



# NORTH ATLANTIC ALBACORE ARTISANAL FISHERY

MSC Certificate code: MSC-F-31246 (F-BV-00483)



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## Public Comment Draft Report

Conformity Assessment Body (CAB)	Bureau Veritas Certification Holding SAS
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Fishery client	OPEGUI, OPESCAYA, OPACAN & Federación de Cofradías de Asturias.
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## 2 Glossary

<b>AZTI</b>	Basque Technological Centre in Marine and Food innovation
<b>Blim</b>	Limit reference point for stock biomass.
<b>BMSY</b>	Biomass that enables a fish stock to deliver the Maximum Sustainable Yield
<b>BV</b>	Bureau Veritas
<b>CSP</b>	Spanish Fishing Control Unit (Centro de Control de Pesca)
<b>CFP</b>	Common Fisheries Policy
<b>CPCs</b>	Contracting Parties, Cooperating non-Contracting Parties, Entities or Fishing Entities
<b>DEA</b>	Electronic Logbook (Diario Electrónico de a Bordo)
<b>ETP</b>	Endangered, threatened and protected species
<b>EC</b>	European Commission
<b>EU</b>	European Union
<b>FMSY</b>	Fishing Mortality at Maximum Sustainable Yield
<b>FCP</b>	Fisheries Certification Process
<b>HCR</b>	Harvest Control Rules
<b>ICCAT</b>	The International Commission for the Conservation of Atlantic Tuna
<b>IEO</b>	Spanish Institute of Oceanography (Instituto Español de Oceanografía)
<b>MAPA</b>	Spanish Ministry of Agriculture, Fishing and Food (Ministerio de Agricultura, Pesca y Alimentación)
<b>MCS</b>	Monitoring, Control and Surveillance (system)
<b>MSC</b>	Marine Stewardship Council
<b>MSY</b>	Maximum Sustainable Yield. The largest average catch or yield that can continuously be taken from a stock under existing environmental conditions
<b>OPACAN</b>	Producer's organization of coastal fisheries from Cantabria (Organización de productores artesanales de Cantabria)
<b>OPEGUI</b>	Producer's organization of coastal fisheries from Guipuzcoa (Organización de productores de pesca de bajura de Guipuzcoa)
<b>OPESCAYA</b>	Producer's organization of coastal fisheries from Bizkaia (Organización de Productores de pesca de bajura de Bizkaia)
<b>PCR</b>	(MSC) Public Certification Report
<b>SA</b>	(MSC) Surveillance Audit
<b>SCRS</b>	ICCAT Standing Committee on Research and Statistics
<b>SGAORP</b>	Spanish Sub-directorate for Fisheries Agreements and Regional Fisheries Management Organizations (Subdirección General de Acuerdos y Organizaciones Regionales de Pesca)

<b>SGCI</b>	Spanish Sub-directorate for Fisheries Control and Inspection (Subdirección General de Control e Inspección)
<b>SGP</b>	Spanish General Secretariat for Fisheries (Secretaría General de Pesca)
<b>UNCLOS</b>	United Nations Convention on the Law of the Sea
<b>UNFSA</b>	United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks

### 3 Executive summary

The fishery got the MSC certification on the 7<sup>th</sup> of June 2016. This fishery was assessed against version 1.3 of the MSC Fisheries Certification Requirements. However, following the MSC Notice, “Scoring of ‘available’ Harvest Control Rules (HCRs) in CRv1.3 fisheries” (issued on 24 November 2014), PI 1.2.2 SI (a) and (c) were scored using CR v2.0 provisions for SG60 scoring.

Initially, 3 conditions were raised to both UoCs on Performance Indicators (PI) 1.1.1 (Stock status), 1.2.2. (HCRs and tools), and 3.2.1 (Fishery specific objectives). While for the trolling (UoC1) another 2 conditions were raised on PI 2.3.1 (ETPs outcome) and 2.3.3 (ETPs information).

The two conditions on P1 (conditions 1 and 2) were closed during the first two surveillance audits, as a result of the latest stock assessment on the North Atlantic albacore (conducted in 2016) and the progress made by ICCAT on developing and adopting a Management Strategy Evaluation (MSE) and HCRs for this stock. As a result, PI 1.1.1 and PI 1.2.2 were re-scored. Also, based on more detailed information on species composition of the catches provided by the observer program on board the UoCs led the team to re-score tables on primary species (PI2.1.1, PI2.1.2 and PI2.1.3) for both UoCs during the first surveillance audit (Monteagudo and Rios, 2017). Besides, due to the harmonisation process with the US North Atlantic swordfish fishery, scores of PIs 1.1.1, 1.2.3 and 1.2.4 were modified during the 2 SA (Kirchner & Rios, 2018). As a result of the third surveillance audit, condition on PI 3.2.1 was closed and the PI re-scored to 80, but the other 2 conditions remained opened, being the PI2.3.1 on target and PI 2.3.3 behind target. No harmonisation activities were undertaken during the third surveillance audit.

In accordance with the MSC response to the variation request published on February 14, 2019 (click [here](#) to download the VR and the MSC response), Bureau Veritas undertook a Principle 1 v2.0 assessment upgrade (PCR published on February 2020 by Kirchner and Rios (2019)). The process for the P1 assessment upgrade followed requirements set out in Appendix B of the MSC VR response. In this P1 upgrade process, harmonization meetings were held with MRAG (see [section 9.8](#) for further details) that led to the re-scoring of PI 1.2.4.

During the 4<sup>th</sup> Surveillance audit, last one of the first certification cycle, the two remaining opened conditions on PI 2.3.1 and PI 2.3.3 were closed. Consequently, the PI 2.3.1 and PI 2.3.3 were re-scored.

The reassessment site visit took place in San Sebastián during 11<sup>th</sup>-12<sup>th</sup> of May 2021. The re-assessment of the fishery was announced at the MSC website on the 4<sup>th</sup> of March 2021.

The North Atlantic Albacore fishery certificate is valid until 6<sup>th</sup> of December 2021.

After the 4<sup>th</sup> Surveillance Audit (on 3<sup>rd</sup> of December 2020), the Fisheries Inspector from the SGP informed the assessment team that he was changing roles within the MAPA. It was not provided to the team the person who was meant to be his replacement in the department. After several emails to Juan Antonio Agüero Monedero (Deputy Director) asking for the information agreed upon during the site visit of that surveillance or to provide the team with the contact of the person in charge of it now, no reply was obtained. As a consequence, BV was not able to gather any of the information requested during the site visit. Therefore, a Recommendation was opened, mostly regarding lack of information about compliance (see [section 5.1.3](#) of Morant and Quílez, 2021). However, during the current recertification site visit, all the information needed by the assessment team was received from all the relevant entities

(via interviews or via email), including that from the SGCI (Spanish Sub-directorate for Fisheries Control and Inspection - Subdirección General de Control e Inspección), therefore, this Recommendation has now been closed.

#### Main strengths:

- A new stock assessment for the North Atlantic Albacore was carried out in 2020 (ICCAT, 2020a), which in summary indicates that the stock has continued to improve.
- The observer coverage has been increasing since 2017, either using observers or by means of EMS systems.
- With the latest data received, the team has confirmed the high selectivity of both UoCs (see **Section 7.2.2**).
- With the latest data received, the team has confirmed the low impact that the fishery has on ETPs (see **section 7.3.1.5**).
- The SGCI considers that the fleet is complying with the management system.

#### Main weaknesses:

- Even though the client demonstrated that it can implement monitoring programs (observers, self-sampling and/or the recent EMS) to collect information on the interactions with ETP species, the team considers that the observer coverage is highly uneven among the different fleets. A recommendation was opened regarding this issue during the 4<sup>th</sup> Surveillance audit (see **section 5.1.3** of Morant and Quílez, 2021). The assessment team leaves this recommendation opened after the recertification site visit, until it can be confirmed that the observer coverage among the different fleets is maintained and implemented in an even way.

Both the assessment team and Bureau Veritas agree that the North Atlantic Albacore artisanal fishery **COMPLIES** with MSC Principles and Criteria. Thus, **the draft determination of the team is that the fishery SHOULD be re-awarded an MSC Fishery certificate.**

## 4 Report details

### 4.1 Authorship and peer review details

Peer reviewer information to be completed at Public Comment Draft Report stage

**Gemma Quílez**, holds a Biology degree from Barcelona University (Spain), an MSc in Natural Resource Management from Leicester University (UK) and a PhD in Marine Biology from Newcastle upon Tyne University (UK).

She has around 20 years of experience working in Marine Biology, Marine Ecology, Marine Conservation Biology and Fisheries. In 1998, she did her MSc thesis on neritic and oceanic fish larvae from the Irish Sea. From 1999 to 2001 she worked at the ICM-CSIC (Marine Science Institute) of Barcelona (Spain) on trophic ecology of pelagic species larvae and participated in different oceanographic cruises on board the RV García del Cid. In 2004, while doing her PhD on Marine Invasive species, she was employed at the Fisheries Research Institute of Kavala, Greece, to conduct a study on trophic ecology of anchovy larvae. Also, during her PhD (2001-2006), she participated on several research cruises on board the RV Bernicia. Once she finished her PhD she went to work on marine invasive species for the Smithsonian Environmental Research Center (USA) until 2010.

From 2010 until 2016, she worked as fisheries policy officer for the Mediterranean Programme of WWF (World Wide Fund for Nature) in Barcelona, Spain. As such she worked on fisheries regional and international policy processes (e.g. GFCM, ICCAT, MedAC), mostly on Atlantic and Mediterranean bluefin tuna and at ICCAT, both at a scientific and policy level. She also participated in the creation and in the following functioning of the co-management committee of the Catalan sandeel fishery.

Since 2010 until present she has been working studying the biology, ecology and population dynamics of Atlantic and Mediterranean bluefin tuna and being deeply involved in the stock assessment of the species at ICCAT level.

In addition, from 2008 until 2018 she has been one of the two the Spanish representatives at two ICES working groups (WGBOSV - Working Group on Ballast and Other Ship Vectors, and WGITMO - Working Group on Introductions and Transfers of Marine Organisms).

Her experience (over 8 years) studying the biology, ecology and population dynamics of Atlantic bluefin tuna, deeply involved with ICCAT, as well as her previous work on trophic ecology of pelagic species larvae, proves her capacity to meet the qualification and competency criteria for PC3 (i) Fishing impacts on aquatic ecosystems. Her 6 years as WWF fisheries officer working on fisheries policy processes (mostly on Atlantic and Mediterranean bluefin tuna) and on the co-management of the Catalan sandeel, proves her capacity to meet the qualification and competency criteria for PC3 (ii) Fishery management and operations. She complies with the current Annex PC of the MSC Fisheries Certification Process v2.1. She does not have a conflict of interest with the fishery.

**Dr. Carola Kirchner.** Dr Kirchner has been working in the field of fisheries for the last 24 years. Her highest qualification is a PhD. Her PhD focussed on the population dynamics and stock assessment of a linefish species. She also completed her MBA part-time through the University of Cape Town. Her research thesis focused on the Namibian hake fishery, where she not only indicated areas of resource rent loss, but also presented a new method of providing bio-economic advice to the fishing industry and management. Included in the thesis was an evaluation of Namibia's post-independence fisheries policies. Dr Kirchner worked for the Ministry of Fisheries in Namibia for 18 years, where she was responsible for the stock assessment and management advice for most commercial species (eg. Hake, Horse mackerel and Sardine). These fisheries differ vastly, from long-lived species (Orange roughy) to the short-lived Sardine. Also, different gear types were used between these fisheries; bottom trawl, purse-seine and handline. Dr Kirchner has over the years built up international relationships, for example she was involved in the stock assessment and management of southern Atlantic Albacore tuna through ICCAT. Further, she worked for two years in the stock assessment and modelling section of the Secretariat of the Pacific Community (SPC). There, her main role was to support the Parties of the Nauru agreement (PNA) members to maintain the compliance to the MSC certification, by evaluating reference points and harvest control rules. In addition, she was working on a regional bio-economic model that aims to evaluate and optimize the various fishing activities and includes all four major tuna resources in the Pacific as in Skipjack, Yellowfin, Bigeye and Albacore tuna.

Her 18 years at the Ministry of Fisheries and Marine Resources of Namibia and her work at the Secretariat of the Pacific Community ensure that she meets the qualification and competency criteria established in PC3 on (i) fish stock assessment, (ii) fish stock biology and (iii) fishing impacts on aquatic ecosystem. Furthermore, her experience in Namibian fisheries administration supports the qualification and competency criteria established in PC3 for (iv) fishery management and operations.

**Carmen Morant** is a marine scientist who holds an MSc in Marine Science and an Msc in Environmental Science from the *University of Cadiz*, also a Postgraduate Degree in Environmental Management and Auditing in Marine Science and Technology from *Polytechnic University of Catalonia* (2008).

From 2011 to 2019 she worked as a freelance PAM and MMO on a wide range of projects from seismic and geographical surveys to off-shore wind farms, or oil and gas prospects.

She worked for over 6 years as a Fisheries Observer with the BFT implementing ICCAT (European) regulations, not just on board purse seiners but also in ports and BFT farms, analysis the bycatch of all different species. During these years, she collaborated during 2 years with TRAGSA for the Spanish General Marine Secretariat, carrying out regular surveys of fish stocks, monitoring number of individuals, size, weight, origin, tagging, and preparing reports and evidence for the European Fishing Commission.

Carmen worked for an NGO in California targeting fishing anglers in an awareness program. This experience was complemented with her work both in Mexico and Costa Rica, where she undertook some research for local NGOs in how the local fishing industry impacted the sea turtles or the impact of whale watchers on marine mammals. Carmen joined the team in 2020 as P2 expert. Her qualifications meet the competence criteria defined in Annex PC for the Team-member with expertise in the impact of fisheries on aquatic ecosystems. She has not a conflict of interest for this fishery.

## 4.2 Version details

**Table 4.2 – Fisheries program documents versions**

Document	Version number
MSC Fisheries Certification Process	Version 2.2, 25 September 2020 (25 March 2020)
MSC Fisheries Standard	Version 2.01, 31 August 2018
MSC General Certification Requirements	Version 2.4.1, 7 May 2019 (28 September 2019)
MSC Reporting Template	Version 1.2, 25 March 2020 (25 September 2020)

## 5 Unit(s) of Assessment and Unit(s) of Certification and results overview

### 5.1 Unit(s) of Assessment and Unit(s) of Certification

#### 5.1.1 Unit(s) of Assessment

##### 5.1.1.1 Fishery within the scope of the MSC fisheries certification

Bureau Veritas Certification confirms that this fishery is within the scope of the MSC fisheries certification sought as:

- It is a non-enhanced wild-capture fishery.
- The fishery is not based on any introduced species.
- It does not target species classified as 'out-of-scope' (amphibians, reptiles, birds, mammals).
- The fishery does not make use of any kind of destructive practices.
- The fishery is not conducted under any controversial unilateral exemption to an international agreement and its management regime includes mechanisms for resolving disputes.
- Spain has been a member of the International Labour Organization (ILO) from 1919 to 1941 and since 1956. The country has ratified 133 Conventions, of which 87 are in force, including the 8 fundamental Conventions and the 4 governance Conventions.
- The CAB is not aware of any of the fishing operators included in the UoA having been prosecuted for forced labour in the last 2 years.
- The CAB has requested to the client to complete the "Certificate Holder Forced and Child Labour Policies, Practices and Measures Template" for publication on the MSC website.



Besides, Bureau Veritas has checked that:

- Although there are no MSC-certified fisheries targeting the same stock, the assessed fishery is managed by the EU, and therefore the P3 assessment will take into account other EU-Spanish fisheries, in application of FCP 7.7.2.
- There are no catches of non-target species that are inseparable or practically inseparable (IPI) from target stock.
- The fishery has not previously failed an assessment and has no certificate withdrawn.

#### 5.1.1.2 Units of Assessment (UoA)

The UoA defines the full scope of what is being assessed and is therefore equal to or larger than the UoC. If it is larger this means it will include “other eligible fishers”. According to the UoA definition given by MSC in its MSC-MSCI Vocabulary, BV confirms that the UoAs shown in **Table 5.1.1.1** meet the MSC fisheries requirements while also suit the client’s needs.

**Table 5.1.1.1** shows the Units of Assessment defined for the North Atlantic Albacore artisanal fishery. In the case of this fishery the UoAs match the Unit of Certification (UoCs) as explained in **Section 5.1.2**.

**Table 5.1.1.1 – Unit(s) of Assessment (UoA)**

UoA 1.- Trolling	Description
Species	Albacore ( <i>Thunnus alalunga</i> )
Stock	North Atlantic albacore ( <i>Thunnus alalunga</i> ) stock
Fishing gear type(s) and, if relevant, vessel type(s)	Trolling
Client group	OPEGUI, OPESCAJA, OPACAN & Federación de Cofradías de Asturias
Other eligible fishers	No other eligible vessels
Geographical area	Bay of Biscay and adjacent North Atlantic waters (approximately up to 52° N and 30°W) within FAO area 27, subareas 7k, 7h, 8, 9b, 10a, 10b and 12c.
UoA 2.- Pole and line	Description
Species	Albacore ( <i>Thunnus alalunga</i> )
Stock	North Atlantic albacore ( <i>Thunnus alalunga</i> ) stock
Fishing gear type(s) and, if relevant, vessel type(s)	Pole and line

Client group	OPEGUI, OPESCAYA, OPACAN & Federación de Cofradías de Asturias
Other eligible fishers	No other eligible vessels
Geographical area	Bay of Biscay and adjacent North Atlantic waters (approximately up to 48° N and 15°W) within FAO area 27, subareas 8a, 8b, 8c and 8 d.2.

### *Client group*

The client for this certification are three Spanish organizations of producers called: Organización de productores de pesca de bajura de Guipuzcoa (OPEGUI), Organización de Productores de pesca de bajura de Bizkaia (OPESCAYA), and Organización de Productores Artesanales de Cantabria (included in the certificate in 2017); as well as the Federación de Cofradías de Asturias (included in the certificate in 2019).

Originally 87 troll vessels and 42 live bait / pole and line vessels were assessed and included in the initial certificate. These vessels were integrated in the Basque producer's organizations (OPEGUI and OPESCAYA) which are at the same time members of the Basque Federations "Federación de Cofradías de Guipuzcoa" (Federation of Guilds of Guipuzcoa) and "Federación de Cofradías de Vizcaya" (Federation of Guilds of Vizcaya).

Afterwards, in 2017, a scope extension of the certificate to include other Spanish vessels targeting albacore was performed. As a result, 9 trollers and 13 live bait vessels based in Cantabrian ports and members of the Cantabrian producer's organization (OPACAN) joined the certificate.

In 2019, BV performed a gap analysis for the Asturian trolling fleet, which comprised a total of 17 trolling vessels (there is no pole & line fleet in Asturias). The results of this gap analysis were included in a scope extension report handed to the Asturian fleet and the client group owning the MSC-fishery certificate in July 2019. The conclusion of this report was that the Asturian trolling fleet was able to be considered as 'other eligible fishers', so they could be included in the MSC-fishery certificate. Unlike the Basque and Cantabrian fleets, there is no Producer Organization representing the Asturian trolling fleet. The client in this case is the "Federación de Cofradías de Asturias" (Federation of Guilds of Asturias).

For the current re-assessment, some vessels have been excluded and some others have been included. The latest updated list is composed of a total of 176 vessels, from which 125 are trolling (i.e., 53 from OPESCAYA, 39 from OPEGUI, 15 from OPACAN and 18 from Asturias) and 51 are pole and line (i.e., 35 from OPEGUI, 14 from OPACAN and 2 from OPESCAYA) vessels. The vessels with their name, registration identification number, gear, port and region are listed in **Table 5.1.1.2**. The updated vessel list can be found at the MSC website in the following link <https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments>.

**Table 5.1.1.2** latest updated Client vessels' list as of July 2021.

1	BENYJOR	24492	Trolling	AVILES	ASTURIAS
2	BERRIZ AMATXO	24948	Trolling	LASTRES	ASTURIAS
3	CRUZ DEL SUR	13774	Trolling	CUDILLERO	ASTURIAS
4	ESMERALDA TERCEDO	25946	Trolling	LASTRES	ASTURIAS
5	FARO TAPIA	27672	Trolling	TAPIA CASARIEGO	DE ASTURIAS
6	JOSE EDUARDO	26487	Trolling	AVILES	ASTURIAS

7	MUNDAKA	22047	Trolling	LUARCA	ASTURIAS
8	NAGORE SEGUNDO	24807	Trolling	LUARCA	ASTURIAS
9	NUBERU	25055	Trolling	CUDILLERO	ASTURIAS
10	NUEVO HERMANOS SUAREZ	24496	Trolling	CUDILLERO	ASTURIAS
11	NUEVO MAPEI	27457	Trolling	GIJON	ASTURIAS
12	NUEVO PADRE	23376	Trolling	CUDILLERO	ASTURIAS
13	PLAYA DE LUARCA	23025	Trolling	LUARCA	ASTURIAS
14	ROSA LOS VIENTOS	27138	Trolling	CUDILLERO	ASTURIAS
15	SIEMPRE MARIA	27291	Trolling	CUDILLERO	ASTURIAS
16	SIEMPRE SAN PABLO	27730	Trolling	PUERTO DE VEGA	ASTURIAS
17	SUAREZ VALLE	21777	Trolling	CUDILLERO	ASTURIAS
18	MAR DE PEDRO	26985	Trolling	CUDILLERO	ASTURIAS
19	AITANA DEL MAR	25325	Pole & line	LAREDO	CANTABRIA
20	ALBO PUERTAS	23804	Trolling	CASTRO	CANTABRIA
21	ALEXANDRE	52311	Trolling	LAREDO	CANTABRIA
22	AMARES	26151	Trolling	COLINDRES	CANTABRIA
23	BRAULIN	23296	Trolling	LAREDO	CANTABRIA
24	BUSTILLO DONOSTI	23948	Pole & line	COLINDRES	CANTABRIA
25	COMILLAS TERCERO	23789	Trolling	LAREDO	CANTABRIA
26	ERMITA PILAR	23876	Pole & line	SANTOÑA	CANTABRIA
27	ESTRELLA POLAR PRIMERO	25177	Trolling	COLINDRES	CANTABRIA
28	MADRE LITA	23255	Pole & line	SANTOÑA	CANTABRIA
29	MADRE LUCIA	26240	Trolling	LAREDO	CANTABRIA
30	MANUEL PADRE SEGUNDO	23947	Pole & line	COLINDRES	CANTABRIA
31	MARCELINA LECUE	23798	Pole & line	SAN VICENTE	CANTABRIA
32	MARIA ESTEFANIA	12838	Trolling	LAREDO	CANTABRIA
33	MARIÑANA	24586	Trolling	LAREDO	CANTABRIA
34	NOCHE DE PAZ	24302	Pole & line	SANTOÑA	CANTABRIA
35	NUESTRO PADRE TONINO	25869	Pole & line	LAREDO	CANTABRIA
36	NUEVO AIRES ASON	24986	Pole & line	COLINDRES	CANTABRIA
37	NUEVO CHISU	23189	Trolling	LAREDO	CANTABRIA
38	NUEVO COLLADO LINDO	24410	Pole & line	COLINDRES	CANTABRIA
39	NUEVO LIBE	23484	Pole & line	SANTOÑA	CANTABRIA
40	NUEVO PANELO VILLA	23803	Pole & line	LAREDO	CANTABRIA
41	NUEVO SALVADOR PADRE	27006	Trolling	SANTOÑA	CANTABRIA
42	NUEVO TERREÑO	24141	Trolling	COLINDRES	CANTABRIA
43	NUEVO TORRE QUITINA	23225	Pole & line	COLINDRES	CANTABRIA
44	NUEVO VIRGEN PODEROSA	24266	Trolling	LAREDO	CANTABRIA
45	PEDRO FLECHERO	24239	Trolling	LAREDO	CANTABRIA
46	RIOMASMA	3896	Trolling	COLINDRES	CANTABRIA

47	SAN ROQUE DIVINO	23834	Pole & line	COLINDRES	CANTABRIA
48	ISTURIZ I	100041	Trolling	DONOSTIA	GUIPUZCOA
49	ANTIGUOTARRAK	23970	Trolling	DONOSTIA	GUIPUZCOA
50	SATANAS BI	25721	Trolling	DONOSTIA	GUIPUZCOA
51	AGUSTIN DEUNA	25315	Pole & line	GETARIA	GUIPUZCOA
52	AZKOITIA	25608	Pole & line	GETARIA	GUIPUZCOA
53	BERRIZ IRIGOIEN	23227	Pole & line	GETARIA	GUIPUZCOA
54	GURE GOGOA	26064	Pole & line	GETARIA	GUIPUZCOA
55	BETI PIEDAD	25229	Pole & line	GETARIA	GUIPUZCOA
56	IRIGOIEN BERRIA	22332	Pole & line	GETARIA	GUIPUZCOA
57	IZASKUN BERRIA	25604	Pole & line	GETARIA	GUIPUZCOA
58	KANTAURI	27743	Pole & line	GETARIA	GUIPUZCOA
59	KAXIMIRONA	25233	Pole & line	GETARIA	GUIPUZCOA
60	MATER BI	25616	Pole & line	GETARIA	GUIPUZCOA
61	PEDRO JOSE BERRIA	15219	Pole & line	GETARIA	GUIPUZCOA
62	SAN PRUDENTZIO BERRIA	24179	Pole & line	GETARIA	GUIPUZCOA
63	SANTA LUZIA HIRU	24178	Pole & line	GETARIA	GUIPUZCOA
64	SANTANA BERRIA	24170	Pole & line	GETARIA	GUIPUZCOA
65	ALAIN BI	21920	Trolling	GETARIA	GUIPUZCOA
66	AMETS	22800	Trolling	GETARIA	GUIPUZCOA
67	CASTILLO ANAYAK	21828	Trolling	GETARIA	GUIPUZCOA
68	KOASTA	9084	Trolling	GETARIA	GUIPUZCOA
69	MANUELAK	1655	Trolling	GETARIA	GUIPUZCOA
70	MANUELAK BI	26369	Trolling	GETARIA	GUIPUZCOA
71	O CROITO	26891	Trolling	GETARIA	GUIPUZCOA
72	POZIK BIZI	27711	Trolling	GETARIA	GUIPUZCOA
73	PYSBE BAT	27037	Trolling	GETARIA	GUIPUZCOA
74	ARRANTZALE	25232	Pole & line	HONDARRIBIA	GUIPUZCOA
75	ATTONA DOMINGO	25606	Pole & line	HONDARRIBIA	GUIPUZCOA
76	BERRIZ KUKUARRI	25568	Pole & line	HONDARRIBIA	GUIPUZCOA
77	BERRIZ MATUTINA	23394	Pole & line	HONDARRIBIA	GUIPUZCOA
78	GURE AMUITZ	24653	Pole & line	HONDARRIBIA	GUIPUZCOA
79	ITSAS EDER	24518	Pole & line	HONDARRIBIA	GUIPUZCOA
80	ITSAS LAGUNAK	26370	Pole & line	HONDARRIBIA	GUIPUZCOA
81	ITSASOAN	23529	Pole & line	HONDARRIBIA	GUIPUZCOA
82	LUIS BARRANKO	23467	Pole & line	HONDARRIBIA	GUIPUZCOA
83	NUEVO HORIZONTE ABIERTO	23830	Pole & line	HONDARRIBIA	GUIPUZCOA
84	PITTAR	24561	Pole & line	HONDARRIBIA	GUIPUZCOA
85	SAN ANTONIO BERRIA	25320	Pole & line	HONDARRIBIA	GUIPUZCOA

