



MarinTrust Standard V2

By-product Fishery Assessment, FRA06- *Cod (Gadus morhua) in Subarea 4, divisions 6.a*

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	<i>Gadus morhua</i> - Cod
	Geographical area:	FAO 27, ICES 6.a
	Country of origin of the product:	France
	Stock:	Cod (<i>Gadus morhua</i>) in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel, and Skagerrak)
Date	22/08/2024	
Report Code	FRA06	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	France	
Country of origin of the product - FAIL	N/A	

Application details and summary of the assessment outcome			
Company Name(s): Concarneau			
Country: France			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LQRA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Sam Peacock	0.5	Surveillance 2
Assessment Period	August 2024- August 2025		

Scope Details	
Main Species	Cod (<i>Gadus morhua</i>)
Stock	Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel, and Skagerrak)
Fishery Location	FAO 27, ICES 6.a
Management Authority (Country/ State)	France
Gear Type(s)	Demersal finfish trawl, nephrops fleet, others
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor
Recommendation	Approve

Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as MarinTrust raw material.</p> <p>Cod is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore although is categorised as Vulnerable, Cod is eligible for approval for use as Marin Trust by-product raw material.</p> <p>ICES is not aware of any agreed precautionary management plan for cod in this area. A benchmark was conducted in 2023, which combined the former North Sea (cod.27.47d20) and West of Scotland (cod.27.6a) cod stocks (WKBCOD; ICES, 2023a). The area corresponding to the North Sea, West of Scotland, the eastern English Channel, and the Skagerrak is now considered to contain three reproductively isolated substocks — Northwestern, Viking, and Southern —with separate spawning grounds and different biological characteristics.</p> <p>The last assessment for Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel, and Skagerrak) was published on June 28th, 2024. Therefore, according to the new stock definition by ICES in 2024, the cod stock in this area is divided into three subcomponents. One subcomponent (Southern) meets Clause C, but the other two (Northwestern and Viking) do not, as shown in Table C. Therefore, PSA was applied to the other two subcomponents, yielding values of productivity at 1.71 and susceptibility at 2.5. The stock meets Clause D and is therefore optimal for MarinTrust.</p> <p><i>Gadus morhua</i>, Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel, and Skagerrak) is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The peer reviewer agrees that cod is eligible for MarinTrust approval, and that all three sub-stocks should initially be assessed under Category C. The assessor has provided sufficient evidence to demonstrate that one sub-stock passes Category C and two sub-stocks fail. The assessor has correctly conducted the PSA for the two sub-stocks. The peer reviewer agrees that material from all three sub-stocks meets the MT requirements and should remain approved for use as a raw material.</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 a 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)	<i>Lepidorhombus whiffiagonis</i>	Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel, and Skagerrak)	European Union Common Fisheries Policy and Directorate general for Maritime affairs, Fisheries and Aquaculture (DGAMPA)	C & D is also assessed	Vulnerable ³	No

¹ <https://www.iucnredlist.org/>

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

³ [Gadus morhua \(Atlantic Cod\) \(iucnredlist.org\)](https://www.iucnredlist.org/species/14612/1)

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 in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel, and Skagerrak)	
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.	Yes
	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.	No
Clause outcome:		Pass – Southern Fail Viking – Go to section D Fail Northwestern– Go to section D	

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.

Northern shelf cod comprises three substocks (Northwestern, Southern and Viking) which mix and are caught together. ICES advises that when the MSY approach is applied for the Southern substock and precautionary considerations to protect the Southern substock are applied for the Northwestern and Viking substocks, catches in 2025 should be no more than 19, 321 tonnes, which corresponds to 12 158 tonnes from the Northwestern substock, 4,089 tonnes from the Viking substock, and 3,074 tonnes from the Southern substock. Catches by substock are not considered as area specific advice and catches were reported in 2024 advice as combined.

