MarinTrust RS V2.0

BYPRODUCT FISHERY ASSESSMENT TEMPLATE REPORT

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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 North East Atlantic
	Country of origin of the product:	France
	Stock:	Division 7.a (Irish Sea)
Date	September 2020	
Report Code	2020-121	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	FRANCE	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: France		**Zip:**	
Tel. No.:		**Fax. No.:**	
Email address:		**Applicant Code:**	
Key Contact:		**Title:**	
Certification Body Details			
Name of Certification Body: SAI Global			
Assessor	**Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/ Re-approval**
Virginia Polonio	Jim Daly	0.5	SURV 1
Assessment Period	September 2020		

Scope Details	
Main Species	Cod (*Gadus morhua*)
Stock	Division 7.a (Irish Sea)
Fishery Location	FAO 27 Northeast Atlantic Ocean
Management Authority (Country/ State)	European Union
Gear Type(s)	Demersal trawls, seines, Gillnets, Beam trawls
Outcome of Assessment	
Peer Review Evaluation	AGREE
Recommendation	**APPROVED**

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 IFFO RS raw material. Cod, (*Gadus Morhua*) do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, cod is eligible for approval for use as IFFO RS by-product raw material. One stock complex forms part of this assessment: 1) Cod in the area Division 7.a (Irish Sea) The cod stock complex is managed under the EU multiannual plan for the Northeast Atlantic Ocean framework of the EU Common Fisheries Policy and so is assessed under Clause C. Fishery removals of the stock complex are included in the stock assessment process then the stock complex **PASSES** Clause C1.1. Although, the species is considered, in its most recent stock assessment, to have a biomass below the limit reference point but removals from the origin country assessed in this report are negligible and it was reported less than 1 ton, so the stock complex **PASSES** Clause C1.2. In order to be approved, the stock assessed must pass all Clauses in category C. Therefore Cod in the area Cod in the area Division 7.a (Irish Sea) is **APPROVED** by SAI Global assessors in the assessment area for the production of fishmeal and fish oil under the current IFFO RS v 2.0 by-products standard.
Peer Review Comments
Removals by the fishery under assessment are considered by scientific authorities to be negligible. PR agrees with the assessment decision.
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

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)

TABLE 3 SPECIES CATEGORISATION TABLE

Common name	Latin name	Stock	Management	Category	IUCN Red List Category[1]	CITES Appendix 1[2]
Cod	*Gadus morhua*	FAO 27 NE Atlantic ICES Cod in the area Division 7.a (Irish Sea)	EU/Common Fisheries Policy	C	VU	No

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

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 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		**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.	PASS
		Clause outcome:	**PASS**

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.

Input data used in the stock assessment are: Northern Ireland quarter 1, groundfish survey (NIGFS-WIBTS-Q1), survey biomass index (ages 1–4), discards and bycatch. Discard information available since 2007, prior to 2007 estimated through raising procedures

The assessment was not of sufficient quality to be retained as a category 1 assessment. The basis for the advice is the ICES precautionary approach (category 3 assessment, stocks for which survey indices (or other indicators of stock size such as reliable fishery-dependant indices; e.g. mean length in catch) are available that provide reliable indications of trends in stock metrics such as mortality ICES 2012)Landings have been adjusted since 2003, to exclude those taken from the southern rectangles (33E2 and 33E3) in the Irish Sea; they are not believed to be part of this stock but rather of the stock in divisions 7.e–k (western English Channel and southern Celtic Seas).

The Northern Ireland Groundfish Quarter 1 WIBTS Survey was used as an index of stock development. The advice is based on the ratio of the mean of the last two index values (Index A) and the mean of the three preceding values (Index B) multiplied by the recent average catch (2016–2018).

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and the fishery achieves a **PASS** in clause C1.1.

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.

The last ICES advice was posted in June 2020. The biomass index is fluctuating without trend and has recently decreased to the lowest value in the time-series. The harvest rate has been decreasing since the 1990s, and increased in 2018. Catches since 2000 have been low and decreasing. ICES cannot assess the stock and exploitation status relative to the maximum sustainable yield (MSY) and precautionary approach (PA) reference points, because the reference points are undefined (Figure 1).

The index is estimated to have decreased by more than 20% and thus the uncertainty cap was applied. The stock status relative to candidate reference points is unknown, therefore the precautionary buffer was applied to the advice. The precautionary buffer has not been applied to this stock before because it was in ICES category 1, and consequently is applied this year. Hence, the reference points previously defined for this stock (ICES 2018a) are based on an assessment that is no longer considered appropriate for providing advice.