86	SAN FERMIN BERRIA	25996	Pole & line	PASAIA	GUIPUZCOA
87	TUKU TUKU	25231	Pole & line	HONDARRIBIA	GUIPUZCOA
88	TXINGUDI	25540	Pole & line	HONDARRIBIA	GUIPUZCOA
89	ALMIRANTE BERRIA	24515	Trolling	HONDARRIBIA	GUIPUZCOA
90	BETI ITXAS ARGÍ	23206	Trolling	HONDARRIBIA	GUIPUZCOA
91	NUEVO ROBER	22639	Trolling	HONDARRIBIA	GUIPUZCOA
92	ARANTZAZUKO IZARRA	25650	Trolling	HONDARRIBIA	GUIPUZCOA
93	ESTELA DEL CARMEN	24988	Trolling	HONDARRIBIA	GUIPUZCOA
94	GURE AMA MARTINA	24104	Trolling	HONDARRIBIA	GUIPUZCOA
95	GURE ITXAROPENA	25501	Trolling	HONDARRIBIA	GUIPUZCOA
96	PADILLA ANAIK	24222	Trolling	HONDARRIBIA	GUIPUZCOA
97	OSTARTE	26620	Trolling	HONDARRIBIA	GUIPUZCOA
98	GUK	26298	Trolling	HONDARRIBIA	GUIPUZCOA
99	MARIÑEL	27028	Trolling	HONDARRIBIA	GUIPUZCOA
100	AITA FRAXKU	24078	Pole & line	HONDARRIBIA	GUIPUZCOA
101	KERMANTXO	24677	Pole & line	HONDARRIBIA	GUIPUZCOA
102	AITA ROMAN	25230	<del>Pole &amp; line</del> Trolling	HONDARRIBIA	GUIPUZCOA
103	ELENITA BERRIA	25893	Trolling	MUTR KU	GUIPUZCOA
104	BERRIZ AVE MARIA	25310	Pole & line	ORIO	GUIPUZCOA
105	BETI AINGERU	25321	Pole & line	ORIO	GUIPUZCOA
106	BETI SAN LUIS	10863	Pole & line	ORIO	GUIPUZCOA
107	MONTSERRAT BERRIA	24630	Pole & line	ORIO	GUIPUZCOA
108	AZKENA	24623	Trolling	PASAIA	GUIPUZCOA
109	BETI SALADA SEGUNDO	24915	Trolling	PASAIA	GUIPUZCOA
110	CLEMENTINA	22247	Trolling	PASAIA	GUIPUZCOA
111	GAZTELUGATXEKO DONIENE	24627	Trolling	PASAIA	GUIPUZCOA
112	GOIZ ARGÍ BERRIA	26380	Trolling	PASAIA	GUIPUZCOA
113	HANDIK	24416	Trolling	PASAIA	GUIPUZCOA
114	KALABERRI	26233	Trolling	PASAIA	GUIPUZCOA
115	MAR DE LLANES	24300	Trolling	PASAIA	GUIPUZCOA
116	MIREN ARGIA	26091	Trolling	PASAIA	GUIPUZCOA
117	NUEVO CHUCHI	22816	Trolling	PASAIA	GUIPUZCOA
118	NUEVO HORIZONTE TXIKI	26232	Trolling	PASAIA	GUIPUZCOA
119	GARRINTXO ETA ZOMORRO	24501	Trolling	PASAIA	GUIPUZCOA
120	OTERO	27719	Trolling	PASAIA	GUIPUZCOA
121	AITA JOXE	23420	Trolling	PASAIA	GUIPUZCOA
122	ALMIKEKO AMA	23019	Trolling	BERMEO	VIZCAYA
123	AMATXO	23244	Trolling	BERMEO	VIZCAYA
124	ANDUIZA ANAIK	24717	Trolling	BERMEO	VIZCAYA

125	ANTXETA PRIMERO	26035	Trolling	BERMEO	VIZCAYA
126	ARLANPI	24514	Trolling	ONDARROA	VIZCAYA
127	BERRIZ ALBONIGA MAYOR	24172	Trolling	BERMEO	VIZCAYA
128	BETI BEGOÑAKO AMA	22981	Trolling	BERMEO	VIZCAYA
129	BETI EUSKAL HERRIA	21353	Trolling	BERMEO	VIZCAYA
130	BETI GURE ISKANDER	27112	Trolling	SANTURTZI	VIZCAYA
131	BETI ISKANDER	23352	Trolling	BERMEO	VIZCAYA
132	BETI LAGUN BI	26670	Trolling	BERMEO	VIZCAYA
133	BETI OITZ	25804	Trolling	ONDARROA	VIZCAYA
134	BETI ZERUKO IZARRA	24946	Trolling	BERMEO	VIZCAYA
135	BIHOTZ ALAI	24654	Trolling	ARMINTZA	VIZCAYA
136	CANALECHEVARRIA	23204	Trolling	BERMEO	VIZCAYA
137	CARABA	23015	Trolling	BERMEO	VIZCAYA
138	DEMAR	25115	Trolling	SANTURTZI	VIZCAYA
139	EL MARINERO	24140	Trolling	BERMEO	VIZCAYA
140	FAROLIN	24150	Trolling	ZIERBENA	VIZCAYA
141	GOIENKALE	26239	Trolling	BERMEO	VIZCAYA
142	GURE FATIMA	24356	Trolling	BERMEO	VIZCAYA
143	GURE IMANOL	26157	Trolling	SANTURTZI	VIZCAYA
144	GURE ITXAS BEGI	26311	Trolling	BERMEO	VIZCAYA
145	GURE NAIARA	25521	Trolling	BERMEO	VIZCAYA
146	HIRU ANAIK	25496	Trolling	SANTURTZI	VIZCAYA
147	ILUNBER ETA ISKANDER	23573	Trolling	SANTURTZI	VIZCAYA
148	ITOITZ	25490	Trolling	ONDARROA	VIZCAYA
149	ITXASOKO LOREAK II	24150	Trolling	ARMINTZA	VIZCAYA
150	IZURDIA MAITEA	23882	Trolling	BERMEO	VIZCAYA
151	JON KURTZIO	25649	Trolling	BERMEO	VIZCAYA
152	KALAMUA BI	25287	Pole & Line	LEKEITIO	VIZCAYA
153	KOROKO	25292	Trolling	BERMEO	VIZCAYA
154	LEKANDA	25901	Trolling	ZIERBENA	VIZCAYA
155	LEPORRE ANAIK	24328	Trolling	BERMEO	VIZCAYA
156	MADARI	26574	Trolling	ARMINTZA	VIZCAYA
157	MARIA DIGNA DOS	22992	Trolling	BERMEO	VIZCAYA
158	MARIEN	27545	Trolling	ARMINTZA	VIZCAYA
159	MATXAKU	26384	Trolling	BERMEO	VIZCAYA
160	NUEVO MONI	25480	Trolling	BERMEO	VIZCAYA
161	ONGI ETORI	26211	Pole & Line	ONDARROA	VIZCAYA
162	OSKARBI	23089	Trolling	LEKEITIO	VIZCAYA
163	OTZARRI BERRIA	24947	Trolling	BERMEO	VIZCAYA
164	PLAYA DEL ASTILLERU	27558	Trolling	SANTURTZI	VIZCAYA

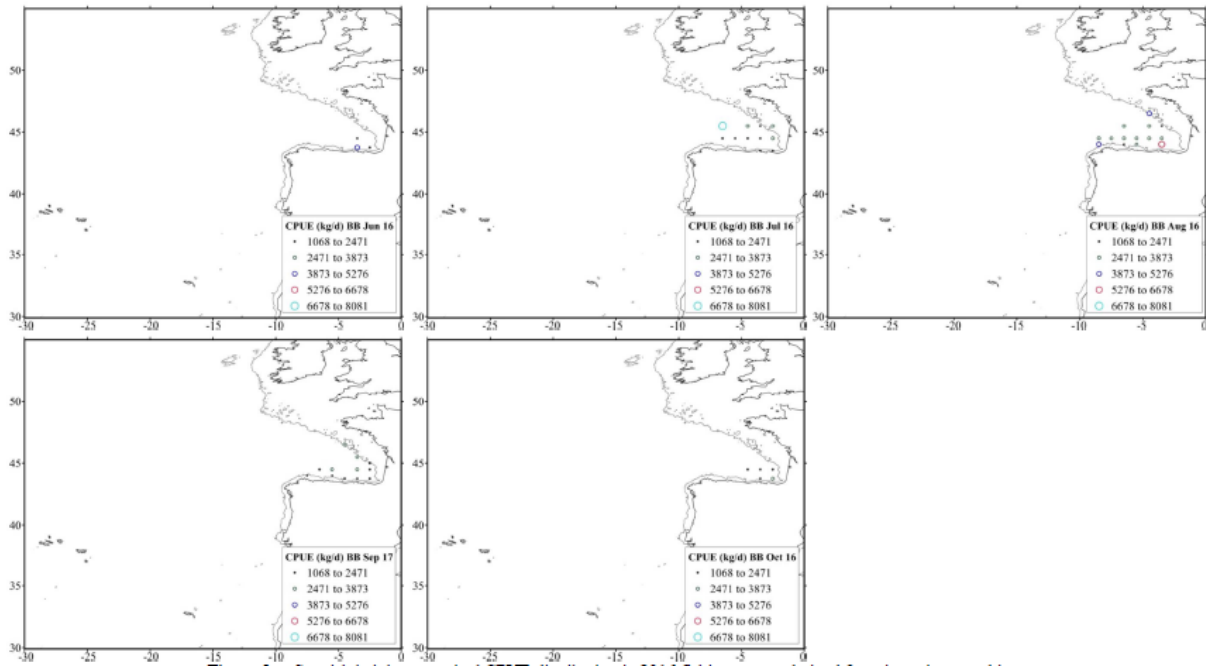
165	ROKILLO	25104	Trolling	SANTURTZI	VIZCAYA
166	SIEMPRE CALAFATE	24291	Trolling	BERMEO	VIZCAYA
167	TOTAITO	100026	Trolling	LEKEITIO	VIZCAYA
168	TRONADA	27687	Trolling	ONDARROA	VIZCAYA
169	UNTXI	25308	Trolling	BERMEO	VIZCAYA
170	URDAIBAI BAT	25805	Trolling	BERMEO	VIZCAYA
171	ZERUKO LAINOA SEGUNDO	15985	Trolling	BERMEO	VIZCAYA
172	IXURDE	24877	Trolling	ARMINTZA	VIZCAYA
173	NUEVO ABELAN	23965	Trolling	ARMINTZA	VIZCAYA
174	ATXURRA ANAIK	25539	Trolling	LEKEITIO	VIZCAYA
175	GURE AMETXA	25945	Trolling	LEKEITIO	VIZCAYA
176	JESUS NAZARET BERRIA	25997	Trolling	LEKEITIO	VIZCAYA

### *Geographical area*

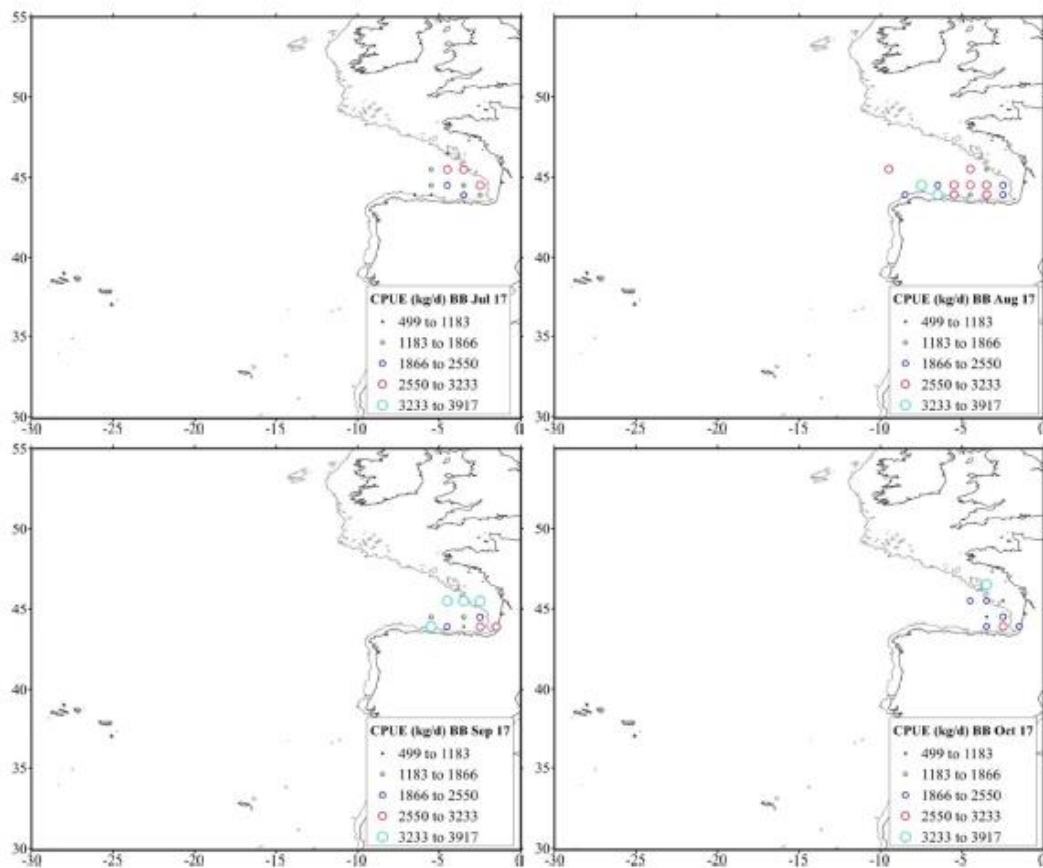
The North Atlantic albacore stock is widely distributed around the North Atlantic. As reported by the FAO<sup>1</sup> in the Atlantic Ocean there are at least three fisheries for albacore:

- The troll fishery that dates back to the nineteenth century that has evolved over time through mechanization and the on-board processing of fish (although, just for clarification, the client group does not process on board as explained in **Section 6.2** - Traceability). It is operated mainly by Spanish and French vessels in the Bay of Biscay and the western European basin.
- A pole-and-line (live bait) fishery was established by the Spanish and French after World War II in the Bay of Biscay and off northern Portugal. The fishery takes place in the summer months. From 1970, autumn activity has developed off Morocco by Spanish and Portuguese vessels based in the Azores and Madeira.
- There are seasonal longline fisheries, originally operated by the Japanese distant water fleet, but later vessels from other countries, mainly Chinese Taipei, joined the fishery.

The assessed fishery takes place through the Bay of Biscay and adjacent North Atlantic waters (approximately up to 52° N and 20° W) within FAO area 27. The bait boat fleet operates with pole and line during July-September, using live bait (mainly sardine). The troll fleet operates with artificial lures during June-October. While baitboats generally operate in the Bay of Biscay (south of 48° N and east of 15° W) trollers work in a wider area reaching high see waters (**Figures 5.1.1.1a, b, c, d**).

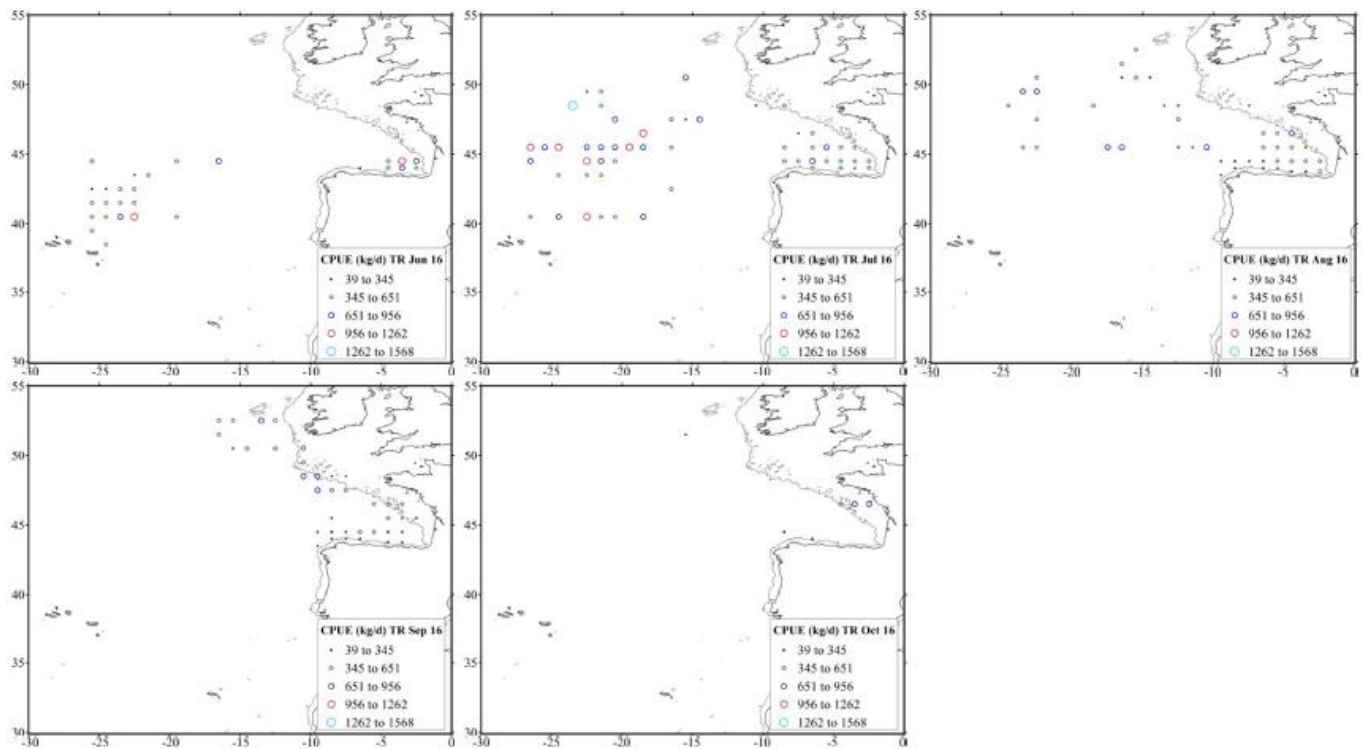


**Figure 5.1.1.1a** Spanish bait boat nominal CPUE distribution in 2016 fishing season derived from interviews to skippers. Source: Ortiz de Zárate et al. (2018).

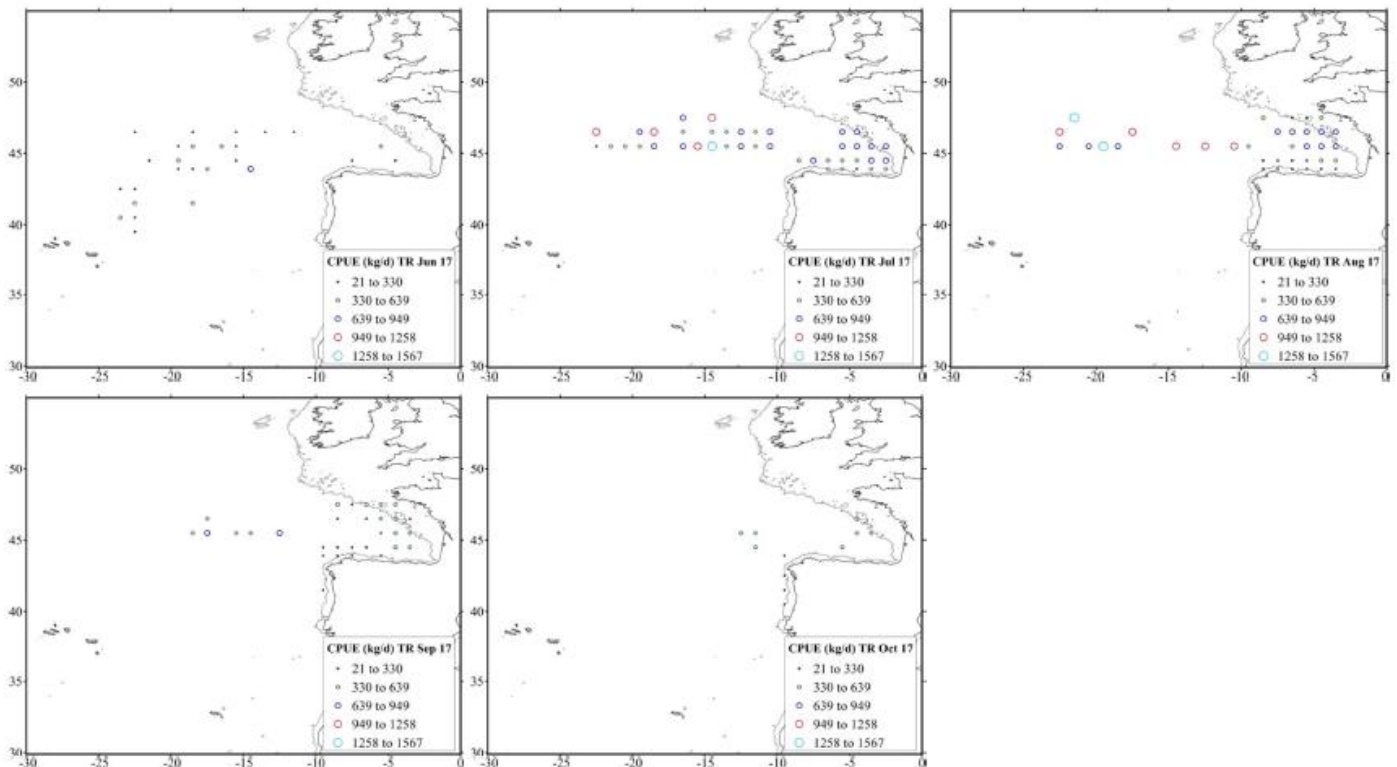




**Figure 5.1.1.1b** Spanish bait boat nominal CPUE distribution in 2017 fishing season derived from interviews to skippers. Source: Ortiz de Zárate et al. (2018).



**Figure 5.1.1.1c** Spanish troll nominal CPUE distribution in 2016 fishing season derived from interviews to skippers. Source: Ortiz de Zárate et al. (2018).



**Figure 5.1.1.1d** Spanish troll nominal CPUE distribution in 2017 fishing season derived from interviews to skippers. Source: Ortiz de Zárate et al. (2018).

### *Other eligible fishers*

Other eligible fishers exist in cases where a client enters into assessment with the aim of initially certifying only part of a fishery, but also wishes to have the possibility of expanding the UoC at a later date by the mechanism of certificate sharing (see FCP G7.5). According to FCP 7.5.7 the CAB shall identify if there are other eligible fishers or other entities that may share the certificate as new client group members. However, the client's intention to share the certificate with other companies outside the client group is a pre-requisite for the existence of 'other eligible fishers' according to the MSC FCP. In this case, the Client group expressed that they are not interested in that possibility, therefore there are no other eligible fishers.

## **5.1.2 Unit(s) of Certification**

The unit of assessment (UoA) defines the full scope of what is being assessed and is therefore equal to or larger than the UoC. If it is larger this means it will include "other eligible fishers". As in this case there are no other eligible fishers (see above), the UoCs (**Table 5.1.2**) are equal to the UoAs defined in **Table 5.1.1.1**.

**Table 5.1.2 – Unit(s) of Certification (UoC)**

UoC 1.- Trolling	Description
Species	Albacore ( <i>Thunnus alalunga</i> )
Stock	North Atlantic albacore ( <i>Thunnus alalunga</i> ) stock
Fishing gear type(s) and, if relevant, vessel type(s)	Trolling
Client group	OPEGUI, OPESCAYA, OPACAN & Federación de Cofradías de Asturias
Geographical area	Bay of Biscay and adjacent North Atlantic waters (approximately up to 52° N and 30°W) within FAO area 27, subareas 7k, 7h, 8, 9b, 10a, 10b and 12c.
UoC 2.- Pole and line	Description
Species	Albacore ( <i>Thunnus alalunga</i> )
Stock	North Atlantic albacore ( <i>Thunnus alalunga</i> ) stock
Fishing gear type(s) and, if relevant, vessel type(s)	Pole and line
Client group	OPEGUI, OPESCAYA, OPACAN & Federación de Cofradías de Asturias
Geographical area	Bay of Biscay and adjacent North Atlantic waters (approximately up to 48° N and 15°W) within FAO area 27, subareas 8a, 8b, 8c and 8 d.2.

## 5.2 Assessment results overview

### 5.2.1 Determination, formal conclusion and agreement

To be drafted at Public Comment Draft Report stage

### 5.2.2 Principle level scores

**Table 5.2.2 - Principle level scores**

Principle	UoA 1	UoA 2
Principle 1 – Target species	90	90
Principle 2 – Ecosystem impacts	90.3	90
Principle 3 – Management system	85.8	85.8

### 5.2.3 Summary of conditions

No conditions have been opened for this re-assessment.

### 5.2.4 Recommendations

These 2 recommendations were opened during the 4<sup>th</sup> surveillance (report available at: <https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments>) and were assessed during the re-assessment site visit.

#### **Recommendation 1 vs PI 3.2.3 - CLOSED**

After the 4<sup>th</sup> Surveillance Audit site visit (on 3<sup>rd</sup> of December, 2020), the Fisheries Inspector from the SGP (from the Risk Analysis Unit. General Secretariat of Fisheries Surveillance and Fight against Illegal Fishing. General Directorate of Fisheries Management and Aquaculture. General Secretariat of Fisheries - SGP) informed the assessment team that he was changing roles within the MAPA. It was not provided to the team the person who was meant to be his replacement in the department. After several emails to Juan Antonio Agüero Monedero (Deputy Director) asking for the information agreed upon during the site visit of this surveillance or to provide the team with the contact of the person in charge of it now, no reply was obtained. As a consequence, BV was not able to gather any of the information requested during the site visit. Therefore, a Recommendation was opened, mostly regarding lack of information about compliance (**section 4.2.1** from Morant and Quílez, 2021).

This lack of information, leading to a lack of transparency from a stakeholder, is not desirable and the CAB recommended that it should not happen in the future. It was agreed that this subject was going to be closely monitored in the next recertification process (to prevent any possible problems due to the lack of this information) and the team insisted on having an interview with all the relevant entities and personnel involved with the fishery as well as receiving all the necessary information/documents. In addition, the Client was informed of this possible risk for the certification of the fishery.

