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Global Standard for Responsible Supply of Marine Ingredients Fishery Assessment Methodology and Template Report V2.0



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Fishery Under Assessment	Whiting <i>Merlangius merlangus</i> FAO 27 (Selected stocks excluding Division VIIa)
Date	October 2019
Assessor	Jim Daly

Application details and summary of the assessment outcome				
Name: Copalis Industrie				
Address:				
Country: France		Zip:		
Tel. No.:		Fax. No.:		
Email address:		Applicant Code:		
Key Contact:		Title:		
Certification Body Details				
Name of Certification Body:		SAI Global Ltd		
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval	Whole fish/ By-product
Jim Daly	Conor Donnelly	0.5	Surveillance 2	By-product
Assessment Period	2019			

Scope Details	
Management Authority (Country/State)	EU/France
Main Species	Whiting <i>Merlangius merlangus</i>
Stocks:	1 Whiting (<i>Merlangius merlangus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)
	2 Whiting (<i>Merlangius merlangus</i>) in Divisions 7.b–c and 7.e–k (southern Celtic Seas and western English Channel)
	3 Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel)
	4 Whiting (<i>Merlangius merlangus</i>) in Division 6.a (West of Scotland)
Fishery Location	FAO 27 Selected stocks excluding Division VIIa
Gear Type(s)	Demersal trawls

Outcome of Assessment			
Overall Outcomes:	Outcome	Clause(s) failed	
1	Whiting (<i>Merlangius merlangus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)	PASS	NONE
2	Whiting (<i>Merlangius merlangus</i>) in Divisions 7.b–c and 7.e–k (southern Celtic Seas and western English Channel)	FAIL	Clause C1.2
3	Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel)	PASS	NONE
4	Whiting (<i>Merlangius merlangus</i>) in Division 6.a (West of Scotland)	FAIL	Clause C1.2
Peer Review Evaluation			
Recommendations	<p>APPROVE Whiting (<i>Merlangius merlangus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters) Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel)</p> <p>DO NOT APPROVE Whiting (<i>Merlangius merlangus</i>) in Divisions 7.b–c and 7.e–k (southern Celtic Seas and western English Channel) and Division 6.a (West of Scotland).</p>		

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it cannot be approved for use as an IFFO RS raw material. Whiting (<i>Merlangius merlangus</i>) does not appear as Endangered or Critically Endangered on the IUCN Red List, nor does it appear in the CITES appendices; therefore, the species is eligible for approval for use as IFFO-RS raw material.</p> <p>Whiting is managed as many distinct stocks in EU waters, each of which are subject to an annual TAC and a variety of other management measures. It is beyond the scope of this assessment to examine all listed stocks in the assessment area listed (FAO 27). Four stocks form part of this assessment (Figure 1):</p> <ol style="list-style-type: none"> 1) Whiting (<i>Merlangius merlangus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters) 2) Whiting (<i>Merlangius merlangus</i>) in Divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel) 3) Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel) 4) Whiting (<i>Merlangius merlangus</i>) in Division 6.a (West of Scotland) <p>Fishery removals of the species in the fishery under assessment are included in the stock assessment process. The species therefore PASSES Clause C1.1.</p>

Each stock assessed must pass both Clause C1.1 and C1.2 of the fisheries assessments:

For Whiting (*Merlangius merlangus*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters) ICES assess that fishing pressure on the stock is below FMSY proxy. No other reference points have been defined for this stock. The stock **passes** Clause C1.2

For Whiting (*Merlangius merlangus*) in Divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel) ICES assess that fishing pressure on the stock is above FMSY, but below Fpa and Flim while spawning-stock is below MSY Btrigger, Bpa, and Blim. The stock **fails** Clause C1.2.

For Whiting (*Merlangius merlangus*) in Subarea 4 and Division 7.d (North Sea and eastern English Channel) spawning-stock biomass (SSB) has fluctuated around MSY Btrigger since the mid-1980s and is just below it in 2019. The stock **passes** Clause C1.2

For Whiting (*Merlangius merlangus*) in Division 6.a (West of Scotland) spawning-stock biomass (SSB) has been increasing since 2010 but remains very low compared to historical estimates and is below Blim. The stock **fails** Clause C1.2

In order to be approved for use as IFFO-RS raw material each stock must pass both Clause C1.1 and C1.2; therefore:

Whiting (*Merlangius merlangus*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters) and Subarea 4 and Division 7.d (North Sea and eastern English Channel) **pass** the assessment.