All substock combined catches

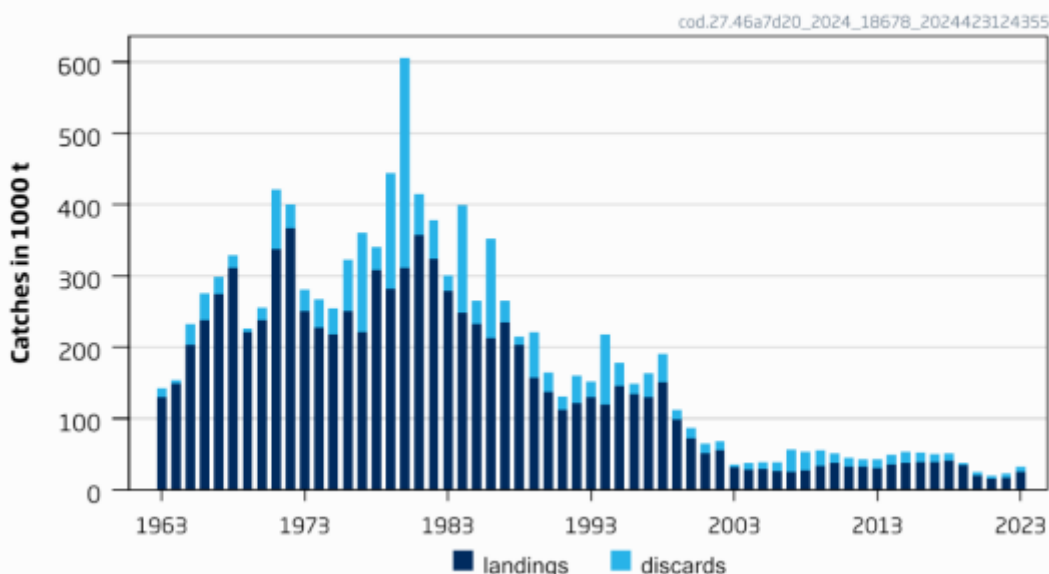


Figure 1. Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20. Total catch for all substocks combined. Source: ICES 2024

From 1995 to 2023, commercial catches include international catches and ages from catch sampling by métier, with landings proportions by substock for Q1 and by quarter for all substocks combined. Two sets of survey indices are derived through a delta-GAM approach: “Q1” (combining NS-IBTS [G1022], SWC-IBTS [G1179], and SCOWCGFS [G4748]) and “Q3+Q4” (combining Q3 NS-IBTS [G2829], Q4 SWC-IBTS [G4299], Q4 SCOWCGFS [G4815], and Q4 IGFS [G7212]). A third set of indices for recruits is derived from the same “Q3+Q4” approach. Indices for “Q1” and recruits are split into substocks. Annually varying maturity data and stock weights are obtained from Q1 NS-IBTS [G1022], Q1 SWC-IBTS [G1179], and Q1 SCOWCGFS [G4748] by substock. Annually varying natural mortalities are sourced from the North Sea multispecies model (1983–2022; ICES, 2024). Discards are included in the assessment, and below minimum size (BMS) landings, where reported, are included with discards in the assessment from 2016 onwards.

Therefore C1.1 is met for all the 3 substocks.

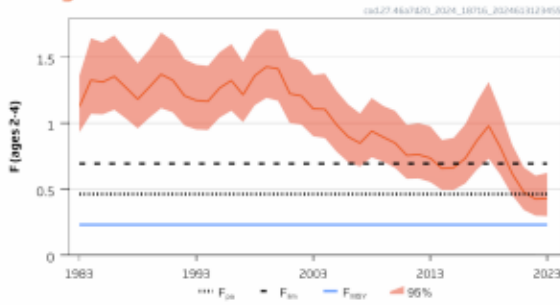
C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

Fishing pressure on all three substocks is above FMSY but below Fpa and Flim.

The spawning-stock size is:

- below MSY Btrigger, Bpa, and Blim for the Southern substock;
- above MSY Btrigger, Bpa, and Blim for the Northwestern and Viking substocks

Fishing Pressure



Spawning Stock Biomass

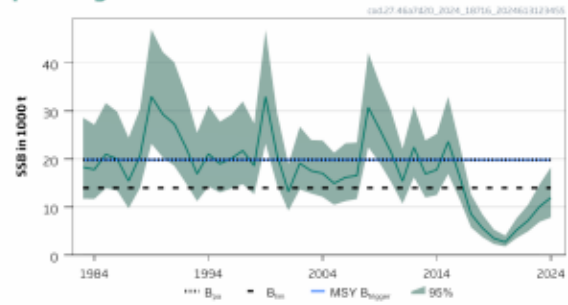
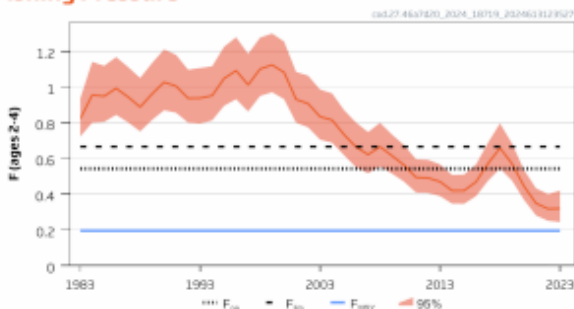