During the current recertification site visit, all the information needed by the assessment team was received from all the relevant entities (via interviews or via email), including that from the SGCI (Spanish Sub-directorate for Fisheries

Control and Inspection - Subdirección General de Control e Inspección), therefore, this Recommendation has now been closed.

### **Recommendation 2 vs. PI 2.3.1 and PI 2.3.3**

Despite the impediments encountered, as explained in detail in **Section 5.3.1** of Morant and Quílez (2021), the trolling fishery observer coverage in fishing days has increased since 2017:

	2017	2018	2019	2020
Asturias	-	1 observer for 1 fishing trip	1%	-
Cantabria	-	1 observer for 1 fishing trip		-
Basque Country	0.5%	>2%	2.8%	3% (EMS)

Even though the client has demonstrated that it can implement monitoring programs (observers, self-sampling and/or the recent EMS) to collect information on the interactions with ETP species, the team considers that the observer coverage is highly uneven among the different fleets. The team is aware of the last two year's complications to have observers on board due to the Covid situation but, apart from the observer coverage, it is also considered of high importance that the fishery needs to have consistent information on ETP interactions, either by means of observers, self-recording, using EMS or using the DEA. Therefore, a recommendation was opened during the 4<sup>th</sup> surveillance audit regarding scientific based information related to P2 (**Section 4.2.4** from Morant and Quílez, 2021) until the team can confirm that the observer coverage is maintained and even among the different fleets in the upcoming years. Therefore, this recommendation stays opened until the team can assess the observer coverage among the different fleets over the next fishing seasons is maintained and even.

## **6 Traceability and eligibility**

### **6.1 Eligibility date**

As it is a re-assessment, the eligibility date is the expiry date of the certificate, i.e., 06/12/2021.

### **6.2 Traceability within the fishery**

Initial information regarding traceability was provided during the first certification period and it has been updated with the clients during the current site visit. This section of the report has been amended accordingly.

#### **6.2.1 Traceability and segregation systems within the fishery**

The bait boat fleet operates with pole and line during July-September and the troll fleet operates with artificial lures during June-October (**Figure 6.2.1**). Usually, the vessels are at sea between 15 or 20 days maximum in each fishing trip.

The fish is preserved on board with ice. Catches are classified according to the capture date and stored in the hold or well of the vessel. Catches remain in the well until they are unloaded in port. The first recording of the catches is estimated at the end of the fishing day and is recorded and sent to the Spanish Government. They have a permitted margin of tolerance in estimates recorded in the fishing logbook of the quantities in kilograms of fish retained on board of +/- 10 % for all species. The completion and submission of the fishing logbook is done in accordance with Article 14 of the Council Regulation (EC) No 1224/2009.



**Figure 6.2.1** Picture of the vessels included in the UoC. Source: Macarena Garcia.

During the unloading operations, all the catches are held in boxes at the harbour. Each box is weighed, and accurate catch data record is generated. The tanks perfectly identified are transported to the official auction site. Before the sale begins, the information of each box is entered into the auction site's computer system and a lot number is assigned (**Figures 6.2.2, 6.2.3 and 6.2.4**).



**Figure 6.2.2** Type of boxes used by the fishery in the offload operations. Source: Macarena Garcia.

At the time of the initial assessment site visit, the overall system in place for the identification of certified catches provided a reliable, practical and verifiably robust mechanism for ensuring the traceability of the certified product.




The results were positive in terms of the systems in place to ensure traceability during the client's operations. The system in place remains the same at the time of writing this report and traceability is ensured:

- Catches by species are estimated by the end of each fishing trip, recorded in the electronic logbooks (DEA) and sent to the Spanish Government.
- There is no transshipment of catches at sea.
- Offloading is restricted to Spanish harbours.
- Catches are sorted by species during landing and reporting of catch quantities is based on final weights after removal of the tanks' weight.
- There is accurate recording and reporting (in Spanish) of catches based on the use of ELBs.
- There are landings' inspections.
- Logbook entries are regularly inspected and cross-checked upon completion of the verification at port of the declared landed species by the Spanish Government.
- Additional client logbooks are also maintained, which provide an additional means of cross-checking landed catches.
- There is good cooperation between the EU and Spanish regulatory and enforcement authorities and ICCAT. Landings data are used for official monitoring of catches and national statistics for ICCAT.
- Vessels over 15 metres long are obliged to use the so-called "blue box" or VMS (Vessel Monitoring System), which allows the vessel to be monitored every two hours, indicating its precise position and the nature of the activity being undertaken at the time (fishing, sailing, etc.).

Jatorrizko herrialdea/ Pais de origen:	Kalibrea/ Calibre:	Código:	Freskotasuna/Frescura: Categoría/Categoría	Data/Fecha:
ESPAÑA	1	ALB	E	27/08/2012
Produkzioa/Producto: Izen komertziala/Nombre comercial: HEGALUZZA – BONITO DEL NORTE Izen zientifikoa/Nombre científico: Thunnus alalunga ZONA DE CAPTURA: ATLANTICO NORDESTE			Igorlea/Expedidor: HONDARRIBIKO KOFRADIA Helbidea/Domicilio: Pº D. Ramón Iribarren, 29	
Lote/Pes.:	Metodo de Producción:	Aukeraketa era/tratamendua Modo de presentación/tratamiento:		ES Nº 12.02.224/SS CE
4/4	EXTRACTIVA	Buruarekin/Con cabeza.		
BARCO:		COMPRADOR:		
ITSAS EDER		ESPECIE: BONITO 7 a 17.900		
PESO NETO: (Pto Envasado)	Nº BOTE:		Nº Envasado:	
142,00 Kg	2388		1	
		Media/Envase:		
		142,00 Kg		

Figure 6.2.3 Example of label issued by Hondarribia fish auction and placed in each tank: number of the tank (red rectangle); name of the vessel (blue rectangle); legal information (green rectangle). Source: Hondarribia auction site.

ZONA DE CAPTURA O		Primer Expedidor		ESP	
ZONA FAO: 27		COFRADIA DE PESCADORES "SAN PEDRO" DE BERMEO		R.S.I 12.05.988/B	
		Muelle Errosape, S/N. Bermeo (Bizkaia)		CE	
Nombre del Barco		Lote: 1136	Fecha		
ALMIKEKO AMA - '3BI22-95'				23/06/2014	
Nombre Comercial:		Bonito del norte			
Nombre Científico:		Thunnus alalunga - ALB			
Talla-Calidad-Procedencia:		03 - E -			
Nombre Común:		BONITO 4/7			
Nº Cajas: 1	Peso Bruto: 167 Kg	Peso Med/Caja: 141 Kg			
Orden: 84	Peso Neto: 141 Kg	Nº Piezas/Caja: 0			
		Peso Med/Pieza: 0 Kg			
		Caja: 01417400142			
 (10)1136(3101)1410(3301)1870(11)23062014(01)0000001136					

**Figure 6.2.4** Example of label issued by Bermeo fish auction and placed in each tank: number of the tank (red rectangle); name of the vessel (blue rectangle); legal information (green rectangle). Source: Bermeo auction site.

## 6.2.2 Determination of risk associated to traceability factors prior to entering CoC

In accordance with MSC requirements, **Table 6.2** includes a description of factors that may lead to risks of non-certified fish being mixed with certified fish prior to entering CoC. For each risk factor, there is a description of whether the risk factor is relevant for the fishery, and if so, a description of the relevant mitigation measures or traceability systems in place.

**Table 6.2– Traceability within the fishery**

Factor	Description
<p>Will the fishery use gears that are not part of the Unit of Certification (UoC)?</p> <p>If Yes, please describe:</p> <ul style="list-style-type: none"> <li>If this may occur on the same trip, on the same vessels, or during the same season;</li> <li>How any risks are mitigated.</li> </ul>	<p><i>No, the fishery will use just trolling and pole and line gears. The bait boat fleet operates with pole and line during July-September and the troll fleet operates with artificial lures during June-October. Normally the vessels are at sea between 15 or 20 days maximum per fishing trip.</i></p>
<p>Will vessels in the UoC also fish outside the UoC geographic area?</p> <p>If Yes, please describe:</p> <ul style="list-style-type: none"> <li>If this may occur on the same trip;</li> <li>How any risks are mitigated.</li> </ul>	<p><i>No.</i></p> <p><i>The fleet operates in the Bay of Biscay and adjacent North Atlantic waters (approximately up to 52° N and 30°W) within FAO area 27, subareas 7k, 7h, 8, 9b, 10a, 10b and 12c (Figures 5.1.1.1a, b, c and d).</i></p>
<p>Do the fishery client members ever handle certified and non-certified products during any of the activities covered by the fishery certificate? This refers to both at-sea activities and on-land activities.</p> <ul style="list-style-type: none"> <li>Transport</li> <li>Storage</li> </ul>	<p><i>The client could handle certified and non-certified products as they fish different species.</i></p>

<ul style="list-style-type: none"> <li>- Processing</li> <li>- Landing</li> <li>- Auction</li> </ul> <p>If Yes, please describe how any risks are mitigated.</p>	<p><i>They are stored in different fish holds and even though there is no ID tag (apart from the bluefin tuna), no mixing of species happens in the fishing holds.</i></p> <p><i>There is no at sea processing and vessels are not equipped to undertake any processing. All the fish is stored in a fridge.</i></p>
<p>Does transshipment occur within the fishery?</p> <p>If Yes, please describe:</p> <ul style="list-style-type: none"> <li>- If transshipment takes place at-sea, in port, or both;</li> <li>- If the transshipment vessel may handle product from outside the UoC;</li> <li>- How any risks are mitigated.</li> </ul>	<p><i>No transshipment occurs. All catches are landed in the authorised harbours and sold in the fish auction.</i></p>
<p>Are there any other risks of mixing or substitution between certified and non-certified fish?</p> <p>If Yes, please describe how any risks are mitigated.</p>	<p><i>No other risks of mixing or substitution between certified and non-certified fish have been identified.</i></p>

### 6.3 Eligibility to enter further chains of custody

CAB used the previous information and the updated one received during the site visit to establish that the system is appropriate, and as such, the fish and fish products from the fishery may enter into further certified chains of custody.

The scope of the certificate includes all vessels listed in **Table 5.1.1.2.**

The main landing ports of the fishery are: Santoña, Colindres, Laredo and San Vicente de la Barquera (in Cantabria), Avilés and Gijón (Asturias) and Ondárroa, Bermeo, Fuenterrabia, Pasaia and Getaria (Basque Country). Landing controls and inspection procedures are sufficient to guarantee traceability. The fish is landed in these ports, weighted and an official document named transport document must accompany the consignment until it reaches the place of destination.

The change of ownership starts after the first sale at one of the auction points covered by the certificate:

- Cofradía de Bermeo
- Cofradía de Lekeitio
- Cofradía de Ondarroa
- Cofradía de Getaria
- Cofradía de Pasaia
- Cofradía de Hondarribia
- Cofradía de Laredo
- Cofradía de Santoña
- Cofradía de Castro Urdiales
- Cofradía de Colindres
- Cofradía de San Vicente de la Barquera
- Rula de Avilés
- Gijón

In addition, the following warehouses for storage (freezer) and distribution activities are included in the certificate of the fishery:



- Frigorífico Cofradía de Bermeo located in the fishing dock of Bermeo and owned by the Cofradía de Bermeo;
- Frigoríficos Bermeo owned by Cofradía de Bermeo, Cofradía de Lekeitio, Cofradía de Ondarroa and Conservas Ortiz;
- Arrankoba owned by Cofradía de Lekeitio and Cofradía de Ondarroa (which is also certified for MSC Chain of Custody);
- Congelados Sor y Mar (which are also certified for MSC Chain of Custody).
  - Pescados Barandica (which is also certified for MSC Chain of Custody)

That is, after the Cofradía issues the sales note before the next user, i.e. the company that purchases the fish, they will be required to have a valid chain of custody certificate whenever they want to market the product bought with an MSC certificate.

## 6.4 Eligibility of Inseparable or Practicably Inseparable (IPI) stock(s) to enter further chains of custody

No IPI stocks have been identified by BV during the assessment.

## 7 Scoring

### 7.1 Summary of Performance Indicator level scores

Principle	Component	Performance Indicator (PI)		Scores UoC1	Scores UoC2
One	Outcome	1.1.1	Stock status	100	100
		1.1.2	Stock rebuilding	NA	NA
	Management	1.2.1	Harvest strategy	90	90
		1.2.2	Harvest control rules & tools	85	85
		1.2.3	Information & monitoring	80	80
		1.2.4	Assessment of stock status	85	85
Two	Primary species	2.1.1	Outcome	95	85
		2.1.2	Management strategy	85	90
		2.1.3	Information/Monitoring	100	100
	Secondary species	2.2.1	Outcome	80	80
		2.2.2	Management strategy	85	85
		2.2.3	Information/Monitoring	100	100
	ETP species	2.3.1	Outcome	80	80
		2.3.2	Management strategy	80	80

		2.3.3	Information strategy	80	80
	Habitats	2.4.1	Outcome	100	100
		2.4.2	Management strategy	95	95
		2.4.3	Information	95	95
	Ecosystem	2.5.1	Outcome	100	100
		2.5.2	Management	85	85
		2.5.3	Information	95	95
Three	Governance and policy	3.1.1	Legal &/or customary framework	85	85
		3.1.2	Consultation, roles & responsibilities	95	95
		3.1.3	Long term objectives	80	80
	Fishery specific management system	3.2.1	Fishery specific objectives	80	80
		3.2.2	Decision making processes	85	85
		3.2.3	Compliance & enforcement	85	85
		3.2.4	Monitoring & management performance evaluation	90	90

## 7.2 Principle 1

### 7.2.1 Principle 1 background

#### 7.2.1.1 Biology (ICCAT, 2019a)

Albacore (*Thunnus alalunga*) is a temperate tuna widely distributed throughout the Atlantic Ocean and Mediterranean Sea. On the basis of the biological information available for assessment purposes, the existence of three stocks is assumed: northern and southern Atlantic stocks (separated at 5°N) and a Mediterranean stock. However, some studies support the hypothesis that various sub populations of albacore exist in the North Atlantic and Mediterranean. Likewise, there is likely intermingling of Indian Ocean and South Atlantic immature albacore which needs further research.

Scientific studies on albacore stocks, in the North Atlantic, North Pacific and the Mediterranean, suggest that environmental variability may have a serious potential impact on albacore stocks, affecting fisheries by changing the fishing grounds, as well as productivity levels and potential MSY of the stocks. Those yet sufficiently unexplored aspects might explain recently observed changes in fisheries, such as the lack of availability of the resource in the Bay of Biscay in some years, or the apparent decline in the estimated recruitment which are demanding focussed research.

The expected life-span for albacore is around 15 years. While albacore is a temperate species, spawning in the Atlantic occurs in tropical waters. Present available knowledge on habitat, distribution, spawning areas and maturity of Atlantic albacore is based on limited studies, mostly from past decades. Biological parameters and conversion factors for the North Atlantic albacore stock used within the stock assessment are presented in **Table 7.2.1.1**.

**Table 7.2.1.1** Biological parameters and conversion factors for the North Atlantic albacore stock used within the stock assessment (ICCAT, 2020a).

<i>North Stock</i>	<i>Parameters</i>	<i>Source</i>
Growth	$L_{\infty} = 122.198\text{cm}; k = 0.21; t_0 = -1.338$ $L_{\infty} = 124.74\text{cm}; k = 0.23; t_0 = -0.9892$	Santiago and Arrizabalaga, 2005 Bard, 1981
Length-weight relationship	$a=1.339 \times 10^{-5} \quad b=3.1066$	Santiago, 1993
Maturity	50% of mature fish at 90 cm (age 5)	Bard, 1981
Natural mortality	$M = 0.3$ per year 0.63; 0.46; 0.38; 0.34; 0.31; 0.29; 0.31; 0.34; 0.38; 0.44; 0.55;	
M at age (1 to 15)	0.55; 0.55; 0.55; 0.55	Anon., 2010

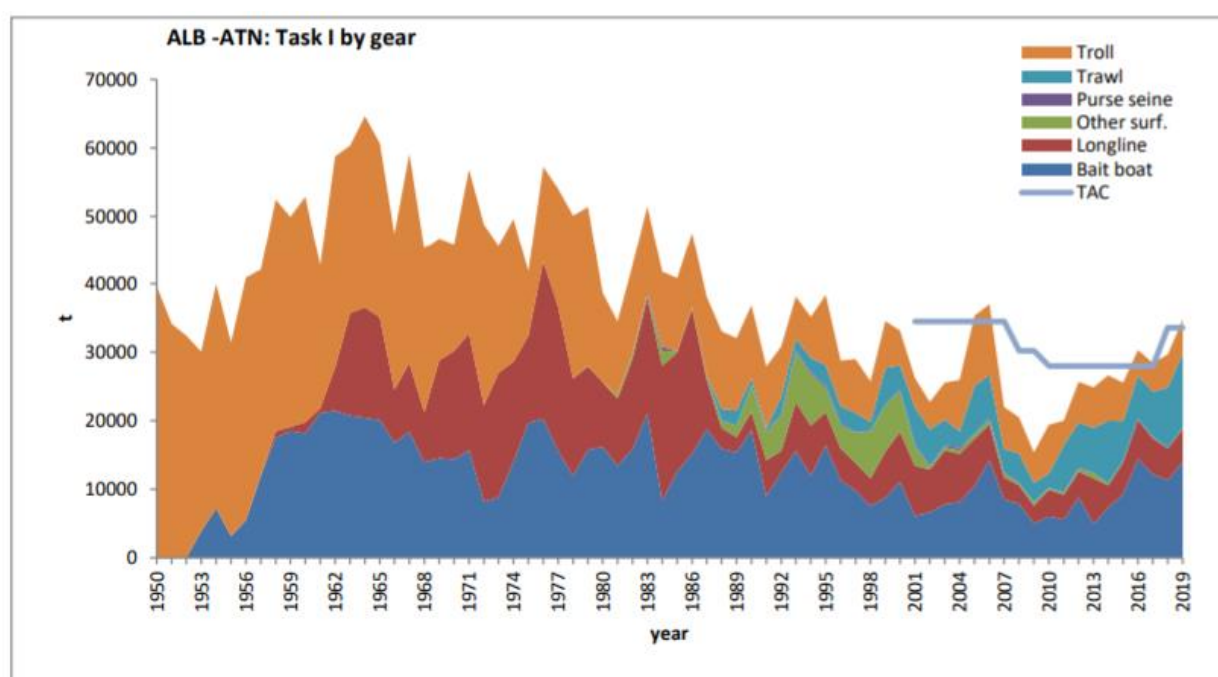
#### 7.2.1.2 Description of fisheries or fishery indicators (ICCAT, 2019a)

The northern stock is exploited by surface fisheries targeting mainly immature and sub-adult fish (50 cm to 90 cm FL) and longline fisheries targeting immature and adult albacore (60 cm to 130 cm FL). The main surface fisheries are carried out by EU fleets (Ireland, France, Portugal and Spain) in the Bay of Biscay, in the adjacent waters of the northeast Atlantic and in the vicinity of the Canary and Azores Islands in summer and autumn. The main longline fleet is the Chinese Taipei fleet which operates in the central and western North Atlantic year round. However, Chinese Taipei fishing effort decreased in the late 1980s due to a shift towards targeting on tropical tuna, and then continued at this lower level to the present. Over time, the relative contribution of different fleets to the total catch of North Atlantic albacore has changed, which resulted in differential effects on the age structure of the stock. Since the 1980s, a reduction of the area fished for albacore was observed for both longline and surface fisheries.

Total reported landings, steadily increased since 1930 to peak above 60,000 t in the early 1960s, declining afterwards, largely due to a reduction of fishing effort by the traditional surface (troll and baitboat) and longline fisheries (**Figure 7.2.1.1**). Some stabilization was observed in the 1990s, mainly due to increased effort and catch by new surface fisheries (driftnet and mid-water pair pelagic trawl), with a maximum catch in 2006 of 36,989 t and, since then, a generally decreasing trend of catch is observed in the North Atlantic.

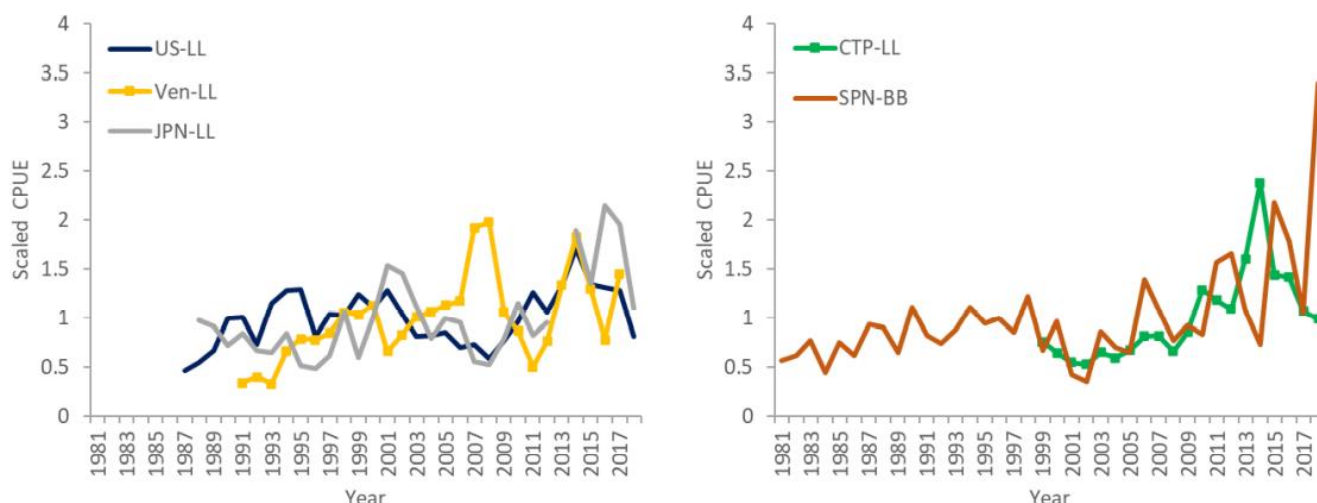
The preliminary total reported catch in 2018 was 29 363 t (below the TAC of 33,600 t), and the catch in the last five years has remained about 27,000 t, above the historical minimum of around 15,000 t recorded in 2009. During the last years, the surface fisheries contributed to approximately 80% of the total catch. The reported catch for 2016, when compared with the average of the last five years, was similar for EU-Spain, EU-Ireland and EU-France

Longline catch contributed to approximately 20% of the total catch during the last five years. During the last decades, both Chinese Taipei and Japan have reduced their fishing effort directed to albacore. In the case of Japan, albacore was taken mainly as by-catch. The catch reported in 2016 for Japan was below the last 5-year average, while for Chinese Taipei it was similar. The trend in mean weight for northern albacore remained stable between 1975 and 2014, ranging between 7 and 11 kg. The mean weight for surface fleets (baitboat and troll) showed a stable trend with an average of 7 kg (range of 4 to 10 kg), and for longline fleets it showed no clear trend with an average of 19 kg, but some important fluctuations between 15 and 26 kg since the 1990.



**Figure 7.2.1.1** Total albacore catches reported to ICCAT (Task I) by gear for the northern Atlantic stock including TAC's (red line). (ICCAT, 2020a)

**Figure 7.2.1.2** summarizes the available indices of abundance for the 2020 assessment. The following indices of abundance: a) the weight index from the Chinese Taipei LL (1981-2018), b) the Japanese longline index (1976-2018) excluding the 2013 observation, c) the Venezuela longline index (1991-2017) excluding 2018 observation, d) the USA longline index (1987- 2018), and e) the Spanish baitboat index (1981-2018).



**Figure 7.2.1.2** CPUEs used for the base case of the 2020 stock assessment for the North Atlantic albacore, (ICCAT, 2020a).

### 7.2.1.3 State of stocks (ICCAT, 2020a)

In 2016 a production model (ICCAT, 2016a) was used to assess the stock status. A thorough revision of North Atlantic Task I data was conducted and catch rate analyses were improved and updated with new information for the northern albacore fisheries. Decisions on the final specifications of the base case model were guided by first principles (e.g., knowledge of the fisheries) and data exploration (e.g., correlation between indices).

Four longline and one bait boat CPUE indices were selected to be used in a production model framework. It was assumed that different CPUE series reflected local abundance available to different fleets operating in different areas, and that overall they represented the global population trend. On this basis, the 5 CPUEs were equally weighted and used jointly in the base case scenario. Despite their variable pattern, these indices showed an overall increasing trend towards the end of the time series (**Figure 7.2.1.2**), which could be reflecting the increasing trend of the stock during this period of relatively low catch. These indices were updated and also used in the 2020 assessment.

It was agreed to define the Reference Case including the 5 CPUE series, excluding the Japanese longline 2013 and the Venezuelan longline 2018 values. Some model convergence difficulties were initially encountered; in this respect, convergence was examined under alternative starting values of the intrinsic growth rate ( $r$ ) and carrying capacity ( $k$ ) parameters and ensured all results and conclusions were based on converged model runs. Model diagnostics examined include likelihood profiles, residuals of fit and retrospective analyses. The latter were limited to the last 5 years of data. The retrospective pattern was minimal for the first 3 years of data, whereas removing 4 years yielded a similar result to the last assessment, conducted 4 years ago. Because changes in the trends of stock catches and CPUE indices occurred mostly in the last decade, it is not surprising that assessment results from the production model show some sensitivity to removing years of data from the recent period.

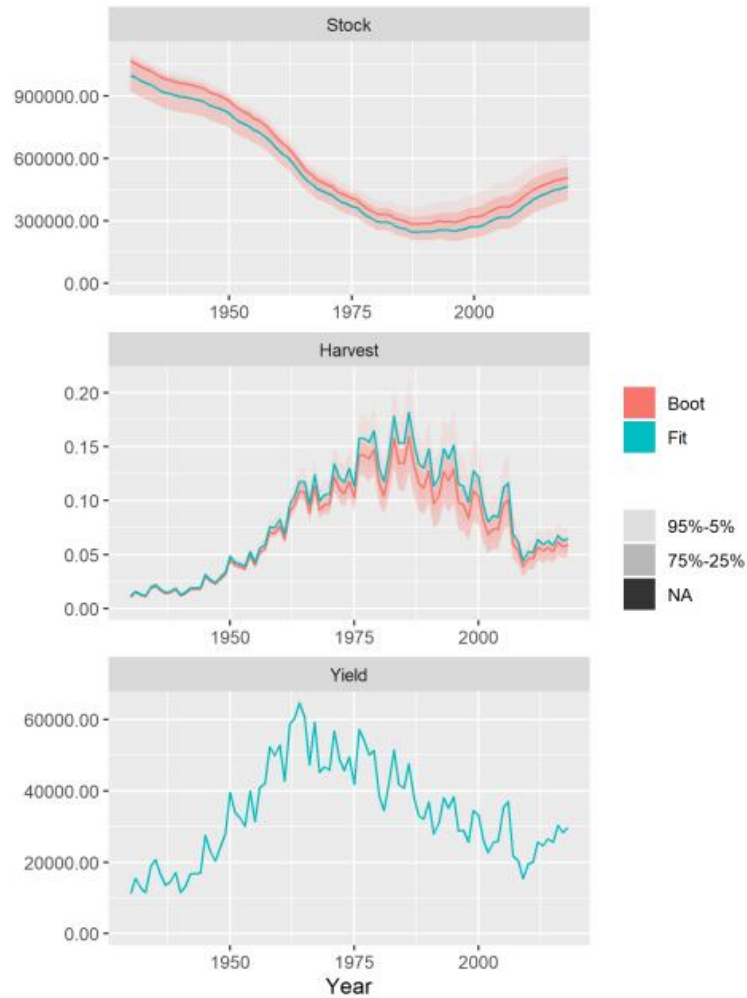
The results of the Reference Case assessment for North Atlantic albacore are shown in **Table 7.2.1.2** and **Figure 7.2.1.3**. Results indicate a decreasing biomass trend between the 1930s and the 1990s and an increasing trend since then. Relative to MSY benchmarks, the Reference Case scenario estimates that the stock has been above  $B_{MSY}$  continuously in the last decade and fishing mortality below  $F_{MSY}$  for a slightly longer period of years (**Figure 7.2.1.4**).