Whiting (*Merlangius merlangus*) in Divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel) and In Division 6.a (West of Scotland) **fail** the assessment.

Peer Review Comments

It is important to confirm with client that they are able to segregate by-product from failed stocks from those stocks that pass.

Notes for On-site Auditor

Ensure IFFO-RS approved raw material is processed and labelled separately to un-approved raw material.

HOW TO COMPLETE THIS ASSESSMENT REPORT

This assessment template uses a modular approach to assessing fisheries against the IFFO RS standard.

By-products

The process for completing the template for **by-product raw material** is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table with the names of the by-product species and stocks under assessment. The ‘% landings’ column can be left empty; all by-products are considered as Category C and D.
2. IF THERE ARE CATEGORY C BYPRODUCTS UNDER ASSESSMENT: Complete clause C1 for **each** Category C by-product.
3. IF THERE ARE CATEGORY D BYPRODUCTS UNDER ASSESSMENT: Complete Section D.
4. ALL OTHER SECTIONS CAN BE DELETED. Clauses M1 - M3, F1 - F3, and Sections A and B do not need to be completed for a by-product assessment.

By-product approval is awarded on a species-by-species basis. Each by-product species scoring a pass under the appropriate section may be approved against the IFFO RS Standard.

SPECIES CATEGORISATION

The following table should be completed as fully as the available information permits. Any species representing more than 0.1% of the annual catch should be listed, along with an estimate of the proportion of the catch each species represents. The species should then be divided into Type 1 and Type 2 as follows:

- **Type 1 Species** can be considered the ‘target’ or ‘main’ species in the fishery. They make up the bulk of annual landings and are subjected to a detailed assessment.
- **Type 2 Species** can be considered the ‘bycatch’ or ‘minor’ species in the fishery. They make up a small proportion of the annual landings and are subjected to relatively high-level assessment.

Type 1 Species must represent 95% of the total annual catch. Type 2 Species may represent a maximum of 5% of the annual catch (see Appendix B).

Species which make up less than 0.1% of landings do not need to be listed (NOTE: ETP species are considered separately). The table should be extended if more space is needed. Discarded species should be included when known.

The ‘stock’ column should be used to differentiate when there are multiple biological or management stocks of one species captured by the fishery. The ‘management’ column should be used to indicate whether there is an adequate management regime specifically aimed at the individual species/stock. In some cases, it will be immediately clear whether there is a species-specific management regime in place (for example, if there is an annual TAC). In less clear circumstances, the rule of thumb should be that if the species meets the minimum requirements of clauses A1-A4, an adequate species-specific management regime is in place.

NOTE: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it **cannot** be approved for use as an IFFO RS raw material. This applied to whole fish as well as by-products.

TYPE 1 SPECIES (Representing 95% of the catch or more)

Category A: Species-specific management regime in place.

Category B: No species-specific management regime in place.

TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS)

Category C: Species-specific management regime in place.

Category D: No species-specific management regime in place.

Common name	Latin name	Stock	% of landings	Management	Category
Whiting	<i>Merlangius merlangus</i>	Whiting (<i>Merlangius merlangus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)	N/A	EU/France	C
Whiting	<i>Merlangius merlangus</i>	Whiting (<i>Merlangius merlangus</i>) in Divisions 7.b–c and 7.e–k (southern Celtic Seas and western English Channel)	N/A	EU/France	C
Whiting	<i>Merlangius merlangus</i>	Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel)	N/A	EU/France	C

Whiting	<i>Merlangius merlangus</i>	Whiting (<i>Merlangius merlangus</i>) in Division 6.a (West of Scotland)	N/A	EU/France	C
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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. 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. A Category C species does not meet the minimum requirements of clause C1 should be re-assessed as a Category D species.

Species Name		Whiting	<i>Merlangius merlangus</i>	
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.	All stocks 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.	Whiting (<i>Merlangius merlangus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)	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.	Whiting (<i>Merlangius merlangus</i>) in Divisions 7.b–c and 7.e–k (southern Celtic Seas and western English Channel)	fail
	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.	Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel)	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.	Whiting (<i>Merlangius merlangus</i>) in Division 6.a (West of Scotland)	fail
Clause outcome:			See above	

Evidence

C1.1:

MAP:

This assessment covers French vessels landing whiting from selected areas:

