# MarinTrust Standard V2

# By-product Fishery Assessment GBR12 - Anglerfish in FAO Area 27 ICES 4, 6 and 3a

## Table 1 Application details and summary of the assessment outcome

| Fishery Under Assessment | Species: | Anglerfish *(Lophius budegassa and Lophius piscatorius)* |
|---|---|---|
| | Geographical area: | FAO Area 27 Northeast Atlantic |
| | Country of origin of the product: | UK, Ireland |
| | Stock: | Anglerfish in Subareas 4 and 6, and Division 3.a (North Sea, Rockall and West of Scotland, and Skagerrak and Kattegat) |
| Date | | June, 2024 |
| Report Code | | GBR12 |
| Assessor | | Jose Peiro Crespo |
| Country of origin of the product - PASS | | UK, Ireland |
| Country of origin of the product - FAIL | | None |

| Application details and summary of the assessment outcome | | | |
|---|---|---|---|
| Company Name(s): Killybegs (Pelagia), Aberdeen (Pelagia), Grimsby (Pelagia) | | | |
| Country: UK, Ireland | | | |
| Email address: | | Applicant Code: | |
| Certification Body Details | | | |
| Name of Certification Body: | | LRQA | |
| Assessor | Peer Reviewer | Assessment Days | Initial/Surveillance/ Re-approval |
| Jose Peiro Crespo | Sam Peacock | 0.5 | Surveillance 2 |
| Assessment Period | June 2024 – June 2025 | | |

| Scope Details | |
|---|---|
| Main Species | Anglerfish (*Lophius budegassa and Lophius piscatorius*) |
| Stock | Anglerfish in Subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat) |
| Fishery Location | FAO Area 27 Northeast Atlantic |
| Management Authority (Country/ State) | National Authorities of United Kingdom and Republic of Ireland, and the European Union |
| Gear Type(s) | Primarily bottom (demersal) trawl |
| Outcome of Assessment | |
| Peer Review Evaluation | Agree with assessment outcome |
| Recommendation | **Pass** |

## Table 2. Assessment Determination

| Assessment Determination |
|---|
| Black-bellied anglerfish (*L. budegassa*) and white anglerfish (*L. piscatorius*) meets the eligibility criteria for approval as Marin Trust by-product raw material, as it is not categorized as Endangered or Critically Endangered on the Union for Conservation of Nature's Red List (IUCN) (Least Concern in the IUCN Red List) and they do not appear in CITES Appendix 1. Both stocks are managed relative to established (proxy) reference points and they have been assessed under Category C.<br><br>Anglerfish (both species) is assessed under ICES framework for category 3 stocks (a Biomass index trigger value (Itrigger) is used to assess the status of the stock). The stock assessment processes take into account fishery removals from the stock. Therefore, **it passes against Clause C1.1**. The most recent stock assessment published in 2022 indicated that the biomass of the stock biomass is above Itrigger (proxy for the target reference point), thus the stock **pass against C1.2**.<br><br>Consequently, Anglerfish in Subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat) has been granted **approval** for the production of fishmeal and fish oil, adhering to the existing MarinTrust v2.3 by-products standard. |
| **Fishery Assessment Peer Review Comments** |
| The peer reviewer agrees that both anglerfish species are eligible for assessment under the MarinTrust byproduct assessment methodology, and that the combined stock falls into Category C. The most recent stock assessment was adequate to meet the requirements of C1.1, and biomass is currently estimated to be above the target reference point level, meeting the requirements of C1.2. Overall, the peer reviewer agrees that the combined anglerfish stock should be approved as a source of byproduct raw material for MarinTrust certified facilities. |
| **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 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] |
|---|---|---|---|---|---|---|
| Black-bellied anglerfish | *L. budegassa* | ICES S.a 4 and 6, Division 3a | Yes | C | Least concern[3] | No |
| White anglerfish | *L. piscatorius* | ICES S.a 4 and 6, Division 3a | Yes | C | Least Concern[4] | No |

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[1] https://www.iucnredlist.org/
[2] https://cites.org/eng/app/appendices.php
[3] https://www.iucnredlist.org/species/198609/45128934
[4] https://www.iucnredlist.org/species/198610/45128985

# 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 | Anglerfish *(Lophius budegassa and Lophius piscatorius)* | |
|---|---|---|
| **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**.

ICES framework for category 3 stocks is applied to the stock. A survey biomass index was used as an indicator of stock development. The advice is based on the recent advised catches (2022), multiplied by the ratio of themean of the last two index values (index A) and the mean of the three preceding values (index B), a ratio of observed mean length in the catch relative to the target mean length, a biomass safeguard, and a precautionary multiplier. Official landings in 2021 were 20,006 tonnes. The discard rate (average 2007–2021) was 2.9%.