**Table 7.2.1.2.** Estimated reference points and parameters of the stock assessment model using the agreed Reference Case. Source: ICCAT, 2020a.

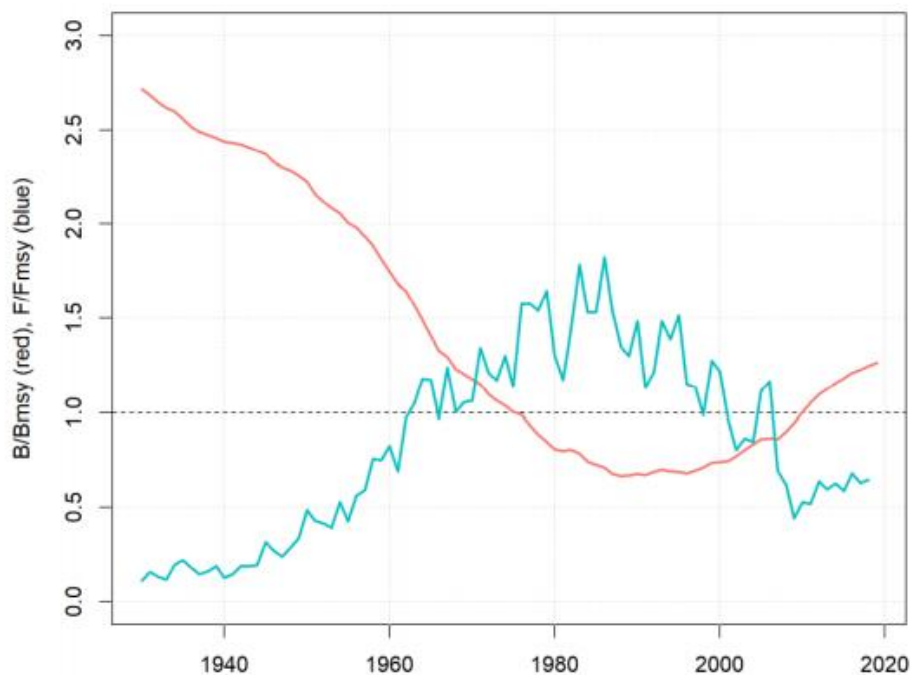
Scenario	Fit	B <sub>curr</sub> (t)**	MSY (t)	F <sub>MSY</sub> (yr-1)	B <sub>MSY</sub> (t)	r (yr-1)	K (t)
RefCase 2020	MLE	464,796	36,737	0.100	367,719	0.100	999,064
	Bootstrapped*	508,074 (425,273-602,157)	36,816 (35,761-38,039)	0.093 (0.091-0.108)	392,556 (349,403-405,097)	0.093 (0.091-0.108)	1,066,546 (943,300-1,100,619)

\* Median and 80% CI

\*\* Biomass in 2019

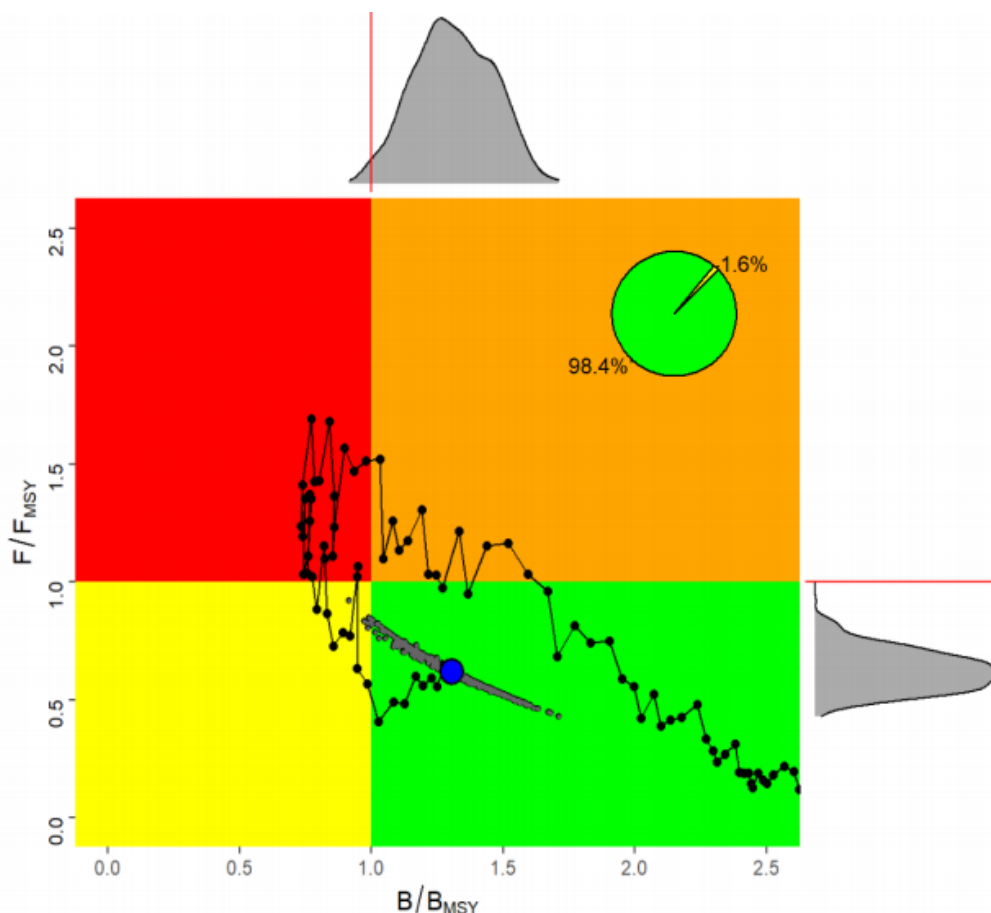


**Figure 7.2.1.3** Bootstrap results: biomass and fishing mortality trajectories estimated for the Reference Case and observed yield. The red line is the median of the bootstrap values. Source: ICCAT, 2020a.



**Figure 7.2.1.4** Relative biomass (red) and fishing mortality (blue) as estimated by the Reference Case. Source: ICCAT, 2020a.

The Kobe phase plot shows a typical pattern of development, overexploitation, and recovery of the stock (**Figure 7.2.1.5**). Consistency with the 2016 stock assessment (ICCAT, 2016a) was evaluated by comparing the biomass trend of this year's Reference Case with the 2016 stock assessment Base Case and it was found that the current estimate of biomass is below that of the 2016 stock assessment base case. The current input data (catch and indices) indicates a shift of historical biomass to lower relative level. However, in the 2020 stock assessment (ICCAT, 2020a) it was estimated that the relative stock biomass has been increasing since 1990s.



**Figure 7.2.1.5** Estimated trajectories of  $B/B_{MSY}$  and  $F/F_{MSY}$  with the Reference Case North Atlantic albacore stock assessment. Dots represent the bootstrapped  $B_{2018}/B_{MSY}$  and  $F_{2018}/F_{MSY}$  coordinates (median in blue) (ICCAT, 2020a).

The bootstrapped results are used to estimate uncertainty on parameters and reference points estimates (ICCAT, 2020a). The probability of the stock currently being in the green area of the Kobe plot (not overfished and not undergoing overfishing,  $F < F_{MSY}$  and  $B > B_{MSY}$ ) is 98.4 %, while the probability of being in the bottom-left yellow area (overfished but not undergoing overfishing,  $F < F_{MSY}$  and  $B < B_{MSY}$ ) is 1.6%. The probability of being in the red area (overfished and undergoing overfishing,  $F > F_{MSY}$  and  $B < B_{MSY}$ ) is 0% (**Figure 7.2.1.5**).

Sensitivity analyses to estimate the potential impact of removing individual CPUE points (Japanese LL for 2013 and Venezuelan LL for 2018) were conducted and it was noted that the impact of these removals on the outcome of the assessment and the resulting TAC advice was minimal. In summary, the available information indicates that the stock has continued to improve, as reflected in the observed CPUE values. The increase in stock biomass was likely facilitated by the recent low catches, and the stock is now estimated to be in the green area of the Kobe plot with very high probability.

$B_{2019}/B_{MSY}$  was estimated as 1.32 (1.13-1.51) and  $F_{2018}/F_{MSY}$  as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b).



#### 7.2.1.4 Harvest Control and Management procedures (ICCAT, 2020a; 2020b)

The level of specification that would need to be included in a Recommendation for the harvest control and management procedure is discussed below in case the Commission decides to adopt a full Management Procedure for the north Atlantic Albacore stock, as was originally planned for 2020.

The MP specifications should include the following:

Indices:

- Chinese Taipei LL starting 1999
- Japan bycatch LL starting 1988
- Spanish baitboat starting 1981
- US LL starting 1987
- Venezuelan LL starting 1991
- Software: mpb Model: Fox (biomass dynamic), with the following specifications:
- Catch time series start year: 1930
- Catch and CPUE time series final year: t-1 preferably (t-2 otherwise) where it is the year of the MP iteration (when the TAC is set for year t+1, t+2 and t+3).
- Biomass at the start of the time series = K
- Variance treatment for the CPUE indices: model weighted

Recent developments of the North Atlantic albacore MSE will follow. Two advances were made in 2020 (ICCAT, 2020a): First, following the definitions of exceptional circumstances being developed for this stock, the impact of one or more indices not being updated for the 2020 stock assessment was evaluated. Second, new figures were generated to evaluate the fits of the indices available in 2013 in the Operating Models that were conditioned from the scenarios developed in the 2013 stock assessment.

For the first, the MSE was re-run including scenarios where one or more indices were not updated since 2014. The code of the MSE is exactly the same code used after the improvements made in 2019. **Table 7.2.1.3** shows the results of the new evaluations and the evaluation of the adopted HCR made in 2019 for comparison. Results suggested that the lack of update of one or more indices would not impede achieving the management objective of keeping the stock in the green zone of the Kobe plot with at least 60% probability. However, the results estimated a significantly lower performance (20-32%) in long term catch if only one index was updated. Also, with only one updated index, the probability of being in the green quadrant would be reduced by some amount between 7 and 15% (although still achieving values larger than 60% to be in the green Kobe quadrant).

**Table 7.2.1.3** Evaluation test of the HCRs performance when one or more indices of abundance are not available or updated since 2014. The first column indicates the scenarios of missing indices. In the “Adopted” HCR all indices are available. Source: ICCAT, 2020a.

HCR	Bmin	Bmean	Fmean	pG(%)	pR(%)	pBlim(%)	pBin(%)	Yshort	Catch Ymid	Ylong	MAP	sd	Stability var	pshut	p(ΔTAC+10%)	p(ΔTAC-10%)
Adopted	0.35	1.47	0.57	78.34	5.56	99.9	13.08	29.14	23.21	29.65	8.43	7.64	58.42	0.84	13.27	10.91
Except Spain BB	0.31	1.43	0.56	76.26	6.78	99.82	13.88	29.75	23.60	29.99	8.65	7.58	57.51	1.02	12.83	10.73
Except Japan LL	0.34	1.46	0.58	75.32	6.06	99.88	13.16	29.50	23.70	29.21	8.30	7.71	59.44	1.14	12.98	10.79
Except Taiwan LL	0.40	1.53	0.55	80.48	4.82	99.96	12.68	27.99	22.64	28.81	8.40	7.67	58.83	1.32	12.98	10.96
Except Other LL	0.38	1.49	0.55	80.14	5.3	99.96	12.54	28.62	22.30	28.47	8.71	7.89	62.28	0.96	13.38	11.03
Spain BB- Jp LL	0.44	1.57	0.53	82.14	4.54	100	12.3	26.67	21.66	28.47	8.44	7.61	57.96	1.2	13.63	10.36
Spain BB- Chi Tai LL	0.43	1.55	0.55	81.46	4.98	100	13.64	27.94	21.02	27.98	8.57	7.80	60.77	1.68	13.83	10.83
Spain BB- US-Ven LL	0.43	1.52	0.51	79.46	4.96	100	13.68	27.80	21.54	28.84	8.44	7.70	59.31	1.68	13.04	11.08
Jp LL- Chi Tai LL	0.31	1.45	0.58	78.04	6.16	99.74	12.72	30.37	23.41	28.39	8.28	7.40	54.82	0.96	12.85	11.02
Jp LL- US-Ven LL	0.31	1.43	0.55	76.46	7.26	99.82	13.68	28.70	22.95	29.24	8.68	7.84	61.49	1.56	13.00	11.13
Chi Tai LL- US-Ven LL	0.28	1.40	0.60	73.9	7.74	99.66	14.2	30.27	25.57	29.52	8.60	7.60	57.80	1.56	12.67	11.08
Only Spain BB	0.30	1.38	0.52	72.72	6.8	99.44	17.96	27.45	19.31	23.61	9.70	8.18	66.85	3.24	12.67	10.71
Only Japan LL	0.27	1.38	0.46	68.06	9.72	99.24	19.74	30.60	23.01	22.79	10.11	8.31	69.10	2.94	12.46	12.29
Only Taiwan LL	0.22	1.33	0.43	71	9.02	98.72	19.34	28.06	19.57	21.47	10.33	8.64	74.72	4.32	12.80	12.90
Only Ven-US LL	0.24	1.37	0.45	67.04	8.92	99.48	18.44	26.35	21.58	20.08	9.96	8.55	73.17	4.5	12.46	12.90

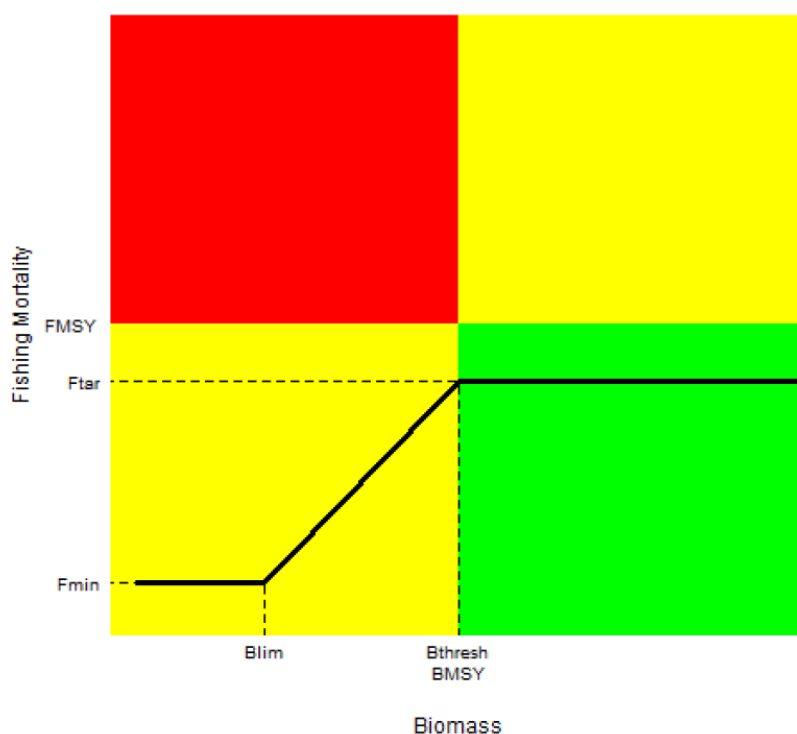
Overall, these results suggest that in the exceptional circumstance that one or more index was not available for stock assessments, the HCR would still achieve management objectives. However, it should be noted that these results are based on simulated indices which are proportional to stock abundance, with a CV of 0.2. To the extent that real world indices deviate from these assumptions (larger variability, autocorrelation, deviation from proportionality to abundance), the performance of the HCR could differ from what was evaluated.

For the second, two types of figures were produced: Histograms of residuals and time series of CPUE observations and model estimates. These figures were produced for each OM and for each of the 12 fisheries (Fleets) considered in the Multifan-CL OM scenarios developed in 2013. There are no differences in the fits of the OMs with regards to different natural mortality, steepness, or dynamic catchability but there are some differences between the original models scenarios developed in 2013. Specifically, it was stressed that adding size frequency data for Chinese Taipei worsens the fit of this CPUE, and the resulting residuals exceed the variability considered in the MSE. Also, in general, the Spanish baitboat data shows residuals with a wider variability than the values considered in the MSE. With regards to the Spanish baitboat residuals, it was noted that it was a small number of extreme values that was widening the confidence interval of the residual values. It was suggested that, if those extreme values were removed, the variability in the residuals would be very similar to the variability used in the MSE.

#### 7.2.1.5 Effect of current regulations (ICCAT, 2018a)

In 2017, the Commission adopted the interim HCR described in **Figure 7.2.1.6**, with a maximum TAC of 50,000 t and a maximum change of 20% when  $B_{CUR} > B_{THR}$ . Its application established a TAC of 33,600 t for 2018-2020 (ICCAT, 2017a, Rec. 17-04) and the possibility to carry over some unused portions of the quotas to be caught later in time (ICCAT, 2016b, Rec. 16-06) remained. Since the establishment of the TAC in the year 2001, catch remained substantially below the TAC in all but four years (**Figure 7.2.1.1**), which might have accelerated rebuilding over the last decade. The bulk of the catch is caught by traditional surface fisheries operating in the Bay of Biscay and surrounding waters. Thus, it is likely that the fluctuations in catches reflect the fluctuations in the availability of the resource to those local regional fisheries, and the carry over allows to compensate the fleets for the years where the stock was less available.

Furthermore, (Rec. 98-08) that limits fishing capacity to the average of 1993-1995, remains in force. The effect of this recommendation has not been evaluated but a general decrease of fishing mortality is observed since its implementation.



**Figure 7.2.1.6** Graphic form of the HCR adopted in Rec 17-04.  $B_{LIM}$  (set at  $0.4B_{MSY}$ ) is the limit biomass reference point,  $B_{THRESH}$  (set at  $B_{MSY}$ ) is the point below which fishing mortality decreases linearly,  $F_{TAR}$  (set at  $0.8F_{MSY}$ ) is the target fishing mortality rate to be applied to achieve the management objectives, and  $F_{MIN}$  (set at  $0.1F_{MSY}$ ) is the fishing mortality to be applied when  $B < B_{LIM}$  (ICCAT, 2018a).

#### 7.2.1.6 Management recommendations (ICCAT, 2019a)

Estimated management quantities (median with 80% confidence intervals) are presented in **Table 7.2.1.4**. Recommendation 16-06 (ICCAT, 2016b) sets the objective of maintaining the stock in the green area of the Kobe plot with a 60% probability while maximizing long-term yield, and, if  $B < B_{MSY}$ , to recover it as soon as possible, while maximizing average catch and minimizing inter-annual fluctuations in TAC levels.

**Table 7.2.1.4** Northern Atlantic Albacore management quantities (ICCAT, 2020b).

	<b>North Atlantic</b>
Maximum Sustainable Yield	36,816 t (35,761 - 38,039) <sup>1</sup>
Current (2019) Yield	34,772 t
Yield in last year of assessment (2018)	29,691 t
Yield in last year of assessment (2015)	
B <sub>MSY</sub>	392,556 t (349,403 - 405,097) <sup>1</sup>
F <sub>MSY</sub>	0.093 (0.091-0.108) <sup>1</sup>
B <sub>2019</sub> <sup>3</sup>	508,074 t (425,273 - 602,157) <sup>1</sup>
B <sub>current</sub> /B <sub>MSY</sub>	1.32 (1.13 - 1.51) <sup>4</sup>
B <sub>2019</sub> /B <sub>LIM</sub> <sup>7</sup>	3.30 (2.83 - 3.78) <sup>1</sup>
F <sub>current</sub> /F <sub>MSY</sub>	0.62 (0.52 - 0.74) <sup>8</sup>
Stock Status	Overfished: NO Overfishing: NO
Management measures in effect:	Rec. 98-08: Limit number of vessels to 1993-1995 average. Rec. 17-04: TAC of 33,600 t for 2018-2020, according to interim HCR. Management objective is to keep the stock in (or rebuild it to) the green area of the Kobe plot with 60% probability, while maximizing catch and reducing variability of TAC.
Recommended TAC for the period 2021-2023 as estimated following the HCR adopted in Rec. 17-04	37,801 t

<sup>3</sup> The assessment model estimates the biomass at the beginning of the year following the last year of data, this is B<sub>current</sub> as referred in Rec. [17-04].

<sup>4</sup> B<sub>2019</sub>/B<sub>MSY</sub> Median and 80% CI for the base case.

<sup>5</sup> B<sub>2018</sub>/B<sub>MSY</sub> Median and 95% CI for the base case.

<sup>6</sup> B<sub>2015</sub>/B<sub>MSY</sub> Median and 95% CI for the base case.

<sup>7</sup> The interim B<sub>LIM</sub> is 0.4\*B<sub>MSY</sub>.

<sup>8</sup> F<sub>2018</sub>/F<sub>MSY</sub> Median and 80% CI for the base case

<sup>9</sup> F<sub>2018</sub>/F<sub>MSY</sub> Median and 95% CI for the base case

<sup>10</sup> F<sub>2014</sub>/F<sub>MSY</sub> Median and 95% CI for the base case

In 2016, the relative abundance of north Atlantic albacore had continued to increase over the last decades and was likely somewhere in the green area of the Kobe plot. However, without additional information, the magnitude of the recovery was not well determined and remained sensitive to many different assumptions. This undermined the ability

to reliably quantify the effects of future TAC or HCR scenarios on the status of the stock, until more sources of uncertainty and the robustness of the advice were evaluated in the future through MSE and/or benchmark stock assessment after accumulating sufficient new information. The projections assuming catch or TAC levels similar to those observed during the last five years (between 25,000 t and 30,000 t) suggested that biomass would continue to increase and are likely sustainable. However, the ability to monitor changes in stock abundance is currently limited due to incomplete fishery dependent information. Thus, it is desirable to pursue alternative fishery independent tools to provide improved bases for monitoring stock condition.

In 2017, MSE results highlighted that the implementation of any of the tested HCRs would meet the objective to be in the green quadrant of the Kobe plot (with a probability higher than 60%) (**Table 7.2.1.5**). In HCRs where maximum change in TAC of 20% is always applied (SC1), higher stability and higher long term yields were achieved, compared to HCRs where the 20% restriction for decrease is not used when  $B < B_{\text{THRESHOLD}}$  (SC2). Not restricting TAC reductions improves safety and might allow quicker recoveries if the stock is really overexploited, but can also cause large unnecessary TAC reductions, or even fishery closures, when the stock is healthy but it is wrongly perceived to be overexploited.

In 2018, an external peer review was conducted and it confirmed that, overall, the MSE framework appears to be scientifically sound and robust to uncertainty, thus, the interim HCR in 2017 that led to a TAC of 33,600 t had a robust scientific basis. Likewise, the additional analyses conducted by the working group in 2018 and 2019 are based on the same MSE framework and suggest that the Commission could adopt any of the variants (a, b or c) mentioned in Paragraph 16 of Rec 17-04, which would provide additional stability to the fisheries while meeting management objectives. However, the Committee noted that imposing the minimum TAC of 15,000 t would override the application of Paragraph 7.c of Rec. 17-04 (with current estimates of  $B_{\text{MSY}}$ ,  $F_{\text{MSY}}$  and  $\text{MSY}$ ). Results also showed that this scenario scored lowest in stock status indicators. Finally, it should be noted that there is an extensive work plan to improve the MSE framework used in the evaluation of HCRs based on the recommendations of the external review.

**Table 7.2.15** Performance of 8 HCRs, according to the performance statistics (only one performance indicator per block is shown, which represents median values across 132 operating models). The combination of the target fishing mortality ( $F_{\text{TARGET}}$ ), Biomass threshold ( $B_{\text{THRESHOLD}}$ ) and the type of stability clause defines the HCR. Two stability clauses were considered: (SC1) maximum change in TAC of 20% always applied from one 3-year management period to the next while also always imposing a 15,000- 50,000 t min-max TAC; and (SC2) same as SC1 but not restricting TAC reductions and not imposing a minimum TAC when  $B < B_{\text{THRESHOLD}}$ . Each HCR has a unique identification number in this table. pGR% = probability of being in the green quadrant of the Kobe plot; pBint% = probability of  $B_{\text{THRESHOLD}} > B > \text{BLIM}$ ; LongY (kt) = mean yield for the period 2030-2045 in thousands of tons; MAP = mean absolute proportional change in catch. Source: ICCAT, 2019a.

HCR				Stock Status	Safety	Catch	Stability
Number	Ftar	Bthresh	Stability clause	pGr%	pBint%	LongY (kt)	MAP (%)
1	0,80	0,80	SC2	85,5	9,0	26,5	8,3
2	1,00	0,80	SC2	78,9	13,0	29,0	8,8
3	0,80	1,00	SC2	88,6	8,3	26,9	8,3
4	1,00	1,00	SC2	84,5	9,2	26,9	8,9
1	0,80	0,80	SC1	85,8	9,3	32,1	5,6
2	1,00	0,80	SC1	74,7	15,8	34,1	6,2
3	0,80	1,00	SC1	86,0	10,4	32,2	6,0
4	1,00	1,00	SC1	77,9	14,3	35,0	6,3

Considering the results of the 2020 assessment (ICCAT, 2020a), following Recommendation 17-04, the estimated median biomass and fishing mortality values were used to provide TAC advice for the period 2021-2023 according to the HCR specified in the Recommendation. As current stock biomass is estimated to be above  $B_{MSY}$ , equation 1 in paragraph 7(a) was applied:

$$TAC_{2021-2023} = F_{TAR} * B_{curr}$$

$TAC_{2021-2023} = 0.8 F_{MSY} * B_{curr} = 37,801$  tons which corresponds to a 12.5% increase over the previous TAC calculated from the HCR for 2018-2020 (33,600 tons).