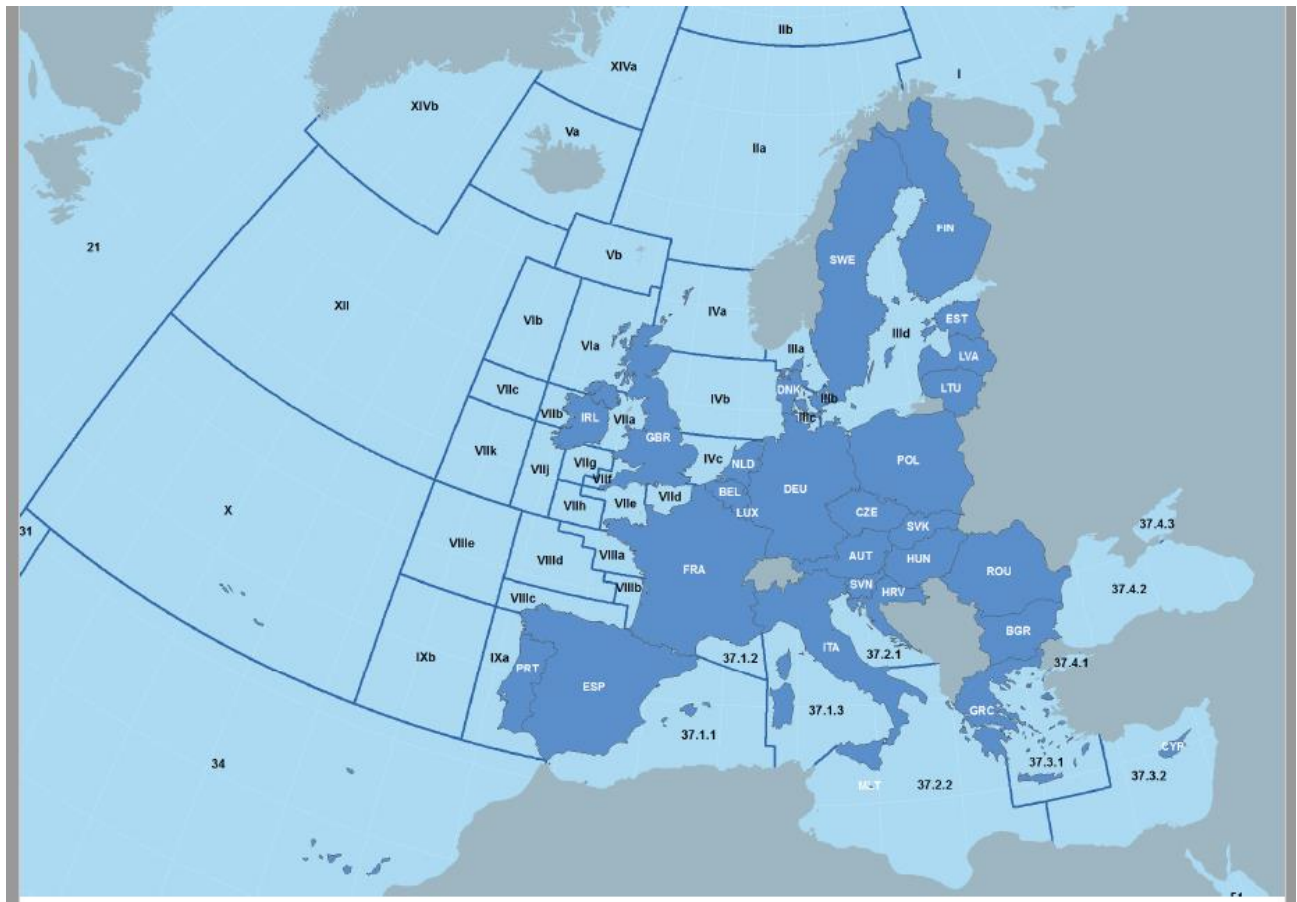


Figure 1 Names of Sub-areas and Divisions of FAO fishing areas 27 and 37 NORTH-EAST ATLANTIC R1

Whiting (*Merlangius merlangus*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters):

Input data includes landings and discards. Discards and bycatch are estimated at 30% (average of 2016-2018). Length-based indicators are used in the assessment. This stock is classified by ICES as Category 5 (Stocks for which only landings data are available).

Whiting (*Merlangius merlangus*) in Divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel):

Input data is derived from commercial landings, estimated discards, age composition of catches and one survey index (EVHOE-WIBTS-Q4 & IGFS-WIBTS-Q4 combined: IGFSEVHOE); maturity knife-edge at age 2; Lorenzen-based M (Lorenzen, 1996) derived from the mean weight-at-age.

