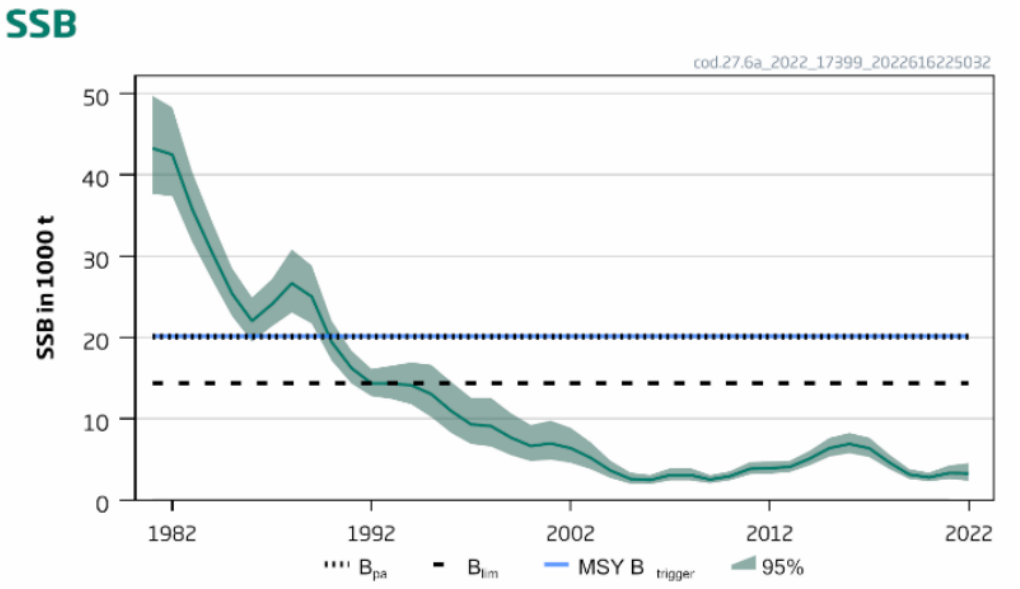

Figure 2. Spawning stock biomass for cod in Division 6.a (West of Scotland) (ICES 2022).

References

ICES (2022). Cod (Gadus morhua) in Division 6.a (West of Scotland). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.19447889.v1

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 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**	**Cod (*Gadus morhua*)**	
	Productivity Attribute	**Value**	**Score**
	Average age at maturity (years)	3.6	1
	Average maximum age (years)	16.9	2
	Fecundity (eggs/spawning)	285,000-9,100,000	1
	Average maximum size (cm)	200	2
	Average size at maturity (cm)	55	2
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	4.1	3
		Average Productivity Score	**1.71**
	Susceptibility Attribute	**Value**	**Score**
	Availability (area overlap)	<10%	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	High overlap with fishing gear	3
	Selectivity of gear type	Individuals < size at maturity are regularly caught [1]	2
	Post-capture mortality	Retained	3
		Average Susceptibility Score	**2.25**
		PSA Risk Rating (From Table D3)	**PASS**
		Compliance rating	**PASS**
	Further justification for susceptibility scoring (where relevant) *For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision*		

References

https://www.fishbase.se/summary/Gadus-morhua.html

[1] ICES (2022). Stock Annex: Cod (Gadus morhua) in Division 6.a (West of Scotland). ICES Stock Annexes. Report. https://doi.org/10.17895/ices.pub.20170406.v1

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species
Selectivity of gear type Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

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.	
		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