### 7.2.2 Catch profiles

Total catches (as estimated in the logbooks) from the assessed fishing vessels from both fleets (i.e., trolling and live bait fleets) from 2016 to 2020 are shown in **Table 7.2.2.1**. As it can be observed, Albacore accounts for over 94% of the total volume caught (i.e., 98.72% and 94.29% for the trolling and the live bait fleets, respectively). The other species reported in the logbooks account for 2.28% and 5.72% of the total amount caught in the trolling and the live bait fleets, respectively.

**Table 7.2.2.1** Total catches (in tons) as estimated in the logbooks from the assessed fishing vessels from 2016 to 2020. Source: Client.

Fishing gear	Species	2016	2017	2018	2019	2020	Total	%
TROLLING UoC1	Albacore	805.8	1,125.16	1,370.27	2,463.21	2,318.65	8,083.08	98.72
	Others	41.72	31.44	9.07	4.17	8.67	95.08	2.28
LIVE BAIT UoC2	Albacore	7,941.71	7,152.05	10,499.41	9,156.69	9,282.32	44,032.17	94.29
	Others	856.5	1,363.67	147.05	154.95	146.56	2,668.7	5.72

Total catches (as estimated in the logbooks) from the assessed fishing vessels from both fleets (i.e., trolling and live bait fleets) from 2016 to 2020 segregated by client are shown in **Table 7.2.2.2**.

**Table 7.2.2.2** Total annual UoCs catches of Albacore (in kg) from 2016 to 2020. Source: OPEGUI, OPESCAAYA, OPACAN and Federación de Cofradías de Asturias.

	2016		2017		2018		2019		2020	
	UoC1	UoC2	UoC1	UoC2	UoC1	UoC2	UoC1	UoC2	UoC1	UoC2
	-troll-	-live bait-	-troll-	-live bait-	-troll-	-live bait-	-troll-	-live bait-	-troll-	-live bait-
OPEGUI + OPESCAAYA	459.455,20	6.132.979,32	665.762,15	5.713.805,45	758.500,51	8.051.321,00	1.030.442,80	7.005.707,43	977.717,19	6.787.140,00
OPACAN	135.216,65	1.808.725,90	175.147,35	1.438.242,10	262.335,30	2.448.088,80	887.691,35	2.150.983,80	834.083,30	2.495.175,60
Federación de Cofradías de Asturias	211.130,23		284.245,65		349.433,18		545.076,05		506.847,35	
TOTAL per UoC	805.802,08	7.941.705,22	1.125.155,15	7.152.047,55	1.370.268,99	10.499.409,80	2.463.210,20	9.156.691,23	2.318.647,84	9.282.315,60
TOTAL	8.747.507,30		8.277.202,70		11.869.678,79		11.619.901,43		11.600.963,44	

### 7.2.3 Total Allowable Catch (TAC) and catch data

Rec [16-06] established an annual Total Allowable Catch (TAC) of 28,000 t for 2017 and 2018. However, later Rec [17-04] adopted a new HCR and consequently the TAC established via Rec [16-06] had to be re-established according to the new adopted HCR. Rec [17-04] established an annual TAC of 33,600 t for 2018 - 2020. This TAC was allocated among 4 different CPCs as presented in **Table 7.2.3.1**. Other ICCAT CPCs had to limit their annual catches to 200 t in 2017-18.

**Table 7.2.3.1** Total TAC (in tonnes) for North Atlantic Albacore and its allocation among ICCAT CPCs for 2017 (Rec 16-06 - ICCAT, 2016b) and 2018-20 (Rec 17-04 - ICCAT, 2017a).

ICCAT CPCs	2017	2018-2020
EU	21,551.3	25,861.6
Chinese Taipei	3,271.7	3,926.0
EEUU	527	632.4
Venezuela	250	300.0
Sub total	25,600.0	30,710.0
<b>TOTAL TAC</b>	<b>28,000.0</b>	<b>33,600.0</b>

However, ICCAT Recommendation 17-04 on a harvest control rule (HCR) for North Atlantic albacore only establishes a TAC for the period 2018–2020. On 17 February 2021, ICCAT published a press release ([https://iccat.int/Documents/Meetings/COMM2020/PRESS\\_RELEASE\\_ENG.pdf](https://iccat.int/Documents/Meetings/COMM2020/PRESS_RELEASE_ENG.pdf)), where it stated that for the northern albacore stock, the Commission agreed to establish a new TAC for 2021 calculated on the basis of the interim Harvest Control Rule (HCR) as well as allocations. The Commission also agreed to review in 2021 the interim HCR, with a view to adopting a long-term management procedure for this stock. Therefore, a decision is still to be taken by ICCAT on the TAC level for 2021.

Considering the decision-making process in 2020, the Council of the EU proposed to follow the scientific advice, which recommended that the new TAC be established on the basis of the current interim HCR and that a pro-rata increase in the catch and other limits be implemented for one year only. While there seemed to be a consensus on the level of TAC, there was a risk that ICCAT was not going to formally adopt it before the EU Regulation for fixing the fishing opportunities for 2021 was adopted (i.e., Council Regulation (EU) 2021/92 that entered into force on 29 January 2021). The TAC was therefore established at that level, but should be revised as soon as possible if ICCAT adopts a different TAC.

Hence, at the time of this ACDR, the EU share of the TAC established for 2021 through Council Regulation (EU) 2021/92 amounts to 28,355.08 t (see **Table 7.2.3.2**). The same Council Regulation splits this share into 4 different Member States, with Spain playing a dominant role accounting for 62.4% of the European TAC share (see **Table 7.2.3.2**), followed by France (19.6%), Ireland (11.1%), and Portugal (6.8%). There is no further quota allocation within each European Member State. Spanish vessels' report daily their catches to the SGP, the Institution in charge of closing the fishery once the entire quota has been consumed.

**Table 7.2.3.2.** Total North Atlantic Albacore TAC for 2020 (adopted by the Commission through Rec 17-04, ICCAT, 2017a) and 2021 (adopted by the Commission following ICCAT's interim scientific advice), together with the EU and Spanish shares of the TAC according to Council Regulation (EU) 2020/123 and Council Regulation (EU) 2021/92.

North Atlantic Albacore Tons		
	2020	2021
ICCAT TAC	33,600.00	37,801.00
EU share of TAC	26,869.43	28,355.08
Spanish share of TAC	16,312.85 (as regulated in Council Regulation 2019/124)	17,704.08 (as regulated in Council Regulation 2021/92)



UoCs share of TAC	16,262.85 (effective due to different commitments acquired by Spain)	
	<i>There is no further quota allocation at a National level</i>	<i>There is no further quota allocation at a National level</i>

Albacore catches performed by both UoCs from 2016 to 2020 are shown in **Table 7.2.2.1**. UoCs catches in 2020 (i.e., 2,318.65 t and 9,282.32 t, for trolling and live bait, respectively) accounted for 14.26 % and 57.08 % of the albacore quota allocated to Spain in 2020 (i.e., 16,262.85 t), for trolling and live bait, respectively; hence, overall making up 71.33 % of the Spanish share of TAC.

## 7.2.4 Principle 1 Performance Indicator scores and rationales

### PI 1.1.1 – Stock status

PI 1.1.1		The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing		
Scoring Issue		SG 60	SG 80	SG 100
a	Stock status relative to recruitment impairment			
	Guide post	It is <b>likely</b> that the stock is above the point where recruitment would be impaired (PRI).	It is <b>highly likely</b> that the stock is above the PRI.	There is a <b>high degree of certainty</b> that the stock is above the PRI.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

The latest stock assessment was done in 2020 (ICCAT, 2020a; 2020b). The stock assessment conducted in 2013 involved large amount of data preparation and scrutiny, and therefore in 2016 it was suggested that future assessment updates could be conducted using simpler models (e.g., production models). Thus, in 2016 (ICCAT, 2016a) a production model was used to assess the stock status. A thorough revision of North Atlantic Task I data was conducted and catch rate analyses were improved and updated with new information for the northern albacore fisheries. Decisions on the final specifications of the base case model were guided by first principles (e.g., knowledge of the fisheries) and data exploration (e.g., correlation between indices).

Four longline and one bait boat CPUE indices were selected to be used in a production model framework. It was assumed that different CPUE series reflected local abundance available to different fleets operating in different areas, and that overall they represented the global population trend. These indices were updated and also used in the 2020 assessment.

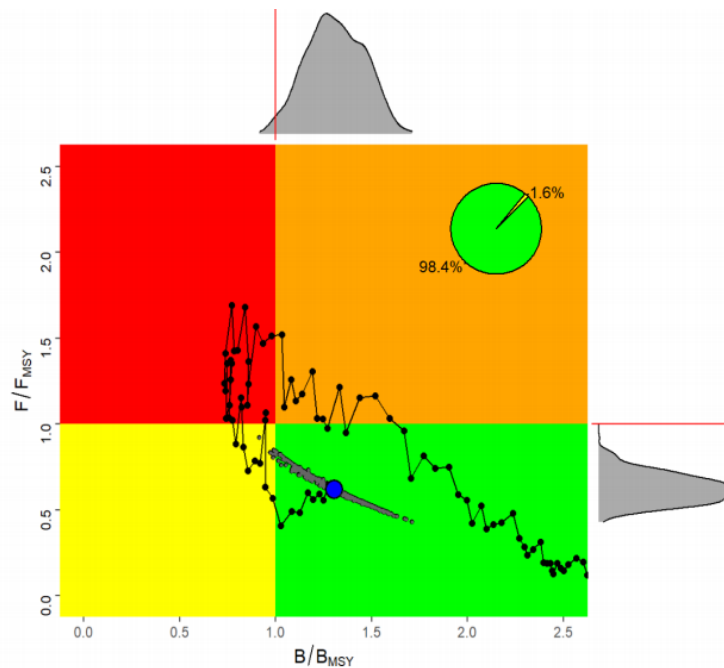
The bootstrapped results are used to estimate uncertainty on parameters and reference points estimates (ICCAT, 2020a). The probability of the stock currently being in the green area of the Kobe plot (not overfished and not undergoing overfishing,  $F < F_{MSY}$  and  $B > B_{MSY}$ ) is 98.4 %, while the probability of being in the bottom-left yellow area



(overfished but not undergoing overfishing,  $F < F_{MSY}$  and  $B < B_{MSY}$ ) is 1.6%. The probability of being in the red area (overfished and undergoing overfishing,  $F > F_{MSY}$  and  $B < B_{MSY}$ ) is 0% (**Figure 1.1.1.1**).

$B_{2019}/B_{MSY}$  was estimated as 1.32 (1.13-1.51) and  $F_{2018}/F_{MSY}$  as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b).

Sensitivity analyses to estimate the potential impact of removing individual CPUE points (Japanese LL for 2013 and Venezuelan LL for 2018) were conducted and it was noted that the impact of these removals on the outcome of the assessment and the resulting TAC advice was minimal. In summary, the available information indicates that the stock has continued to improve, as reflected in the observed CPUE values. The increase in stock biomass was likely facilitated by the recent low catches, and the stock is now estimated to be in the green area of the Kobe plot with very high probability.



**Figure 1.1.1.1** Estimated trajectories of  $B/B_{MSY}$  and  $F/F_{MSY}$  with the Reference Case North Atlantic albacore stock assessment. Dots represent the bootstrapped 2018  $B/B_{MSY}$  and  $F/F_{MSY}$  coordinates (median in blue) (ICCAT, 2020a).

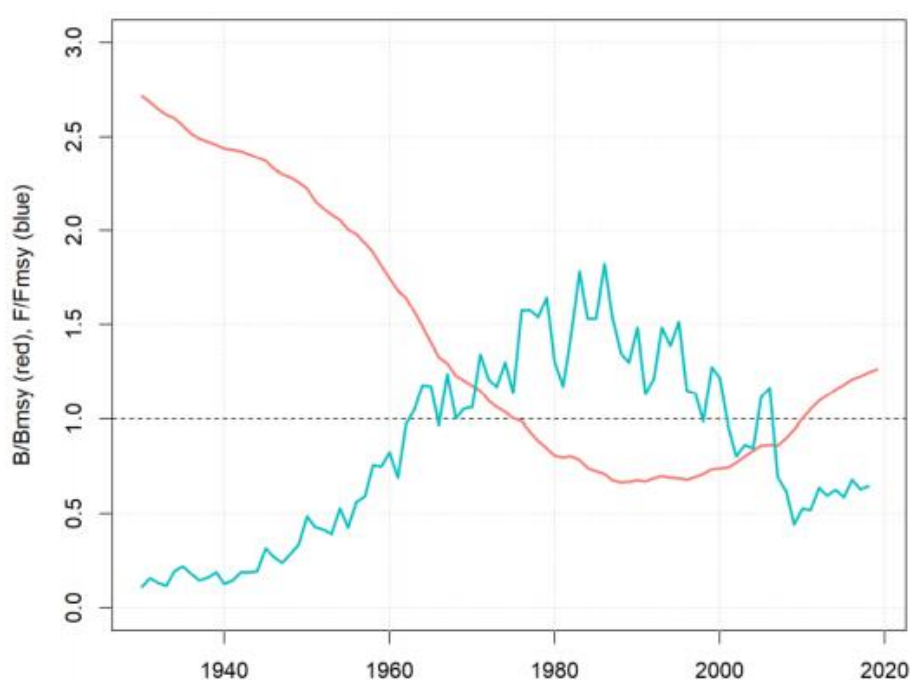
The PRI is set to be at  $B_{Lim}=0.4B_{MSY}$ . The biomass at MSY in 2019 was estimated to be 3.3 times that of  $B_{Lim}$  (2.83-3.78) Median and 80% CI for the base case. The fishing mortality should be below  $0.8F_{MSY}$  and it has been estimated (with 80% confidence intervals) to be 0.62 (0.52-0.74) (ICCAT, 2020b). In addition, there is a 98.4% probability that the stock is not overfished and no overfishing is taking place, therefore there is a high degree of certainty ( $\geq 95\%$ ile) that the stock is above the PRI and therefore **SG60, SG80 and SG100 are met**.

Stock status in relation to achievement of Maximum Sustainable Yield (MSY)			
<b>b</b>			
	Guide post	The stock is at or fluctuating around a level consistent with MSY.	There is a <b>high degree of certainty</b> that the stock has been fluctuating around a level consistent with MSY or has been above this level over recent years.

Met?	Yes	Yes
Rationale		

Considering the rationale under P1.1.1a, the available information indicates that the stock is in the green area of the Kobe plot (98,4%). The threshold point is set equal to the  $B_{MSY}$ .  $B_{2019}/B_{MSY}$  was estimated as 1.32 (1.13-1.51) and  $F_{2018}/F_{MSY}$  as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b).

The probability of being in the bottom-left yellow area (overfished but not undergoing overfishing,  $F < F_{MSY}$  and  $B < B_{MSY}$ ) is 1.6%. Relative to MSY benchmarks, the Reference Case scenario (2020 assessment) estimates that the stock has been above  $B_{MSY}$  continuously in the last decade and fishing mortality below  $F_{MSY}$  for a slightly longer period of years (Figure 1.1.1.2).



**Figure 1.1.1.2** Relative biomass (red) and fishing mortality (blue) as estimated by the Reference Case (ICCAT, 2020a).

Considering all this information **SG60, SG80 and SG100 are met.**

#### References

ICCAT (2016a); ICCAT (2020a; 2020b)

#### Stock status relative to reference points

	Type of reference point	Value of reference point	Current stock status relative to reference point
Reference point used in scoring stock relative to PRI (S1a)	$B_{LIM}$	$B_{LIM} = 0.4 * B_{MSY}$	$B_{2019} = 3.3 * B_{LIM}$
	$F_{MIN}$	$F_{MIN} = 0.1 * F_{MSY}$	
Reference point used in scoring stock relative to MSY (S1b)	$B_{THRESH}$	$B_{THRESH} = B_{MSY}$	$B_{2019}/B_{MSY} = 1.32 (1.13-1.51)$
	$F_{TAR}$	$F_{TAR} = 0.8 * F_{MSY}$	$F_{2018} = 0.62 (0.52-0.74)$

Draft scoring range and information gap indicator added at Announcement Comment Draft Report stage

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>100</b>
Condition number (if relevant)	<b>NA</b>

## PI 1.1.2 – Stock rebuilding

PI 1.1.2		Where the stock is reduced, there is evidence of stock rebuilding within a specified timeframe		
Scoring Issue		SG 60	SG 80	SG 100
a	Rebuilding timeframes			
	Guide post	A rebuilding timeframe is specified for the stock that is the <b>shorter of 20 years or 2 times its generation time</b> . For cases where 2 generations is less than 5 years, the rebuilding timeframe is up to 5 years.		The shortest practicable rebuilding timeframe is specified which does not exceed <b>one generation time</b> for the stock.
	Met?	Not scored		Not scored
Rationale				

The stock is not overfished neither is overfishing taking place therefore this PI does not get scored.

Rebuilding evaluation				
b	Guide post	Monitoring is in place to determine whether the rebuilding strategies are effective in rebuilding the stock within the specified timeframe.	There is <b>evidence</b> that the rebuilding strategies are rebuilding stocks, <b>or it is likely</b> based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the <b>specified timeframe</b> .	There is <b>strong evidence</b> that the rebuilding strategies are rebuilding stocks, <b>or it is highly likely</b> based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the <b>specified timeframe</b> .
	Met?	Not scored	Not scored	Not scored
Rationale				

The stock is not overfished neither is overfishing taking place therefore this PI does not get scored.

## PI 1.2.1 – Harvest strategy

PI 1.2.1		There is a robust and precautionary harvest strategy in place		
Scoring Issue		SG 60	SG 80	SG 100
a	Harvest strategy design			
	Guide post	The harvest strategy is <b>expected</b> to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy <b>work together</b> towards achieving stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and is <b>designed</b> to achieve stock management objectives reflected in PI 1.1.1 SG80.
	Met?	Yes	Yes	Yes
Rationale				

The management objectives of the multiannual management and conservation programme for North Atlantic albacore are those set out below (ICCAT, 2016b, Rec 16-06):

Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities (CPCs) whose vessels fish North Atlantic albacore in the Convention area shall implement this Multi-annual Management and Conservation Programme, of which the management objective for the Northern Atlantic albacore stock is:

- to maintain the stock in the green zone of the Kobe plot, with at least a 60% probability, while maximizing long-term yield from the fishery, and
- where the spawning stock biomass (SSB) has been assessed by the SCRS as below the level capable of producing MSY ( $SSB_{MSY}$ ), to rebuild SSB to or above  $SSB_{MSY}$ , with at least a 60% probability, and within as short time as possible, while maximizing average catch and minimizing inter-annual fluctuations in TAC levels.

Furthermore, [Rec. 98-08 - ICCAT, 1998] that limits fishing capacity to the average of 1993-1995, remains in force. The effect of this recommendation has not been evaluated but a general decrease of fishing mortality is observed since its implementation.

A TAC of 28,000 t was allowed for the time period 2014-2017. Following the recommendation on the harvest control rule (ICCAT, 2017a, Rec 17-04), a three-year constant TAC of 33,600 t was established for the period 2018-2020. Following this TAC, it is expected to keep the stock above the  $B_{MSY}$ . **SG 60 has been met.**

In 2016, the relative abundance of north Atlantic albacore had continued to increase over the last decades and was in the green area of the Kobe plot, with a probability of 96.8%. This probability increased to 98.4% in the 2020 stock assessment (ICCAT, 2020a), (see **Figure 1.1.1.1**). The preliminary total reported catch in 2018 was 29,363 t (below the TAC of 33,600 t), and the catch in the last five years has remained about 27,000 t suggesting that the biomass level would continue to increase and this is likely sustainable, therefore the harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80, therefore **SG80 is met.**

In 2017, MSE results highlighted that the implementation of any of the tested HCRs would meet the objective to be in the green quadrant of the Kobe plot (with a probability higher than 60%). In the 2020 stock assessment,  $B_{2019}/B_{MSY}$  was estimated as 1.32 (1.13-1.51) and  $F_{2018}/F_{MSY}$  as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b). It can therefore be deduced that the harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in PI 1.1.1 SG80 and **SG 100 is met**.

Harvest strategy evaluation				
b	Guide post	The harvest strategy is <b>likely</b> to work based on prior experience or plausible argument.	The harvest strategy may not have been fully <b>tested</b> but evidence exists that it is achieving its objectives.	The performance of the harvest strategy has been <b>fully evaluated</b> and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.
	Met?	Yes	Yes	Yes
Rationale				

In 2017, MSE results highlighted that the implementation of any of the tested HCRs would meet the objective to be in the green quadrant of the Kobe plot (with a probability higher than 60%) (**Table 1.2.1.1**, ICCAT, 2018a). In HCRs where maximum change in TAC of 20% is always applied (SC1), higher stability and higher long term yields were achieved, compared to HCRs where the 20% restriction for decrease is not used when  $B < B_{THRESHOLD}$  (SC2). Not restricting TAC reductions improves safety and might allow quicker recoveries if the stock is really overexploited, but can also cause large unnecessary TAC reductions, or even fishery closures, when the stock is healthy but it is wrongly perceived to be overexploited.

**Table 1.2.1.1** Performance of 8 HCRs, according to the performance statistics defined by Panel 2 (only one performance indicator per block is shown, which represents median values across 132 operating models). The combination of the target fishing mortality ( $F_{TARGET}$ ), Biomass threshold ( $B_{THRESHOLD}$ ) and the type of stability clause defines the HCR. Two stability clauses were considered: (SC1) maximum change in TAC of 20% always applied from one 3-year management period to the next while also always imposing a 15,000 to 50,000 t min-max TAC; and (SC2) same as SC1 but not restricting TAC reductions and not imposing a minimum TAC when  $B < B_{THRESHOLD}$ . Each HCR has a unique identification number in this table. pGr% = probability of being in the green quadrant of the Kobe plot; pBint% = probability of  $B_{THRESHOLD} > B > B_{LIM}$ ; LongY (kt) = mean yield for the period 2030-2045 in thousands of tons; MAP = mean absolute proportional change in catch (ICCAT, 2018a).

HCR				Stock Status	Safety	Catch	Stability
Number	Ftar	Bthresh	Stability clause	pGr%	pBint%	LongY (kt)	MAP (%)
1	0,80	0,80	SC2	85,5	9,0	26,5	8,3
2	1,00	0,80	SC2	78,9	13,0	29,0	8,8
3	0,80	1,00	SC2	88,6	8,3	26,9	8,3
4	1,00	1,00	SC2	84,5	9,2	26,9	8,9
1	0,80	0,80	SC1	85,8	9,3	32,1	5,6
2	1,00	0,80	SC1	74,7	15,8	34,1	6,2
3	0,80	1,00	SC1	86,0	10,4	32,2	6,0
4	1,00	1,00	SC1	77,9	14,3	35,0	6,3

Considering the above evaluation of the harvest control rules it can be deduced that the performance of the harvest strategy has been fully evaluated and considering that the stock in the 2020 stock assessment was estimated as  $B_{2019}/B_{MSY} = 1.32$  (1.13-1.51) and  $F_{2018}/F_{MSY} = 0.62$  (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b) shows that the stock is well above the  $B_{THRESH}$ , implicating that the harvest strategy is achieving its objectives including being clearly able to maintain stocks at target levels and therefore **SG60, SG80 and SG100 are met.**

Harvest strategy monitoring			
<b>c</b>	Guide post	Monitoring is in place that is expected to determine whether the harvest strategy is working.	
	Met?	Yes	
Rationale			

Catches and CPUE are monitored and reported on a yearly basis as CPCs are obligated to annually report data to ICCAT; catch data (Task I) and catch-effort (Task II). The results are reviewed every year during the species group meeting, the SCRS meeting and the Commission meeting. According to Rec 17-04 (ICCAT, 2017a) a new stock assessment shall be conducted every three years, with the last one having occurred in 2020. Monitoring is in place and it provides all the information to test whether the harvest strategy is working, therefore **SG60 is met.**

Harvest strategy review			
<b>d</b>	Guide post	The harvest strategy is periodically reviewed and improved as necessary.	
	Met?		No
Rationale			

In 2017, the Commission adopted the interim HCR described in **Figure 1.2.2.1**, with a maximum TAC of 50,000 t and a maximum change of 20% when  $B_{CUR} > B_{THR}$ . Its application established a TAC of 33,600 t for 2018-2020 (ICCAT, 2017a, Rec. 17-04) and the possibility to carry over some unused portions of the quotas to be caught later in time (ICCAT, 2016b, Rec. 16-06) remained. According to Rec 17-04 (ICCAT, 2017a), the Commission shall review the interim HCR in 2020 with a view to adopting a long-term management procedure. Also, the stock assessment should be updated every three years. This has been done as the last assessment took place in 2020. In addition, Sculley (2018) reviewed the code and algorithms used within the MSE for the target species.

At this stage there is no information that the interim HCR has been reviewed in 2020, therefore at this stage **SG 100 is not met.**

Shark finning				
<b>e</b>	Guide post	It is <b>likely</b> that shark finning is not taking place.	It is <b>highly likely</b> that shark finning is not taking place.	There is a <b>high degree of certainty</b> that shark finning is not taking place.
	Met?	NA	NA	NA
Rationale				



This SI need not be scored if sharks are not a target species.

Review of alternative measures				
f	Guide post	There has been a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock, and they are implemented, as appropriate.
	Met?	NA	NA	NA
Rationale				

The fishing gears used by the two UoAs (troll and pole & line) catch the fish one by one and are highly selective gears. Therefore, in this case, damaged or small fish is not common. Therefore, the mortality caused by the UoAs on the North Atlantic albacore stock due to unwanted catches is considered to be negligible. Based on the above this SI was considered to be not relevant.

#### References

ICCAT (1998); ICCAT (2016b); ICCAT (2017a); ICCAT (2018a); ICCAT (2020a; 2020b); Sculley (2018)

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>90</b>
Condition number (if relevant)	<b>NA</b>

## PI 1.2.2 – Harvest control rules and tools

PI 1.2.2		There are well defined and effective harvest control rules (HCRs) in place		
Scoring Issue		SG 60	SG 80	SG 100
a	HCRs design and application			
	Guide post	<b>Generally understood</b> HCRs are in place <b>or available</b> that are <b>expected</b> to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	<b>Well defined</b> HCRs are <b>in place</b> that <b>ensure</b> that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock <b>fluctuating around</b> a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock <b>fluctuating at or above</b> a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, <b>most</b> of the time.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

According to Rec 17-04 (ICCAT, 2017a) the following harvest control rules have been implemented.