Whiting (*Merlangius merlangus*) in Subarea 4 and Division 7.d (North Sea and eastern English Channel):

Input data is derived from commercial catches (international catches, ages from catch sampling by métier, since 1978), two survey indices (IBTS Q1 & Q3; ages 0 to 5; since 1983); time-varying maturity estimated from NS IBTS Q1 data; time-varying natural mortalities from the SMS multispecies model.

Whiting (*Merlangius merlangus*) in Division 6.a (West of Scotland):

Input data is derived from commercial landings, estimated discards, age composition of catches; five survey indices (ScoGFS-WIBTS-Q1, ScoGFS-WIBTS-Q4, IGFS-WIBTS-Q4, UK-SCOWCGFS-Q1 and UK-SCOWCGFS-Q4); fixed maturity data from surveys; natural mortalities estimated from mean weight-at-age (Lorenzen's model (Lorenzen, 1996), using mean weight data from market sampling and discard observations).

Fishery removals of the species in the fishery under assessment are included in the stock assessment process therefore all stocks **pass** Clause C1.1.

C1.2

Whiting (*Merlangius merlangus*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters):

ICES assess that fishing pressure on the stock is below FMSY proxy (Figure 2); no reference points for stock size have been defined. The stock **passes** Clause C1.2:

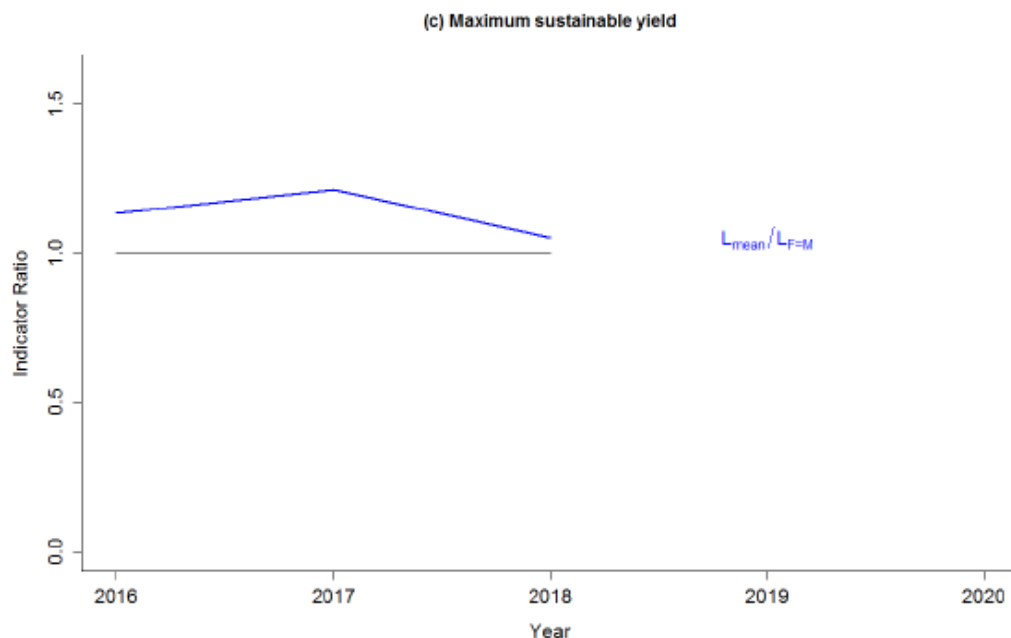


Figure 2: Whiting in Subarea 8 and Division 9.a. Index ratio $L_{mean}/L_{F=M}$ from the length-based indicator method (LBI; ICES, 2018a, 2019a) used for the evaluation of the exploitation status. The exploitation status is below the FMSY proxy when the index ratio value is higher than 1. R2

Whiting (*Merlangius merlangus*) in Divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel):

ICES assess that fishing pressure on the stock is above FMSY, but below F_{pa} and F_{lim} ; the spawning-stock size is below $MSY_{Btrigger}$, B_{pa} , and B_{lim} . The stock **fails** Clause C1.2 (Figure 3):