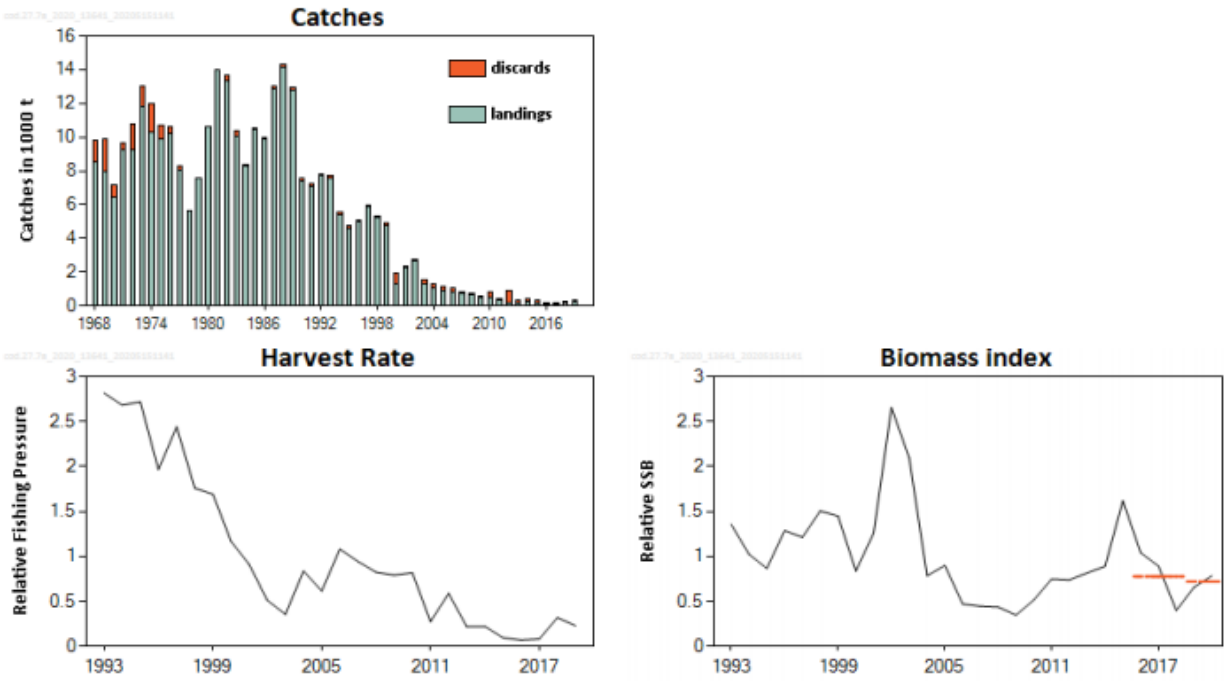

Figure 1. Cod in Division 7.a. Summary of the stock. The biomass index (NIGFS-WIBTS_Q1 up to 2020) is used as an indicator of stock size. The short orange lines indicate the average of the biomass index for 2016–2018 and 2019–2020. Harvest rate is calculated as catches divided by survey index. Discard estimates are available since 2007; prior to 2007, discards are reconstructed. Source: ICES 2020

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

Removals by the fishery under assessment are considered by scientific authorities to be negligible as France reported catches of less than 1 tons of a total of 144 tones, basically all landings of this area correspond to Ireland. Therefore, total landings of French vessels are considered negligible by scientific authorities in the area assessed. Hence, the fishery achieves a **PASS** in clause C1.2.

References

EU. 2019. Regulation (EU) 2019/472 of the European Parliament and of the Council of 19 March 2019 establishing a multiannual plan for stocks fished in the Western Waters and adjacent waters, and for fisheries exploiting those stocks, amending Regulations (EU) 2016/1139 and (EU) 2018/973, and repealing Council Regulations (EC) No 811/2004, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007 and (EC) No 1300/2008. Official Journal of the European Union, L 83. 17 pp. http://data.europa.eu/eli/reg/2019/472/oj.

ICES. 2019. Cod (Gadus morhua) in Division 7.a (Irish Sea). In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, cod.27.7a, https://doi.org/10.17895/ices.advice.4781

ICES. 2020. Cod (Gadus morhua) in Division 7.a (Irish Sea). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cod.27.7a. https://doi.org/10.17895/ices.advice.5919.

Cook, R., Fernandes, P., Florin, A., Lorance, P. & Nedreaas, K. 2015. *Gadus morhua*. The IUCN Red List of Threatened Species 2015: e.T8784A45097319. Downloaded on 17 September 2020.

Links	
MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

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 A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

"*The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of r_m (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of K, t_m and t_{max} and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on r_m (see below) as we are not yet confident with the reliability of the current method for estimating rm. If users have independent r_m or fecundity estimates, they can refer to Table 1 for using this information*."

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
r_{max} (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
K (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
t_m (years)	< 1	2 - 4	5 - 10	> 10
t_{max} (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, "Estimation of Life-History Key Facts", http://www.fishbase.us/manual/English/key%20facts.htm#resilience]

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;

1. Fisheries should prohibit dynamiting, poisoning and other comparable destructive fishing practices.

2. 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