For the purpose of the multiannual management and conservation programme for the North Atlantic albacore, the following interim reference points are established:

- $B_{THRESH} = B_{MSY}$
- $B_{LIM} = 0.4 * B_{MSY}$
- $F_{TAR} = 0.8 * F_{MSY}$
- $F_{MIN} = 0.1 * F_{MSY}$

The North Atlantic albacore stock assessment shall be conducted every three (3) years, and the harvest control rule (HCR) sets a 3-year constant annual total allowable catch (TAC) using the following three values estimated from the stock assessment. For each value the median values as reported in the summary table of the SCRS report shall be used:

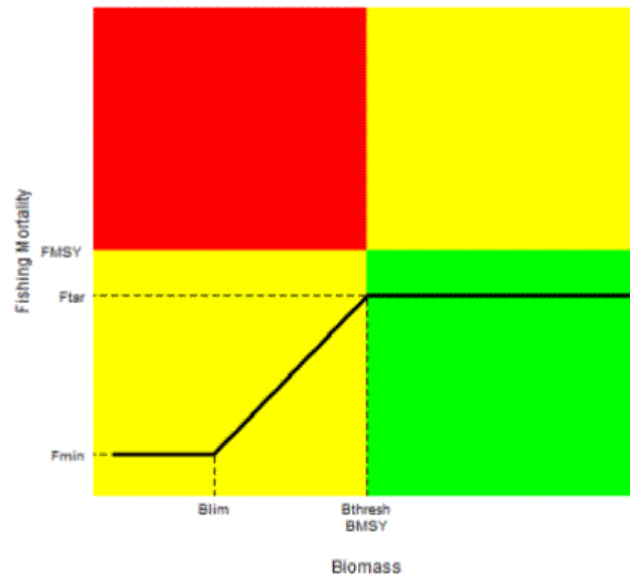
- The estimate of current stock biomass ( $B_{curr}$ ) with respect to  $B_{MSY}$ .
- The estimate of the stock biomass at Maximum Sustainable Yield ( $B_{MSY}$ ).
- The estimate of the fishing mortality at MSY ( $F_{MSY}$ ).

The HCR has the form shown in **Figure 1.2.2.1** and the following control parameters are set as per below:

- The biomass threshold level ( $B_{THRESH}$ ) is equal to the biomass able to deliver the maximum sustainable yield ( $B_{THRESH} = B_{MSY}$ ).
- A fishing mortality target corresponding to 80% of  $F_{MSY}$  ( $F_{TAR} = 0.8 * F_{MSY}$ ) will be applied when the stock status is at, or above, the threshold level ( $B_{THRESH}$ ).

In 2017, the Commission adopted the interim HCR described in **Figure 1.2.2.1**, with a maximum TAC of 50,000 t and a maximum change of 20% when  $B_{CUR} > B_{THR}$ . Its application established a TAC of 33,600 t for 2018-2020 (ICCAT, 2017a, Rec. 17-04) and the possibility to carry over some unused portions of the quotas to be caught later in time (ICCAT, 2016b, Rec. 16-06) remained.

Furthermore, Recommendation 98-08 (ICCAT, 1998), that limits fishing capacity to the average of 1993-1995, remains in force. The effect of this recommendation has not been evaluated but a general decrease of fishing mortality is observed since its implementation.



**Figure 1.2.2.1** Graphic form of the HCR adopted in Rec 17-04.  $B_{LIM}$  (set at  $0.4B_{MSY}$ ) is the limit biomass reference point,  $B_{THRESH}$  (set at  $B_{MSY}$ ) is the point below which fishing mortality decreases linearly,  $F_{TAR}$  (set at  $0.8F_{MSY}$ ) is the target fishing mortality rate to be applied to achieve the management objectives, and  $F_{MIN}$  (set at  $0.1F_{MSY}$ ) is the fishing mortality to be applied when  $B < B_{LIM}$  (ICCAT, 2018a).

Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached (**Figure 1.2.2.1**), which are expected to keep the stock fluctuating around a  $B_{TRESH}$ , which is consistent with MSY, therefore **SG60 and SG80 has been met**.

The target species is not a key LTL and therefore MSY is considered to be an ecologically appropriate target level, most of the time. Considering that the results show that the probability of the stock currently being in the green area of the Kobe plot (not overfished and not undergoing overfishing,  $F < F_{MSY}$  and  $B > B_{MSY}$ ) is 98% while the probability of being in the yellow area (overfished,  $B < B_{MSY}$ ) is 1.6% and the probability of being in the red area (overfished and undergoing overfishing,  $F > F_{MSY}$  and  $B < B_{MSY}$ ) is 0% (ICCAT, 2020a), it can be concluded that the HCR is expected, though not with time-tested confidence, to keep the stock **fluctuating at or above** a target level consistent with MSY, therefore **SG100 is met**.

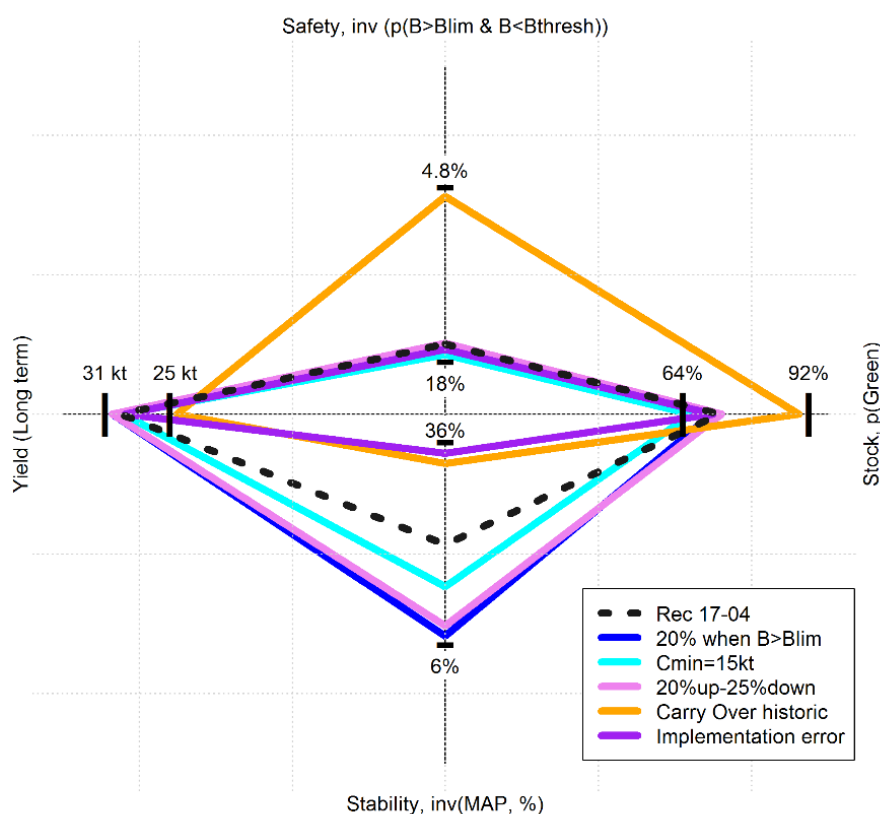
HCRs robustness to uncertainty			
<b>b</b>	Guide post	The HCRs are likely to be robust to the main uncertainties.	The HCRs take account of a <b>wide</b> range of uncertainties including the ecological role of the stock, and there is <b>evidence</b> that the HCRs are robust to the main uncertainties.
	Met?	Yes	No
Rationale			

In 2017, MSE results highlighted that the implementation of any of the tested HCRs would meet the objective to be in the green quadrant of the Kobe plot (with a probability higher than 60%) (**Table 7.2.1.5**). In HCRs where maximum change in TAC of 20% is always applied (SC1), higher stability and higher long term yields were achieved, compared to HCRs where the 20% restriction for decrease is not used when  $B < B_{THRESHOLD}$  (SC2). Not restricting TAC reductions improves safety and might allow quicker recoveries if the stock is really overexploited, but can also cause large unnecessary TAC reductions, or even fishery closures, when the stock is healthy but it is wrongly perceived to be overexploited.

In 2018, the HCR adopted in Rec 17-04 (ICCAT, 2017a) was tested together with variants accounting for:

- the carry over,
- the effect of setting a lower TAC limit of 15,000t,
- the effect of applying the 20% stability clause also when  $B_{CUR} > B_{LIM}$  and  $B_{CUR} < B_{THR}$ , and
- the effect of 20% maximum TAC reduction and 25% maximum TAC increase when  $B_{CUR} > B_{LIM}$  and  $B_{CUR} < B_{THR}$ .

Results indicate that the HCR adopted in 17-04 and its new variants achieve ICCAT's management objective of maintaining stocks in the green quadrant of the Kobe plot with at least 60% probability. Compared to a perfect implementation of the TAC, the carry over scenario (i) produced lower yield and stability, but better stock condition and safety. The carry over effect was tested assuming that historical differences between catch and TAC would remain in the future. The three other scenarios (ii, iii, iv) led to more stability together with comparable yield and stock condition (**Figure 1.2.2.2**).



**Figure 1.2.2.2** Spider plots representing the relative performance of the HCR adopted in Rec 17-04, as well as different variants, namely the effect of the carry over (orange), the effect of setting a lower TAC limit of 15,000t (light blue), the effect of applying the 20% stability clause also when  $B_{CUR} > B_{LIM}$  and  $B_{CUR} < B_{THR}$  (dark blue), and the effect of 25% maximum TAC reduction and 20% maximum TAC increase when  $B_{CUR} > B_{LIM}$  and  $B_{CUR} < B_{THR}$  (pink). The purple scenario represents an extreme scenario of imperfect implementation of the TAC, (ICCAT, 2018a).

Two advances were made in 2020 (ICCAT, 2020a): First, following the definitions of exceptional circumstances being developed for this stock, the impact of one or more indices not being updated for the 2020 stock assessment was evaluated. Second, new figures were generated to evaluate the fits of the indices available in 2013 in the Operating Models that were conditioned from the scenarios developed in the 2013 stock assessment. Overall, these results suggest that in the exceptional circumstance that one or more index was not available for stock assessments, the HCR would still achieve management objectives.

As shown above, the HCRs are likely to be robust to the main uncertainties, namely the effect of the carry over, the effect of setting a lower TAC limit of 15,000t, the effect of applying the 20% stability clause also when  $B_{CUR} > B_{LIM}$  and  $B_{CUR} < B_{THR}$ , and the effect of 25% maximum TAC reduction and 20% maximum TAC increase when  $B_{CUR} > B_{LIM}$  and  $B_{CUR} < B_{THR}$ , therefore **SG80 is met**.

Although, the HCRs take account of a wide range of uncertainties, and that there is evidence that the HCRs are robust to the main uncertainties, there are still uncertainties regarding the original stock assessment as for example that the structural assumptions regarding selectivity do not fully account for shift in size frequency over time. Also, for one model the information contained in the length composition was inconsistent with regard to any type of definitive trends in recruitment signal, and therefore this guidepost is only partially met and **SG100 is not reached**.

HCRs evaluation				
C	Guide post	There is <b>some evidence</b> that tools used <b>or available</b> to implement HCRs are appropriate and effective in controlling exploitation.	<b>Available evidence indicates</b> that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	<b>Evidence clearly shows</b> that the tools in use are effective in achieving the exploitation levels required under the HCRs.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

In 2017, the Commission adopted the interim HCR described in **Figure 1.2.2.1**, with a maximum TAC of 50,000 t and a maximum change of 20% when  $B_{CUR} > B_{THR}$ . Its application established a TAC of 33,600 t for 2018-2020 (ICCAT, 2017a, Rec. 17-04) and the possibility to carry over some unused portions of the quotas to be caught later in time (ICCAT, 2016b, Rec. 16-06) remained. Since the establishment of the TAC in the year 2001, catch remained substantially below the TAC in all but four years (**Figure 7.2.1.1** in the background section). To support this, available information indicates that the stock is in the green area of the Kobe plot (98,4%).  $B_{2019}/B_{MSY}$  was estimated as 1.32 (1.13-1.51) and  $F_{2018}/F_{MSY}$  as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b), hence the stock is not overfished and overfishing is not taking place, therefore it can be said that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCR's, therefore **SG60 and SG80 are met**.

This HCR has only just been implemented, therefore it is too early to say the evidence clearly shows that the tools in use are effective, therefore **SG100 is not met** at this time.

## References

ICCAT (1998); ICCAT (2016b); ICCAT (2017a); ICCAT (2018a); ICCAT (2020a; 2020b)

Draft scoring range

**≥80**

Information gap indicator

Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score

85

Condition number (if relevant)

NA

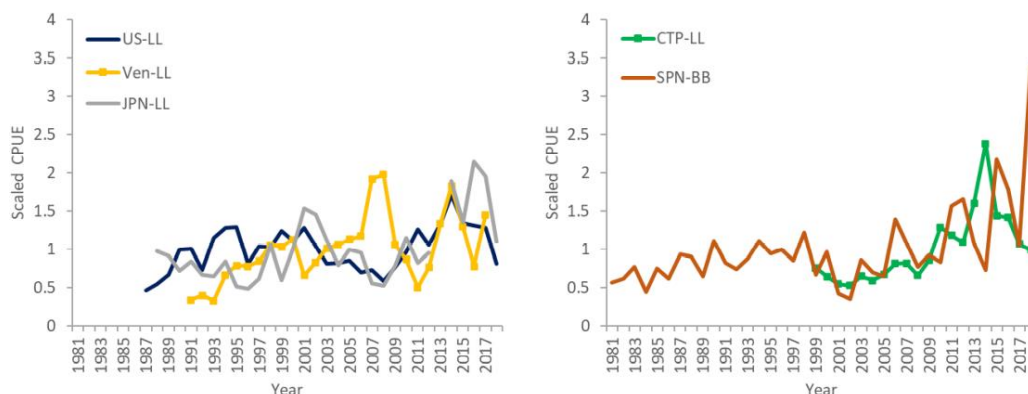
## PI 1.2.3 – Information and monitoring

PI 1.2.3		Relevant information is collected to support the harvest strategy		
Scoring Issue		SG 60	SG 80	SG 100
a	Range of information			
	Guide post	<b>Some</b> relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	<b>Sufficient</b> relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.	A <b>comprehensive range</b> of information (on stock structure, stock productivity, fleet composition, stock abundance, UoA removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

Catches and CPUE are monitored and reported on a yearly basis as CPCs are obligated to annually report data to ICCAT; catch data (Task I) and catch-effort (Task II). The results are reviewed every year during the species group meeting, the SCRS meeting and the Commission meeting, therefore some relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy; **SG60 is met**.

Four longline and one bait boat CPUE indices were selected to be used in a production model framework. It was assumed that different CPUE series reflected local abundance available to different fleets operating in different areas, and that overall they represented the global population trend. On this basis, the 5 CPUEs were equally weighted and used jointly in the base case scenario. Despite their variable pattern, these indices showed an overall increasing trend towards the end of the time series (**Figure 1.2.3.1**), which could be reflecting the increasing trend of the stock during this period of relatively low catch. These indices were updated and also used in the 2020 assessment.

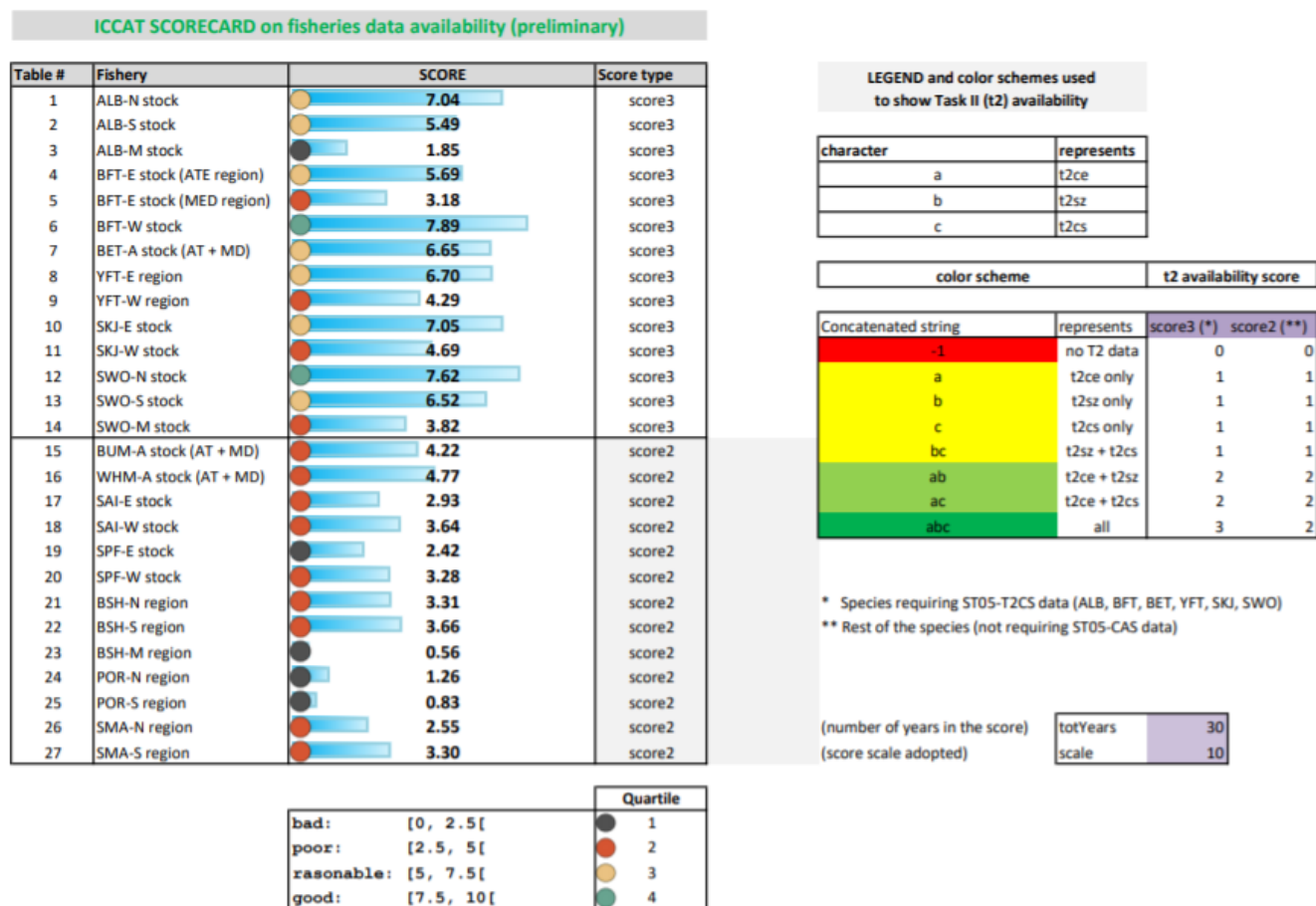
No fisheries independent data is available, but sufficient relevant information related to stock structure, stock productivity, fleet composition (selectivity) and other data are available to support the harvest strategy, therefore **SG80 is met**.





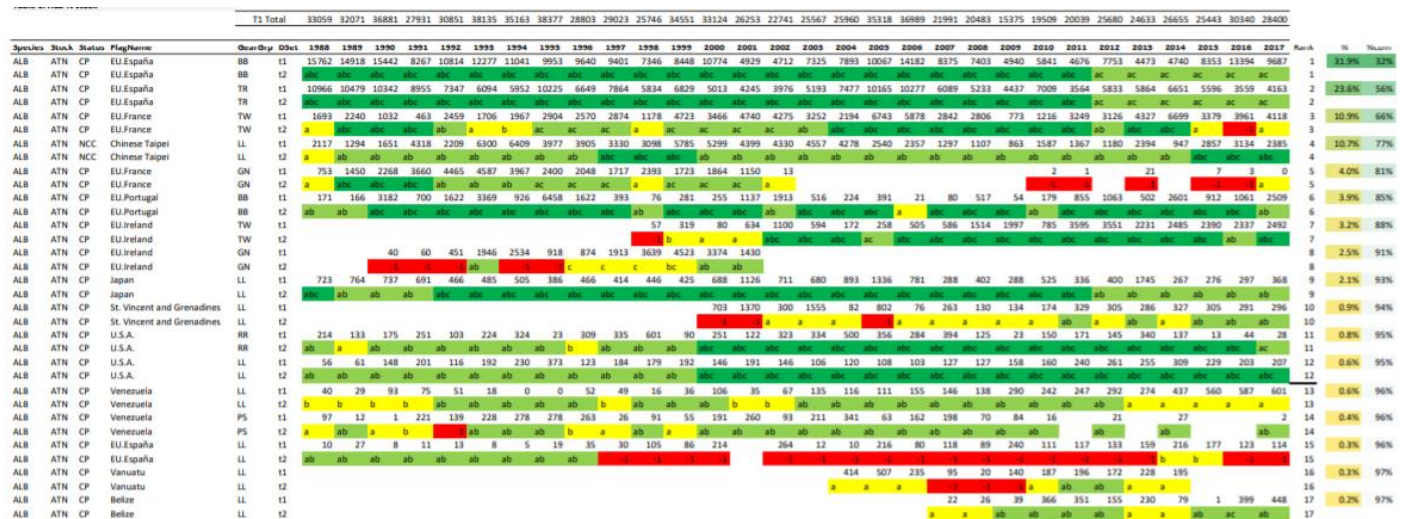
**Figure 1.2.3.1** North Atlantic albacore. Standardized catch rate indices used in the 2016 stock assessment from the surface fisheries, which take mostly juvenile fish, and from the longline fisheries, which take mostly adult fish (ICCAT, 2020a).

According to the ICCAT scoreboard of data availability provided in the latest biennial report prepared by the ICCAT Secretariat (ICCAT, 2019b), the score for the North Atlantic albacore was 3, where 4 is the highest score (See **Figure 1.2.3.2** below).



**Figure 1.2.3.2** ICCAT scoreboard on data availability (preliminary study). Source: ICCAT, 2019b.

At a national level, albacore can only be targeted using troll or pole & line. These two Spanish fleets account for more than 50% of the total catches of this stock (**Figure 1.2.3.3**). The level of reporting of these two Spanish fleets on Task I and Task II is considered optimal, as shown in **Figure 1.2.3.3**.



**Figure 1.2.3.3** SCRS statistics (Task-I and Task-II) for the North Atlantic albacore stock, major fishery (flag/gear combinations ranked by order of importance) and year (1996 to 2016). Only the most important fisheries (representing  $\pm 97.5\%$  of Task-I total catch) are shown. For each data series, Task I (DSet= "t1", in tonnes) is visualised against its equivalent Task II availability (DSet= "t2") scheme. The Task-II colour scheme, has a concatenation of characters ("a"= T2CE exists; "b"= T2SZ exists; "c"= CAS exists) that represents the Task-II data availability in the ICCAT-DB. See the legend for the colour scheme definitions provided above in **Figure 1.2.3.2**. Source: ICCAT, 2019b.

While information is sufficient, it is not comprehensive. There is considerable environmental data not directly used in the current harvest strategy. In addition, data on age and abundance are limited and understanding of the population dynamics is incomplete, therefore **SG100 is not met**.

Monitoring				
b	Guide post	Stock abundance and UoA removals are monitored and <b>at least one indicator</b> is available and monitored with sufficient frequency to support the harvest control rule.	Stock abundance and UoA removals are <b>regularly monitored at a level of accuracy and coverage consistent with the harvest control rule</b> , and <b>one or more indicators</b> are available and monitored with sufficient frequency to support the harvest control rule.	<b>All information</b> required by the harvest control rule is monitored with high frequency and a high degree of certainty, and there is a good understanding of inherent <b>uncertainties</b> in the information [data] and the robustness of assessment and management to this uncertainty.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

Catches and CPUE are monitored and reported on a yearly basis as CPCs are obligated to annually report data to ICCAT; catch data (Task I) and catch-effort (Task II). The results are reviewed every year during the species group meeting, the SCRS meeting and the Commission meeting. Four longline and one baitboat CPUE indices are available to be used in a production model framework (Figure 1.2.3.1). Different CPUE series reflect local abundance available to different fleets operating in different areas, and overall they represent the global population trend. It is evident that all information required by the harvest control rule is monitored with high frequency (annually); **SG60, SG80 are met**.

Even though stock abundance and fishery removals are regularly monitored at a level of accuracy and coverage consistent with the HCR, the monitoring program, however, does not cover all information, and not all information from all fleets is recorded with a high degree of certainty, therefore **SG100 is not met**.

Comprehensiveness of information			
<b>C</b>	Guide post	There is good information on all other fishery removals from the stock.	
	Met?	Yes	

#### Rationale

Total catches of the P1 stock is broken down into all nations and all gears. Contracting Parties and Cooperating non-Contracting Parties, Entities and Fishing Entities (CPCs) require the collection of bycatch and discard data in their existing domestic scientific observer programs and logbook programs (Rec 11-10 - ICCAT, 2011a).

The level of reporting of most of CPCs targeting this stock is relatively good. The most relevant CPCs have been reporting Task I and II data since at least 1996, with the only exception of France which failed to report Task II data in 2016. No major issues regarding IUU fishing affecting this stock have been raised at ICCAT level. As already mentioned above in SI(a), the ICCAT scoreboard of data availability provided in ICCAT (2019b) gives the North Atlantic albacore stock a score of 3, where 4 is the highest score (see **Figure 1.2.3.3** above).

Based on the information presented the team concludes that there is sufficient information on all other fishery removals from the stock. Thus, **SG80 is met**.

#### References

ICCAT (2011a); ICCAT (2019b)

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	80
Condition number (if relevant)	NA

## PI 1.2.4 – Assessment of stock status

PI 1.2.4		There is an adequate assessment of the stock status		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Appropriateness of assessment to stock under consideration			
	Guide post	The assessment is appropriate for the stock and for the harvest control rule.		The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA.
	Met?		Yes	No
Rationale				

In the 2013 assessment, several model formulations (MFCL, SS3, VPA and ASPIC) with varying degrees of complexity were used (ICCAT, 2016a). This allowed to model different scenarios that represented different hypotheses, and to characterize the uncertainty around the stock status. The results showed that although the range of estimated management benchmarks was relatively wide, most models were in agreement that the stock was overfished, but not currently undergoing overfishing. The analyses conducted in 2013 took a large amount of data preparation and scrutiny, and the group suggested that future assessment updates be conducted using simpler models (e.g., production models).

In 2016, the Biodyn algorithm for a biomass dynamic model based on ADMB, which is available in the mpb package of the FLR project ([www.flr-project.org](http://www.flr-project.org)) repository was used to conduct stock assessment of the North Atlantic albacore. Biodyn was validated against ASPIC, as it provided the same results using the 2013 assessment inputs and assumptions, and it is the algorithm that is used in the MSE framework.

For the 2020 assessment (ICCAT, 2020a), the group selected 5 CPUE series to be used in a production model framework (**Figure 1.2.3.1** above). Major features relevant to the biology of the species are shown in **Table 1.2.4.1**. The assessment is appropriate for the stock and for the harvest control rule, therefore **SG80 is met**.

**Table 1.2.4.1.** Biological parameters and conversion factors for the North Atlantic albacore stock used within the stock assessment (ICCAT, 2016a).