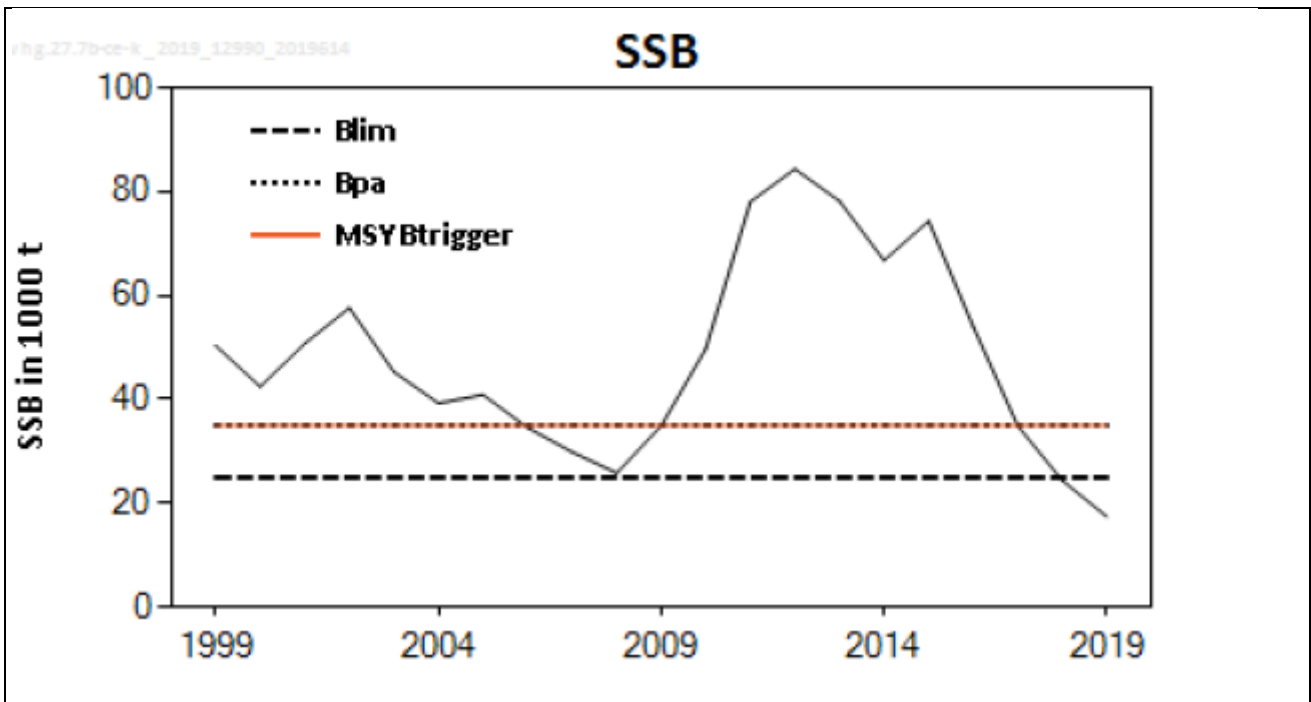


Figure 3: Whiting in divisions 7.b-c and 7.e-k. Summary of the stock assessment. R3

Whiting (*Merlangius merlangus*) in Subarea 4 and Division 7.d (North Sea and eastern English Channel):

Spawning-stock biomass (SSB) has fluctuated around MSY Btrigger since the mid-1980s and is just below it in 2019. The stock **passes** Clause C1.2 (Figure 4):