Fishery removals of the species in the fishery under assessment are included in the stock assessment process. **Therefore, the C1.1 is met.**

**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 most relevant reference point for this indicator is an MSY Btrigger proxy of 46,554 metric tons, referred to as Itrigger, which is defined as 1.4 times the lowest observed historical biomass index value in the period 2005-2022 (Iloss). According to the latest assessment, I2022 is greater than Itrigger, meaning that the stock complex can be considered above relevant limits for the purpose of assessing its status against the requirements of this indicator.

The current advice has decreased by 30% compared to last year's advice because of a change in the advice method and a declining trend in the recent stock biomass.
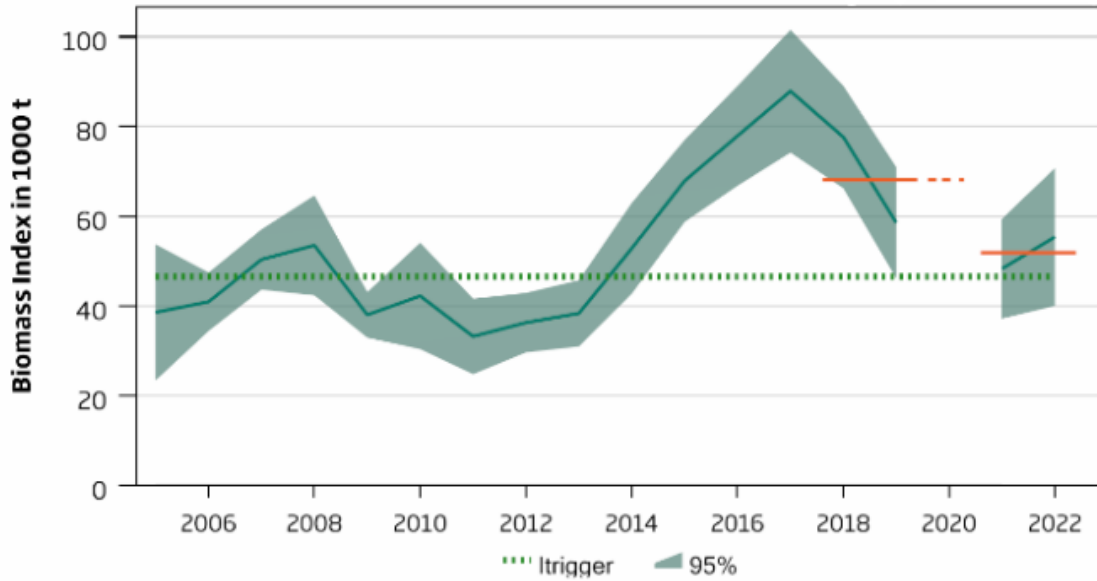
**Stock size indicator**

FIGURE 1 ANGLERFISH IN SUBAREAS 4 AND 6, AND IN DIVISION 3.A. STOCK BIOMASS FROM THE SIAMISS-Q2 SURVEY (*HORIZONTAL ORANGE LINES INDICATE THE AVERAGE OF THE MOST RECENT TWO YEARS, AND THE PREVIOUS THREE YEARS (WITH 2020 NOT AVAILABLE AND THEREFORE EXCLUDED FROM THE AVERAGE) (ICES 2022)*

The biomass of the stock is above the limit reference point (or proxy). Therefore, the **C1.2 is met.**

### References

ICES (2022). Anglerfish (*Lophius budegassa*, *Lophius piscatorius*) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.19772359.v2

### 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 | n/a | |
|---|---|---|---|
| **Productivity Attribute** | | **Value** | **Score** |
| Average age at maturity (years) | | | |
| Average maximum age (years) | | | |
| Fecundity (eggs/spawning) | | | |
| Average maximum size (cm) | | | |
| Average size at maturity (cm) | | | |
| Reproductive strategy | | | |
| Mean trophic level | | | |
| | | **Average Productivity Score** | |
| **Susceptibility Attribute** | | **Value** | **Score** |
| Availability (area overlap) | | | |
| Encounterability (the position of the stock/species within the water column relative to the fishing gear) | | | |
| Selectivity of gear type | | | |
| Post-capture mortality | | | |
| | | **Average Susceptibility Score** | |
| | | **PSA Risk Rating (From Table D3)** | |
| | | **Compliance rating** | |
| **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** | | | |
| *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 | | n/a |
|---|---|---|---|
| | **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 |