<i>North Stock</i>	<i>Parameters</i>	<i>Source</i>
Growth	$L_{\infty} = 122.198\text{cm}; k = 0.21; t_0 = -1.338$	Santiago and Arrizabalaga, 2005
	$L_{\infty} = 124.74\text{cm}; k = 0.23; t_0 = -0.9892$	Bard, 1981
Length-weight relationship	$a = 1.339 \times 10^{-5} \quad b = 3.1066$	Santiago, 1993
Maturity	50% of mature fish at 90 cm (age 5)	Bard, 1981
Natural mortality	$M = 0.3$ per year 0.63; 0.46; 0.38; 0.34; 0.31; 0.29; 0.31; 0.34; 0.38; 0.44; 0.55;	Anon., 2010
M at age (1 to 15)	0.55; 0.55; 0.55; 0.55	

Even though the assessment is appropriate for the stock and for the harvest control rule and although biological information exists and was used in the past in more sophisticated assessments, the more simplified assessment using production models does not incorporate life-history information, or other information on the nature of the fishery, therefore **SG100 is not met**.

Assessment approach			
<b>b</b>	Guide post	The assessment estimates stock status relative to generic reference points appropriate to the species category.	The assessment estimates stock status relative to reference points that are appropriate to the stock and can be estimated.
	Met?	Yes	Yes
Rationale			

In 2016 (ICCAT, 2016a), the estimated population was projected under both alternative TACs and HCRs, as combinations of target fishing mortality ( $F_{\text{TAR}}$ ), threshold biomass ( $B_{\text{THRESH}}$ ) and an interim biomass limit reference point ( $B_{\text{LIM}}$ ) of  $0.4 B_{\text{MSY}}$ , therefore the assessment estimates stock status relative to generic reference points appropriate to the species category; **SG60 is met**.

During 2017, the testing of candidate reference points (e.g.,  $SSB_{\text{THRESHOLD}}$ ,  $SSB_{\text{BLIM}}$  and  $F_{\text{TARGET}}$ ) and associated harvest control rules (HCRs) that would support the management objective were refined, a set of alternative HCRs were tested by projecting a wide range of simulated albacore populations in a management strategy evaluation (MSE) framework (ICCAT, 2018a). The MSE used was tailored specifically to support the process to discuss and eventually adopt an HCR for North Atlantic albacore in 2017 but not to provide TAC recommendation, therefore it is evident that the assessment estimates stock status relative to reference points that are appropriate to the stock; **SG80 is met**.

Uncertainty in the assessment				
c	Guide post	The assessment <b>identifies major sources</b> of uncertainty.	The assessment <b>takes uncertainty into account</b> .	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a <b>probabilistic</b> way.
	Met?	Yes	Yes	Yes
Rationale				

The ICCAT scientific working group identified several uncertainties which were tested (ICCAT, 2016). Several sensitivity analyses, namely considering a logistic production function, the information content of the data, i.e., length of the catch time series (truncated at 1975), and the impact of dropping one of the five CPUE indices at a time. Historical absolute biomass estimates were not very sensitive to the effect of truncating the time series in 1975 and the production functions estimated in both scenarios resulted in a similar increase in biomass in the recent years. However, other scenarios demonstrated higher sensitivity of historical absolute biomass trends (in the period prior to 1975 for which only catch information was considered) as well as  $K$  and  $r$ , to the data used (Figure 1.2.4.1). Relative to  $MSY$  benchmarks, the historic sensitivities were reduced, but recent status indicators were more sensitive. When a logistic function was assumed in the biomass dynamic assessment model lower values of  $B/B_{\text{MSY}}$  were predicted for the trajectory over the whole time series, while excluding the Chinese Taipei longline resulted in much larger values



of  $B/B_{MSY}$  in the recent period. The sensitivity analyses with respect to the other indices did not show strong deviations from the Base Case and all predicted the stock to be in the green quadrant, although the recent status varied across scenarios Figure 1.2.4.2.

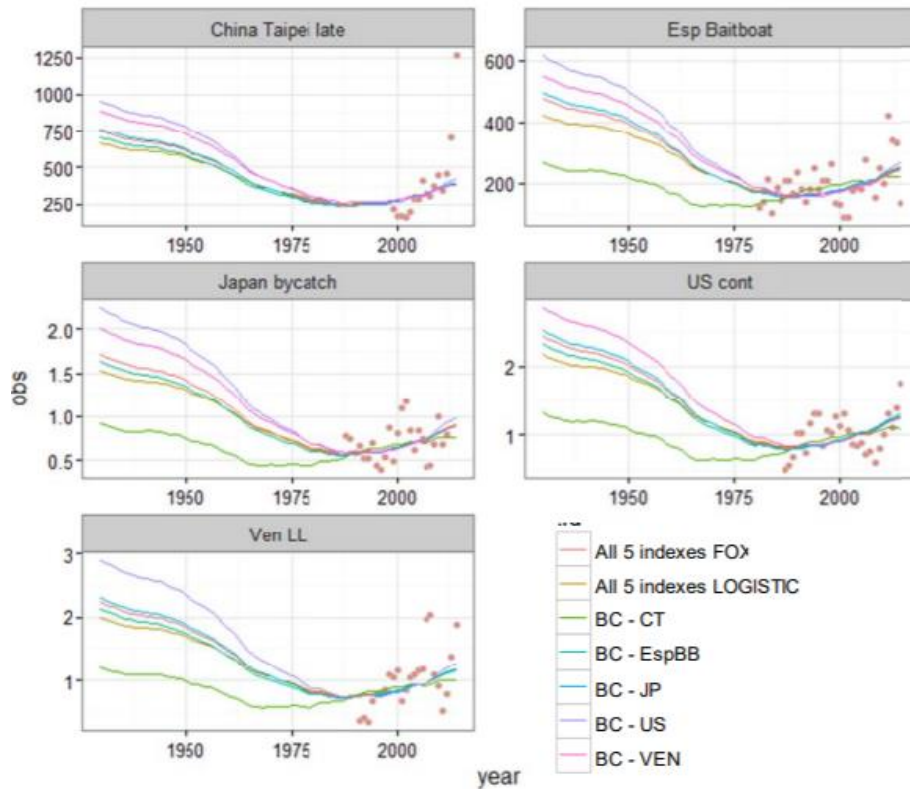


Figure 1.2.4.1. Estimated historical stock trends for the Base Case (BC, red) and sensitivity runs (Base Case with logistic production model and sensitivities removing one single fleet each time). The observed fleets' CPUE series (dots, in different panels) for the Base Case are also shown.

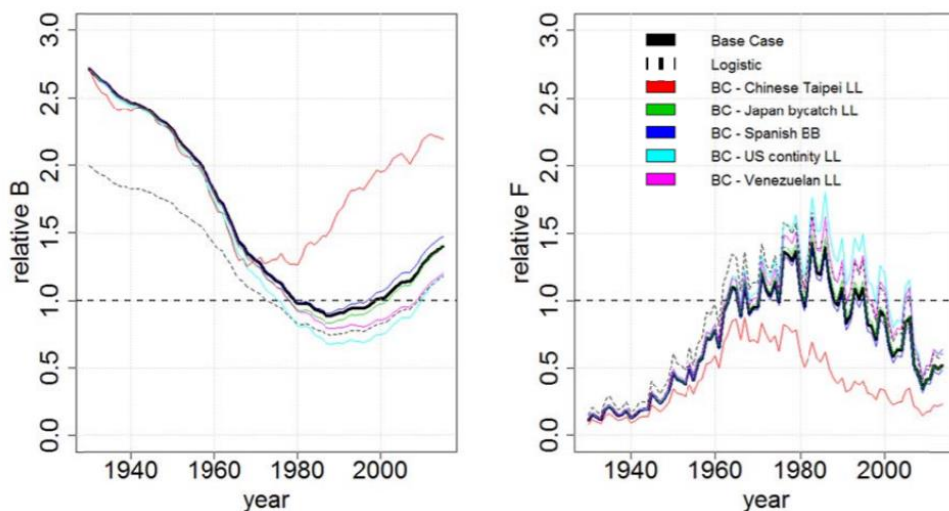


Figure 1.2.4.2. Estimated relative biomass ( $B/B_{MSY}$ , left) and fishing mortality ( $F/F_{MSY}$ , right) for the Base Case scenario (black line) and sensitivity runs (Base Case with logistic production function and sensitivities removing on single index each time).

Considering the above, the assessment takes into account uncertainty and is evaluating stock status relative to reference points in a probabilistic way. The probability of the stock currently (ICCAT, 2020a) being in the green area of the Kobe plot (not overfished and not undergoing overfishing,  $F < F_{MSY}$  and  $B > B_{MSY}$ ) is 98.4% while the probability of being in the yellow area (overfished,  $B < B_{MSY}$ ) is 1.6%. The probability of being in the red area (overfished and undergoing overfishing,  $F > F_{MSY}$  and  $B < B_{MSY}$ ) is 0%. Thus, **SG60, SG80 and SG100 are met.**

Evaluation of assessment			
d	Guide post	The assessment has been tested and shown to be robust. Alternative hypotheses and assessment approaches have been rigorously explored.	
	Met?		Yes
Rationale			

In the 2013 assessment, several model formulations (MFCL, SS3, VPA and ASPIC) with varying degrees of complexity were used. This allowed to model different scenarios that represented different hypotheses, and to characterize the uncertainty around the stock status. Sensitivities surrounding natural mortality, selectivity, inclusion of tagging data, sex separated maturity ogives, catch at age data and different recruitment assumptions, amongst others, were tested using the models above. The results showed that although the range of estimated management benchmarks was relatively wide ( $SSB/SSB_{MSY}$  was estimated to be between 0.39 and 1.49), most models were in agreement that the stock was overfished, but not currently undergoing overfishing. Model validation tests such as hindcastings or prediction skill with outside data were not conducted. The analyses conducted in 2013 took a large amount of data preparation and scrutiny, and the group suggested that future assessment updates be conducted using simpler models (e.g., production models). In 2016, the Biodyn algorithm for a biomass dynamic model based on ADMB, which is available in the mpb package of the FLR project ([www.flr-project.org](http://www.flr-project.org)) repository was used to conduct stock assessment of the North Atlantic albacore. Biodyn was validated against ASPIC, as it provided the same results using the 2013 assessment inputs and assumptions, and it is the algorithm that is used in the MSE framework (ICCAT, 2016a).

Considering the above, the assessment has been tested and shown to be robust. Alternative hypotheses and assessment approaches have been rigorously explored, therefore **SG100 has been met.**

Peer review of assessment			
e	Guide post	The assessment of stock status is subject to peer review.	The assessment has been <b>internally and externally</b> peer reviewed.
	Met?	Yes	No
Rationale			

The SCRS meet annually and discuss the data, model assumptions and results. This meeting is attended by numerous stock assessment scientists, therefore the assessment of the stock status is subject to peer review. **SG80 is met.**

The latest benchmark assessment on the albacore stock was in 2013 and it was externally reviewed by Adam Doak Langley. This can be checked in the list of participants of the report issued (ICCAT, 2013), however the report of this



review is not available anywhere. Further, in 2018 an external peer review was conducted (Sculley, 2018) and it confirmed that, overall, the MSE framework appears to be scientifically sound and robust to uncertainty. However, it cannot be shown that the actual assessment has been reviewed externally, therefore **SG100 has not been met.**

## References

ICCAT (2013); ICCAT (2016a); ICCAT (2018a); ICCAT (2020a); Sculley (2018).

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

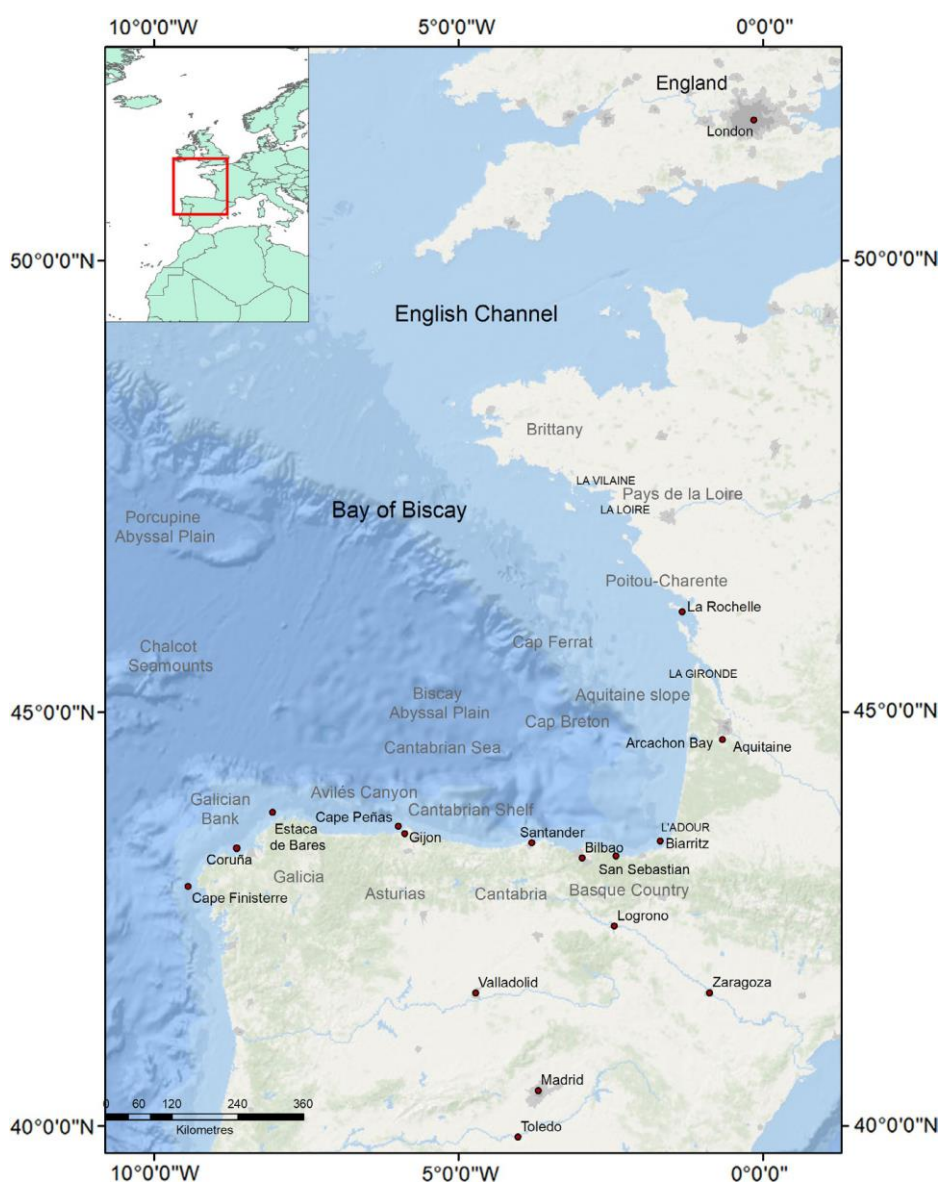
Overall Performance Indicator score	85
Condition number (if relevant)	NA

## 7.3 Principle 2

### 7.3.1 Principle 2 background

#### 7.3.1.1 Bay of Biscay: context

The Bay of Biscay is located in the temperate (NE) North-East Atlantic Ocean, between (NW) North-West France (offshore of Brittany) and NW Spain (Galicia) (**Figure 7.3.1.1**). The Bay is included in the Lusitanian province and within the South European Atlantic Shelf ecoregion (Spalding *et al.*, 2007). The name of this ecoregion is also used in the European Marine Strategy Framework Directive (MSFD) and includes the Bay of Biscay and the Iberian coasts. The limits of the Bay are Cape Finisterre, at 43°N, in Galicia (NW Spain), and 48°N, in Brest (NW France) (Lavín *et al.*, 2006). In total, the Bay occupies around 175,000 km<sup>2</sup>.

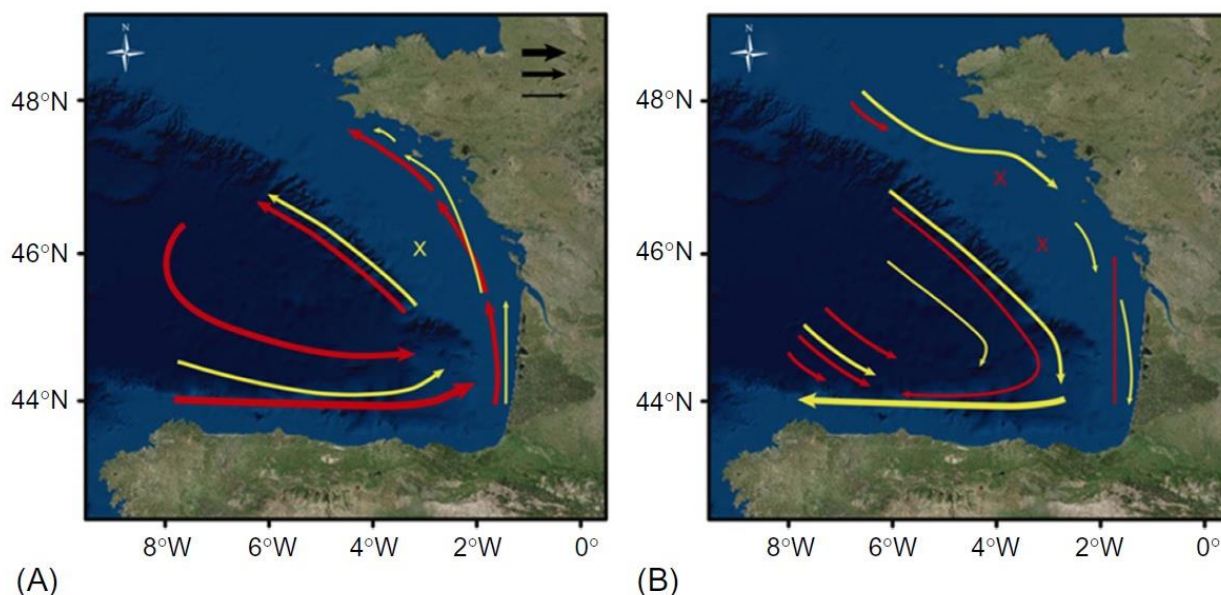


**Figure 7.3.1.1** Map of the Bay of Biscay, showing the main biogeographical characteristics and the locations mentioned in the text. Source: Borja *et al.*, 2019.

The Bay of Biscay is a well-differentiated geomorphological unit, orientated toward the NW. The abyssal basin, which represents around 50% of the total surface, has a mean depth of 4800 m, being adjacent to the Porcupine plain in the northern part, but separated from the Iberian Abyssal Basin and the West Iberian Margin by the Charcot Seamounts and the Galician Bank (Lavín *et al.*, 2006). In turn, the continental shelf in the south of the Bay is quite narrow (between 12 and 30 km), being much wider on the French coast, especially in the north, where it can be more than 150 km wide. The continental slope, an area of transition between the shelf and the deep sea, is very pronounced, with a slope of the order of 10%–12%, even more in the south-eastern part. The slope is formed by three main areas with different orientation, the Armorican slope NW–SE, the Aquitaine slope N–S, and the Cantabrian slope with an E–W orientation. This slope is cut by numerous canyons, which have generally narrow, steep-sided, linear, and sinuous channels, the most conspicuous being the Cap Breton Canyon, where the 1000 m isobath is found only 3 km from the coast (Lavín *et al.*, 2006). The deep-sea valleys allow continental sediments to be transported to oceanic basins from the main rivers (Vilaine, Loire, Gironde, and Adour), all of them in France, while the rivers in northern Spain are shorter and with small flows.

#### a. Oceanographic features

The circulation in the Bay of Biscay is complex and depends on bathymetry, tides, density-driven currents, and wind (Borja *et al.*, 2019). The main macroscopic features are summarized in the classical figure created by Koutsikopoulos and Le Cann (1996) and modified by Charria *et al.* (2013) (**Figure 7.3.1.2**). The oceanic area of the bay, which is part of the North Atlantic circulation, is characterized by a weak ( $<2 \text{ cm s}^{-1}$ ) and variable anticyclonic circulation (Koutsikopoulos & Le Cann, 1996; Pingree, 1993).



**Figure 7.3.1.2** Circulation scheme within the Bay of Biscay: (A) circulation in autumn (red) and winter (yellow), (B) circulation in spring (red) and summer (yellow). Arrow thickness is proportional to the intensity of currents, as marked by black arrows in the first frame, which corresponds to values higher than  $5 \text{ cm s}^{-1}$ ,  $3\text{--}5 \text{ cm s}^{-1}$ , and  $1\text{--}3 \text{ cm s}^{-1}$ , respectively. Crosses mark slack zones. Source: Borja *et al.*, 2019.

A poleward current transporting warm and salty water develops along the Atlantic coast of the Iberian Peninsula during autumn and winter (Frouin *et al.*, 1990; Haynes & Barton, 1990). This current, which attains velocities around  $25 \text{ cm s}^{-1}$ , is trapped within a narrow band of approximately 50 km from the shelf edge and extends down to 400 m. The current is mostly density driven (Huthnance, 1984) and reaches the Cantabrian slope around Christmas, which is the reason why it was named Navidad (Christmas in Spanish) by Pingree and Le Cann (1992a). During summer, owing to westerly winds, a surface equatorward current can develop, which sinks and displaces offshore the slope current (Borja *et al.*, 2019). Specifically, Charria *et al.* (2013) found a general northwesterly circulation over the deep ocean, a cyclonic along-slope circulation with a poleward slope current along the Aquitaine, Armorican and Celtic shelves ( $3.5$  to  $7 \text{ cm s}^{-1}$ ), a marked winter eastward flow along the North Spanish slope (larger than  $5 \text{ cm s}^{-1}$  in average), and weak currents on the continental shelf from April to September (lower than  $2.5 \text{ cm s}^{-1}$  in summer). Further circulation patterns were also identified and quantified as the westward current in spring and summer along the North Spanish slope and shelf with speeds reaching  $13.5 \text{ cm s}^{-1}$ . A cyclonic circulation cell was also confirmed on the Armorican shelf from October to March, and intense poleward currents (about  $10\text{--}15 \text{ cm s}^{-1}$ ) were observed from October to March on the shelf (Charria *et al.*, 2013).

Eddies can be formed by destabilization of the poleward current. Anticyclonic eddies tend to be longer-lasting and were named SWODDIES (Slope Water Oceanic eDDIES) by Pingree and Le Cann (1992a, 1992b). Their diameter ranges from 60 to 130 km and the mean depth is on the order of 500 m. Recent studies along the Northwestern Iberian margin (Teles-Machado *et al.*, 2016) have proved the dominance of anticyclonic eddies at the top 200 m of the water column and from 600 to 1000 m, as well as the dominance of cyclonic eddies from 600 to 1000 m. Eddies have been monitored in the Bay of Biscay by means of satellite and in situ data and by numerical models (Caballero *et al.*, 2014; García-Soto *et al.*, 2002). In addition, Ferrer and Caballero (2011) conducted a 20-year numerical simulation finding a mean migration speed of less than  $2 \text{ cm s}^{-1}$ .

Coastal upwelling has traditionally been considered one of the main oceanic features along the western Iberian (Borja *et al.*, 2019), and recent research along the Cantabrian Sea has shown that summer upwelling was more frequent than traditionally believed (Alvarez *et al.*, 2010; 2011). Local upwelling induced by northerly winds can also be observed in summer along the French continental shelf (Puillat *et al.*, 2004).

The continental shelf is about 150 km wide at the northern part of the French coast. Circulation is governed by the combined effect of buoyancy due to the Gironde and Loire rivers, tides, and wind. In addition, cross-shelf transport is enhanced along the axis of submarine canyons (Cap Breton) (Borja *et al.*, 2019).

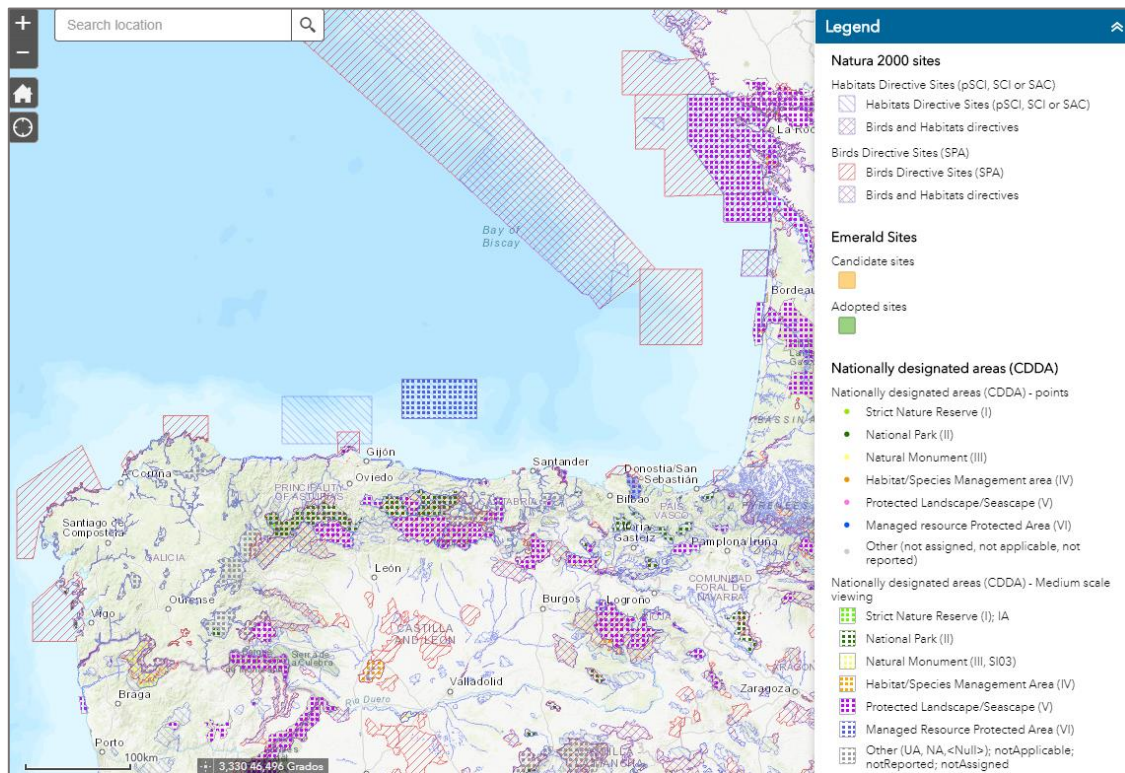
### ***b. Bay of Biscay habitats / MPAs /Biodiversity***

Some protection frameworks (MPAs, Biosphere reserves, Natural parks) have been put in place in some locations in the Bay of Biscay (e.g., Cabo Peñas, El Cachucho, Urdaibai, Marismas de Santoña, Arcachon Bay et Cap Ferret, Golfe du Morbihan, etc.; **Figure 7.3.1.3**). These areas have been studied extensively and provide some knowledge on the seabed habitat of the Bay of Biscay.