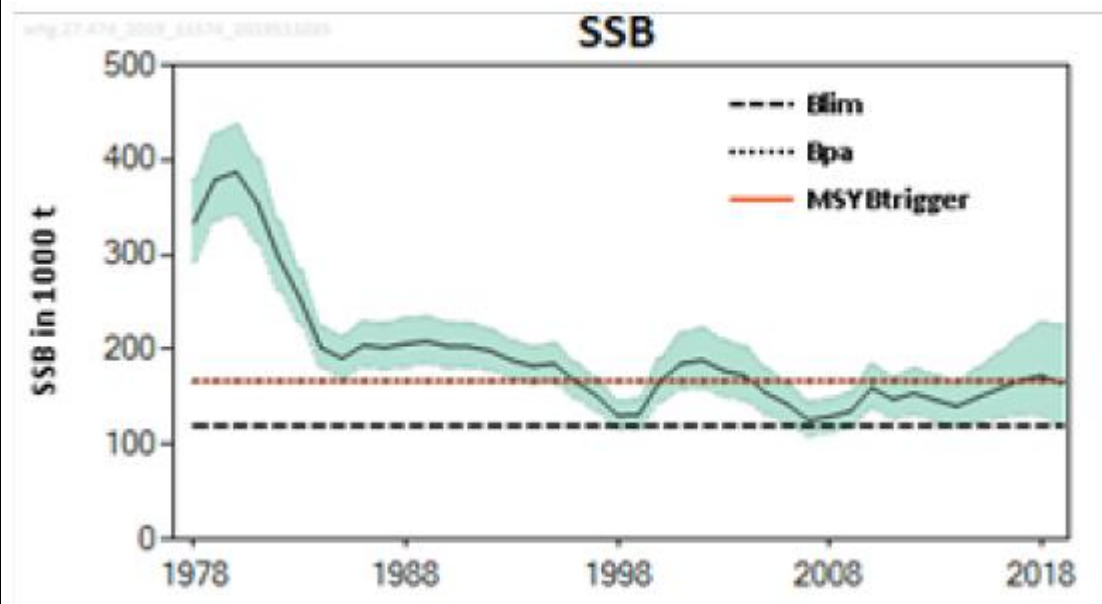


Figure 4: Whiting in Subarea 4 and Division 7.d. Summary of the stock assessment. Shaded areas (F, SSB) and error bars (R) indicate 95% confidence intervals. R4

Therefore, fishery removals are included in the stock assessment process and the stock does **PASS** C1.1.

Therefore, this stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point; the stock does **PASS** C1.2.

Whiting (*Merlangius merlangus*) in Division 6.a (West of Scotland):

The spawning-stock biomass (SSB) has been increasing since 2010 but remains very low compared to the historical estimates and is below Blim. The stock **fails** Clause C1.2 (Figure 5):

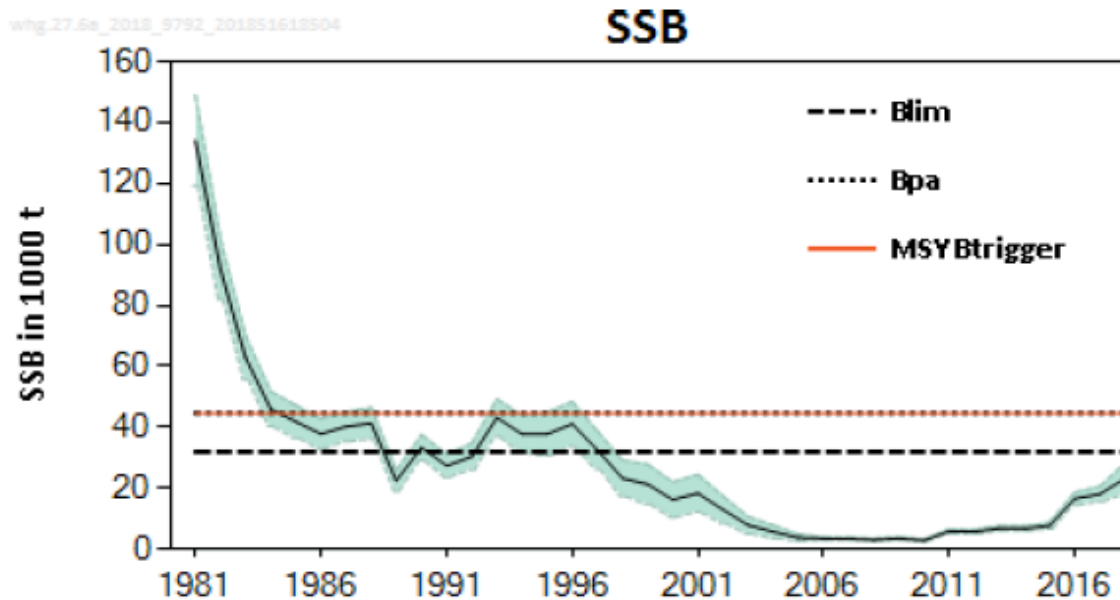


Figure 5: Whiting in Division 6.a. Summary of stock assessment (weights in thousand tonnes). Shaded areas correspond to two standard errors. R5

References:

R1 Map of the assessment area:

https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/fishing_areas_en.pdf

R2 ICES Advice Whiting (*Merlangius merlangus*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters) <http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/whg.27.89a.pdf>

R3 ICES Advice Whiting (*Merlangius merlangus*) in divisions 7.b-c and 7.e-k (southern Celtic Seas and western English Channel)

<http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/whg.27.7b-ce-k.pdf>

R4 ICES Advice Whiting (*Merlangius merlangus*) in Subarea 4 and Division 7.d (North Sea and eastern English Channel): <http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/whg.27.47d.pdf>

R5 ICES Advice Whiting (*Merlangius merlangus*) Division 6.a (West of Scotland):

<http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2018/2018/whg.27.6a.pdf>

Standard clauses 1.3.2.2