Figure 2. Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20. Summary of the stock assessment for the Southern substock. Source: ICES2024

Fishing Pressure



Spawning Stock Biomass

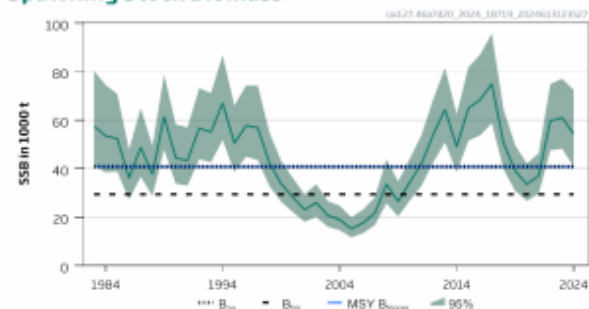


Figure 3. Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20. Summary of the stock assessment for the Northwestern substock. Source: ICES2024

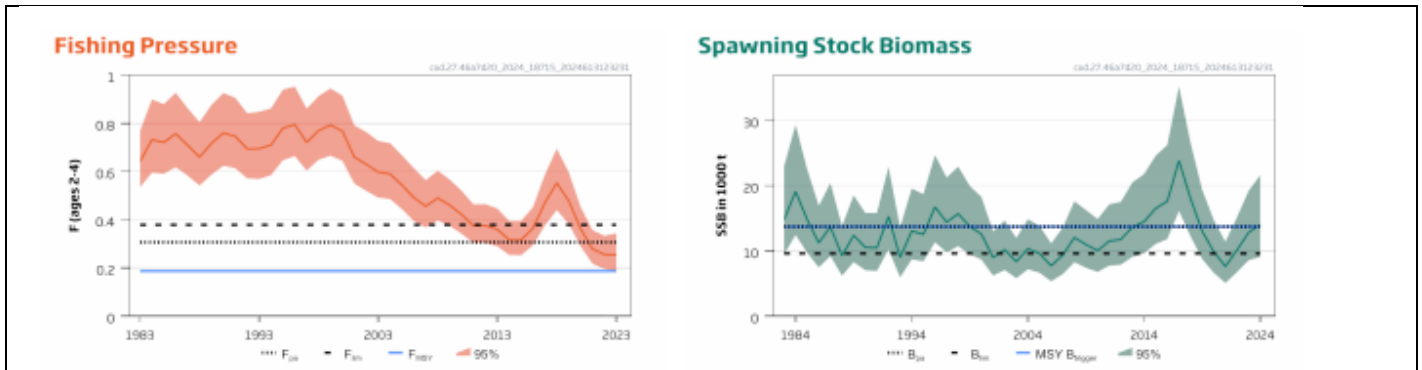


Figure 4. Cod in Subarea 4, divisions 6.a and 7.d, and Subdivision 20. Summary of the stock assessment for the Viking substock. Source: ICES2024

Therefore, for the Southern substock C1.2 is met but it is not met for the Viking substock neither for Northwestern substock.

Since the assessor is not fully confident about the fraction that corresponds to this assessment and because the stock split remains challenging due to mixing stocks in some areas, Section D has been assessed separately.

References

ICES. 2024. Cod (*Gadus morhua*) in Subarea 4, divisions 6.a and 7.d, and Subdivision 20 (North Sea, West of Scotland, eastern English Channel and Skagerrak). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, cod.27.46a7d20, <https://doi.org/10.17895/ices.advice.25019219>

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 (<i>Gadus morhua</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	3.6 years	1
	Average maximum age (years)	25 years	2
	Fecundity (eggs/spawning)	1,610,435	1
	Average maximum size (cm)	200 cm TL	2
	Average size at maturity (cm)	Lm 65.4, range 31 - 74 cm	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 overlapping with the fishing gear	3
	Selectivity of gear type	Most of the specimens are retained	3
	Post-capture mortality	Mostly dead	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS
	Further justification for susceptibility scoring (where relevant)		
	The values of the attributes have been taken from Fishbase - Gadus morhua, Atlantic cod - FishBase		
	Figure 5. Distribution of Cod, <i>Gadus morhua</i> . Source Fishbase – AquaMaps.		
	References		
Gadus morhua, Atlantic cod - FishBase			
Spawning List - Gadus morhua (fishbase.org.au)			
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	