As a group, these sites represent a broad range of species diversity, habitats, and ecological regimes (oceanic, coastal, estuaries, and salt marshes) in the marine environment, and are perhaps stabilizing or, in some cases, reversing the negative impacts of human impacts/stressors. It must be noted that, according to data provided by OSPAR, the region is falling behind the Convention of Biological Diversity target of 10% of territory protected (OSPAR, 2015). However, studies and efforts to increase the number of MPAs in the Bay of Biscay are ongoing in areas within national jurisdiction (e.g., Aviles Canyon). Institutional frameworks for the identification and implementation of MPAs at regional scales are also well established in France (Agence des aires marines protégées, within the Ministère de l'Environnement, de

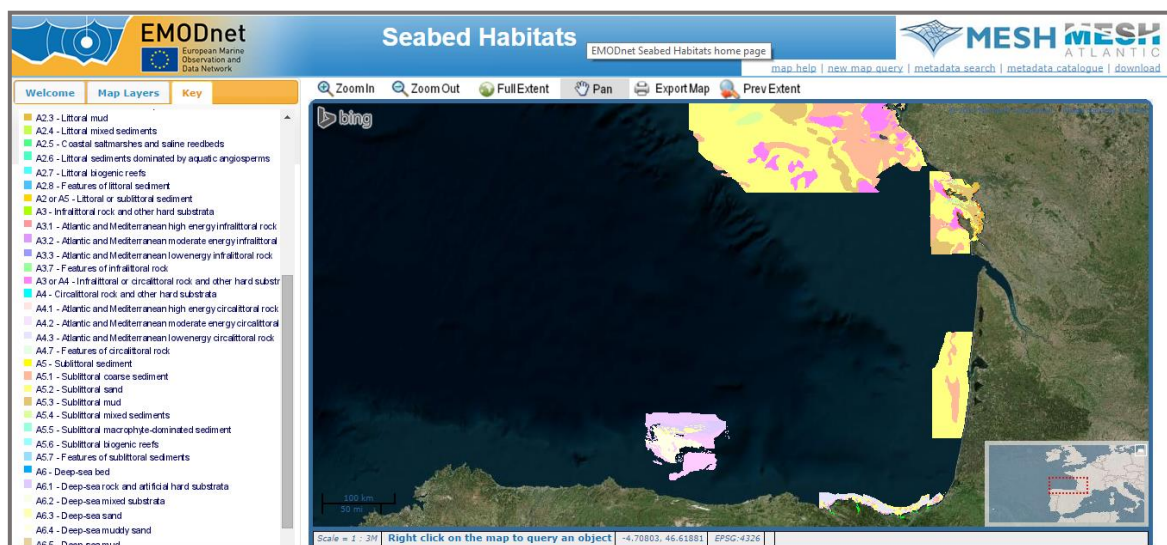


l'Energie et de la Mer) for the development of management plans and in enforcing the regulations that may be required (Borja *et al.*, 2019).

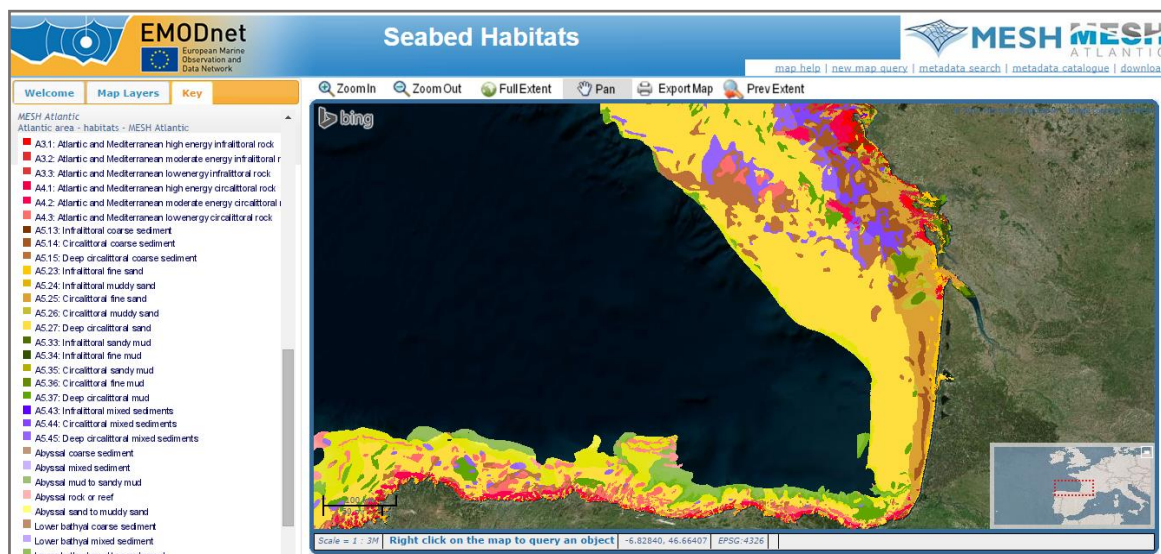


**Figure 7.3.1.3** Map of the Bay of Biscay showing the location of all Marine Protected Areas under national legislation, the OSPAR Convention and Natura 2000. Source: <http://www.eea.europa.eu/data-and-maps/explore-interactive-maps/european-protected-areas-1>.

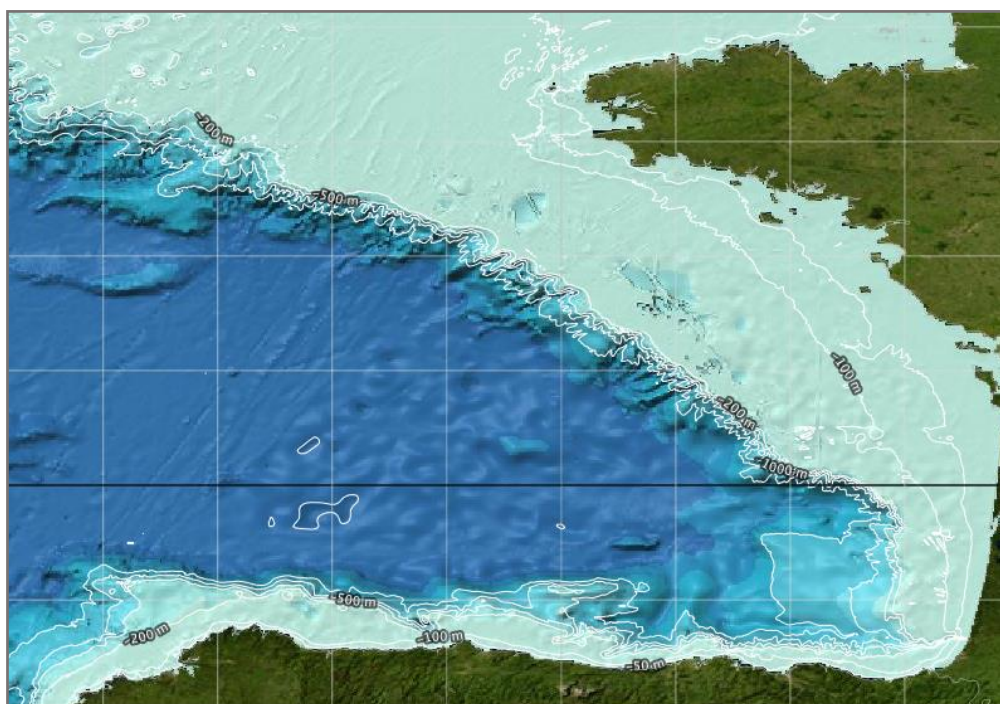
There is also good information regarding the habitat characteristics of many areas of the European seas, through several international projects and integrated efforts (EUSeaMap, EMODnet, MeshAtlantic), which can provide predicted habitats for many areas including the Bay of Biscay (Figures 7.3.1.4, 7.3.1.5, 7.3.1.6).



**Figure 7.3.1.4** Map of the Bay of Biscay showing the habitat type of all Marine Protected Areas. Source: <http://www.emodnet-seabedhabitats.eu/default.aspx?page=1974>.



**Figure 7.3.1.5** Map of the Bay of Biscay showing the seabed habitat type (yellow areas are sandy substrates) Source: <http://www.emodnet-seabedhabitats.eu/default.aspx?page=1974>.



**Figure 7.3.1.6** Bay of Biscay bathymetry profile. Source: AZTI.

Although only 19% of the total EEZ area of the Bay of Biscay and Iberian Peninsula is mapped, most of the habitat mapping effort is located at 200 meters depths and shallower (Galparsoro *et al.*, 2014). Since a large area of the Bay



of Biscay is delimited by the 200 meters bathymetry, the percentage of seabed mapping coverage is significantly higher. In total, the Bay of Biscay encompasses 42 benthic habitats.

The albacore troll and bait boat fishery are pelagic (near surface) in nature, and hence habitat interactions are largely concentrated on the pelagic environment. Impacts are expected to be transient and negligible, in particular given the gear type.

- Troll fishing gear employed in the Cantabrian sea albacore fishery operates at the surface in deep oceanic water. The fishing gear consists of a towing line with artificial bait at the speed of 7 knots behind the boat (3-4 knots when fish is catching). Generally, troll vessels are fitted with large poles or rods and can have between 12-14 lines (they may have up to 15) towing at the same time. The lines are drawing at the surface. Impacts will, therefore, be limited to the pelagic habitat, and are expected to be imperceptible, highly transient and negligible. Furthermore, based on the nature of the gear, there is no risk that the fishery contacts the seabed. The species landed are always pelagic species living in pelagic habitats. This provides evidence that the fishery is highly unlikely to ever come into contact with the seabed.

- Bait boat fishing gear employed in the Cantabrian sea albacore fishery operates at the surface in deep oceanic water. The fishing gear consists of using rods, 4-6 meters in length to catch tuna that are attached and kept close to the vessel by periodically throwing live fish overboard. Impacts will, therefore, be limited to the pelagic habitat, and are expected to be imperceptible, highly transient and negligible. Furthermore, based on the nature of the gear, there is no risk that the fishery contacts the seabed. The species landed are always pelagic species living in pelagic habitats. This provides evidence that the fishery is highly unlikely to ever come in to contact with the seabed. To obtain the live bait species is used a small purse seine and keep alive on board ship in large tanks. The gear used is smaller than used by the Spanish Bay of Biscay purse seiners target anchovy, sardine or mackerel (80 meters depth by 550 meters length). It is designed to operate in mid-water and to catch pelagic species it is likely to have negligible impact on benthic habitats. Depending on the fishing area, shipwrecks can cause breakage the gear but is very unlikely to lose the gear or a part of it.

Another possible impact of fishing is the gear lost. During the site visit, the team checked with AZTI about the gear lost in this fishery and it was confirmed that the gear lost by this fishery is very low. Benthic habitat impact from lost gear, as noted above, will be minimal due to the infrequency of lost gear and the nature of the gear.

In addition, VMS data from the fishing fleet provides the Spanish authorities with updated information on vessel position and tracks.

### c. Ecosystem

#### Food webs

The Ecosystem component considers the broad ecological community and ecosystem in which the fishery operates. Besides removing target species, fishing also affects the structure of the food-web by removing prey species, which may play an important role in regulating the upper trophic levels.

Fish diversity is quite high in relation to the co-occurrence of subtropical, temperate, and boreal species, with relative abundances following latitudinal gradients. In the Bay of Biscay ecosystem, anchovy, together with sardine, sprat, mackerel and horse mackerel, are the dominant low trophic level species, and as such they transfer a very large proportion of the total primary production through the lower part of the food web (Lassalle *et al.*, 2011). Seasonally, albacore (*Thunnus alalunga*) occurs along the shelf break. Albacore is widely spread throughout the north Atlantic (Arrizabalaga *et al.* 2011). It is a seasonal predator in the North-Eastern Atlantic, meaning it does not exert top-down pressure on this ecosystem throughout the year. Additionally, only a proportion of the population visits the trophic area of the NE Atlantic in summer. The feeding habits of the albacore in this area are known (Goñi *et al.* 2009) and like



other tunas, it is considered an opportunistic predator, capable of feeding on a wide range of prey, and adapting to the available type of prey. Immature northern bluefin tuna (*Thunnus thynnus*) migrate to the feeding areas in the innermost part of the Bay of Biscay, from late spring to mid-autumn, returning to the Gulf of Cadiz and Atlantic Moroccan coasts in winter (Rodríguez-Marín *et al.* 2007).

In the Bay of Biscay ecosystem the phytoplanktonic and zooplanktonic compartments are the keystone groups (Lassalle *et al.*, 2011). Bottom-up processes play a significant role in the population dynamics of upper-trophic-levels and in the global structuring of this marine ecosystem. There is also a marked bottom-up control of small pelagic fish by mesozooplanktonic prey and not by their predators (Lassalle *et al.*, 2011).

In a more recent study, Lassalle *et al.* (2014a) split into three fleets - targeting small pelagic fish, demersal fish, and invertebrates, respectively - the single fishery described in the original model by Lassalle *et al.* (2011) to be able to study the impacts of these fleets separately. The authors used qualitative and quantitative foodweb models of the Bay of Biscay continental shelf ecosystem to predict the effects of two kinds of human and natural pressure changes: (i) increase in fishing pressure exerted by the different fleets operating in the area and (ii) increase in primary productivity due to nutrient inputs and/or climate change.

In this study (Lassalle *et al.*, 2014a), benthivores and planktivores were identified as functional groups sensitive to foodweb changes, independent of model structure and type. For planktivores, commonly referred to as small pelagics, two robust predictions were identified: a high risk of decline associated with an increase in demersal piscivorous fish abundance and a potential increase following a rise in primary productivity, the reverse being also true. The first pressure change, for which predictions were only partially robust to model type, is very likely to take place during the phases of demersal fish stock rebuilding. The second result was relevant in the context of decreasing eutrophication in coastal areas, but also climate variability (Beaugrand and Reid, 2003). A temporary or permanent diminution in system fertility and thus primary production could follow and as such constrain to a certain degree the abundance of zooplanktivorous fish populations (Malzahn *et al.*, 2007). In the Bay of Biscay, several coastal areas with eutrophication problems have been identified (AAMP and Ifremer, 2011).

Moreover, the qualitative model analyses results indicated that a given fishery could affect the opposite food chain, e.g. pelagic fleets could change the abundance of functional groups in the benthic-demersal food chain (Lassalle *et al.*, 2014a). This is in line with the findings of Rochet *et al.* (2013) which, using qualitative models, demonstrated that the less-selective multispecies fisheries operating in the Northeast Atlantic might create antagonistic pressures, the impacts of which are less predictable. Nevertheless, quantitative outputs of Lassalle *et al.* (2014a) work did not confirm the propagation of fishing pressure. A possible explanation for this discrepancy was that direct impacts of individual fishing fleets on their targeted stocks (i.e., small pelagic fish, demersal fish, and invertebrates) were not strong and consequently indirect impacts on opposite food chain components were even less detectable (Lassalle *et al.*, 2014a).

In addition, Astarloa *et al.* (2019) showed that the co-occurrence patterns of top predators and prey were driven by a combination of environmental and biotic factors, which highlights the importance of considering both components to fully understand the community structure in the Bay of Biscay.

### **Climate change**

Macroscopically, surface water at the Bay of Biscay has warmed over the past decades at a rate ranging from 0.02 to 0.07°C year<sup>-1</sup> depending on the area and the period under study (Borja *et al.*, 2019 and references therein). Costoya *et al.* (2015) analysed SST over the period 1982–2014, finding that the warming is mainly due to the increase in the duration of the warm season. This fact is mainly responsible for the increase in the frequency of extreme hot SST days measured in spring ( $1.16 \pm 0.23$  days dec<sup>-1</sup>) and autumn ( $1.81 \pm 0.42$  days dec<sup>-1</sup>). However, warming has not been

permanent over the 20<sup>th</sup> century where several cooling-warming cycles have been observed (deCastro *et al.*, 2009; García-Soto *et al.*, 2002; González *et al.*, 2010). Coastal warming trends increase from Galicia to Brest with a marked seasonal component, being only significant during spring and summer (Gómez-Gesteira *et al.*, 2008). Salinity shows strong interannual fluctuations, without a clear trend (González-Pola *et al.*, 2012).

According to the IPCC Fifth Assessment Report (IPCC, 2014), the global mean sea level rose by 0.19 m over the period 1901–2010, which results in an approximate rate of 1.7 mm year<sup>-1</sup>. In addition, the rise since the mid-19<sup>th</sup> century has been observed to be larger than during the past two millennia. The sea level is projected to rise at a higher rate over this century. The situation within the Bay of Biscay is similar to the one observed at the planetary scale (Borja *et al.*, 2019).

Apart from mean changes in sea level, the IPCC Fifth Assessment Report (IPCC, 2014) also concluded that climate change might affect the intensity, frequency, and duration of extreme events such as floods and storms. The analysis carried out at the eastern Bay of Biscay over the period 1980–1998 (Dupuis *et al.*, 2006) shows that wave height tends to decrease. On the other hand, Borja *et al.* (2013) analysed the Basque coast finding that the number of waves higher than 5 m has increased significantly over time. In addition, Cid *et al.* (2016) analysed long-term trends in frequency, intensity, and duration of extreme storm surges in parts of the Bay of Biscay, showing that while intensity shows a significant moderate increase, both frequency and duration show a significant decrease. In the case of frequency, the decrease can be intense in the central part of the Bay. These authors also point out that extreme storm surges can be more affected by interannual and decadal variability than by climate variations at longer timescales.

### 7.3.1.2 Marine habitat

According to MSC requirements (SA 3.13.1), the team shall assess the habitats component in relation to the effects of the UoA on the structure and function of the habitats impacted by the UoA. The habitat's structure and function (i.e., the ecosystem services that it provides), including abundance and biological diversity, is of concern in an MSC assessment. Thus, an assessment should look not only at the impact on the habitat but also the habitat's delivery of ecosystem services.

Prior to the assessment of the habitats component, the team shall determine and justify which habitats are commonly encountered, vulnerable marine ecosystems (VMEs), and minor (i.e., all other habitats).

#### a. Commonly encountered habitats

Commonly encountered habitats are defined by MSC Fisheries Standard v2.01 SA3.13.3.1 as a habitat that regularly comes into contact with a gear used by the UoA, considering the spatial (geographical) overlap of fishing effort with the habitat's range within the management area(s) covered by the governance body(s) relevant to the UoA.

Both bait boat and trolling fishing gear used by the North Atlantic Albacore fishery operate at the surface in deep oceanic waters and there is no risk of the gears contacting the seabed, therefore the epipelagic habitat in the Bay of Biscay is considered as the commonly encountered habitat for the purpose of this assessment.

The assessment team is not aware of any evidence of adverse impacts on the structure or functioning of the pelagic habitat by the purse-seine. The fishery doesn't change the characteristics of the water column, e.g., the temperature, salinity, or currents.

## **b. VMEs**

According to MSC Fisheries Standard v2.01 SA3.13.3.2, VMEs have one or more of the following characteristics, as defined in paragraph 42 of the FAO Guidelines: (i) Uniqueness or rarity; (ii) Functional significance of the habitat, (iii) Fragility; (iv) Life-history traits of component species that make recovery difficult; (v) Structural complexity.

The FAO Guidelines' Annex identifies the following species groups, communities, and habitat-forming species that may form VMEs and may be indicative of the occurrence of VMEs: (i) Certain cold water corals and hydroids; (ii) Some types of sponge-dominated communities; (iii) Communities composed of dense emergent fauna where large sessile protozoans and invertebrates (e.g., hydroids and bryozoans) form an important structural component of habitat; (iv) Seep and vent communities comprised of invertebrate and microbial species found nowhere else (i.e., endemic).

The FAO Guidelines' Annex also lists various geographical features that are often associated with these communities.

Epipelagic habitats in open waters are not included in the definition of paragraph 42, subparagraphs (i)-(v) of the FAO Guidelines on Vulnerable Marine Ecosystems (VMEs), as described in MSC Fisheries Standard SA3.13.3.2. Therefore, no VMEs were identified in this assessment.

## **c. Minor habitats**

Minor habitats are defined by MSC as those that do not fall within the classification of Commonly Encountered Habitats or VMEs (GSA3.13.3).

Taking into account that the whole fishing area is considered an epipelagic commonly encountered habitat, no minor habitats have been identified in this assessment.

### **7.3.1.3 UoC catch composition: species assignment to MSC P2 categories**

The species to be assessed under P2 are those coming on board which are not covered under P1. MSC Fisheries Standard SA3.1.2 establishes that the team shall consider each P2 species within only one of the primary species, secondary species or ETP species components, following SA3.1.3-3.1.5 and SA3.4.4-3.4.5.

### **7.3.1.4 Sources of information and P2 terminology in relation to species components**

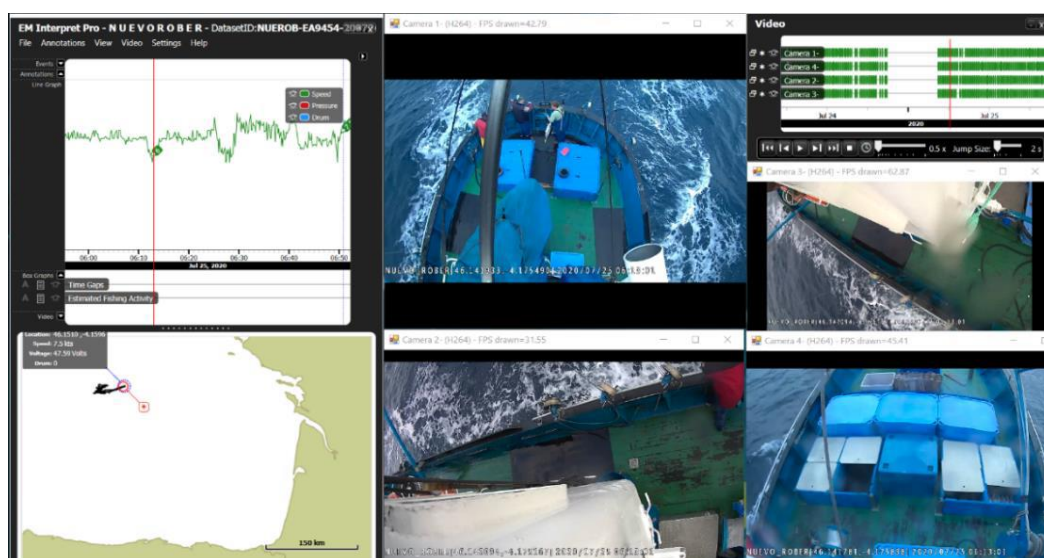
#### **a. Observers and EMS data recorded (AZTI).**

For the monitoring of the trolling fishery, physical observers (qualified personnel independent from the crew) on board the vessels were used during 2017 to 2019. But in 2019 a comparative pilot study of sampling efficiency using electronic monitoring (EMS) versus observer monitoring was conducted. That study showed very consistent results between both monitoring methods, both in catch of target species, bycatch species, size frequencies and interactions with sensitive species or ETPs (Reference).

In case of the monitoring of the live bait fishery, the observers were on board the fleet from 2016 to 2019. During the year 2020, due to the pandemic situation, it was decided to monitor only using EMS in both trolling and live bait fleets. The work of the observers onboard consists of the routine collection of data on catches made, retained and discarded catches and interactions with ETP species. The self-sampling logbooks provided to the fleet consist of collecting

information on interactions with ETP species, with a graphic guide for the identification of the most common bird species (Onandia *et al.*, 2021).

On the other hand, the EMS system allows the visualization and analysis of images recorded on board the fishing vessels. In the following figure (**Figure 7.3.1.7**), an example of the images analyzed using Archipelago Marine Research's EMI software is shown. This system allows knowing the exact geographical position of the vessel, detecting fishing operations and covering the entire visual area where the catches are brought on board and, therefore, making an exhaustive analysis of the fishing activity of the vessels (Onandia *et al.*, 2021a).



**Figure 7.3.1.7** Image from EMI software for image analysis of fishing activity (Onandia *et al.*, 2021).

i. UoC 1 (Trolling fleet). Basque and Asturian fleets 2017-2020.

OPEGUI and OPESCAJA hired AZTI to get observers on board the Basque and Asturian trolling fleets. OPEGUI had observers on board from 2017-2019. In the case of the Asturian fleet, the coverage by physical observers was done during 2018 and 2019. During 2020, due to the COVID-19 pandemic situation, both fleets used EMS on board. The report prepared by AZTI which included the analyses and results of both fleets was handed to the assessment team (Onandia *et al.*, 2021a).

Eleven vessels (9 from the Basque country and 2 from Asturias), 21 fishing trips (19 from the Basque fleet and 2 from the Asturian fleet) and a total of 343 days (319 from the Basque fleet and 24 from the Asturian fleet) were observed between 2017 and 2020 (Onandia *et al.*, 2021a). This represented an average observer coverage of around 2.05%, reaching a maximum coverage of a 3% during 2020 and a minimum coverage of 0.8% in 2017 (**Table 7.3.1.1**). After the implementation of the EMS system in this fleet, the observer coverage could be increased substantially in the future.

**Table 7.3.1.1.** - Summary of the observer coverage during the period 2017-2020 (source: AZTI).

Year	Nº of fishing trips	Nº of days	% observer coverage
2017	2	32	0.8%
2018	7	113	1.6%

<b>2019</b>	6	98	2.8%
<b>2020</b>	6	100	3%
<b>TOTAL</b>	21	343	2.05% (average)

The data obtained in the trolling fleet during 2017-2020 confirmed the high selectivity of this fishery, with over 99, 88% of the total retained catches made up of albacore (**Table 7.3.1.2**). Bigeye and bluefin tuna catches can be considered anecdotal with 0.07% and 0.03% of the total catch, respectively. Their combined weight accounted for 0.1 % of the Albacore catches and the individuals were released alive (unless used for the crew's consumption).

**Table 7.3.1.2** Summary of the observer's results in the trolling Basque fleet in the period 2017-2020 (Onandia *et al.*, 2021a).

Common name	Code	2017	%	2018	%	2019	%	2020	%	2017-2019	% TOTAL
ALBACORE	ALB	24595	100%	112356	99.81%	89235	99.86%	69043	100%	295229	<b>99.88%</b>
BIGEYE	BET	0	0%	163	0.14%	48	0.05%	0	0%	211	<b>0.07%</b>
BLUEFIN	BFT	0	0%	22	0.019%	72	0.08%	0	0%	94	<b>0.03%</b>
AT.BONITO	BON	0	0%	0	0%	1	0%	0	0%	1	<b>0%</b>
ATL.WHITE MARLIN	WHM	0	0%	20	0.018%	0	0%	0	0%	20	<b>0%</b>

Interactions with ETP species are minimal. Occasional interactions with birds have been recorded, in 2 of the 4 years sampled. Interactions recorded in the period 2017-2020, generally with birds, were very scarce. During the 343 fishing days monitored in the period 2017-2020, interactions took place only in 14 of those days (4.08 %) with a total of 49 interactions with birds recorded, of which only two were killed in four years (**Table 7.3.1.3**) (Onandia *et al.*, 2021a).

Interactions with birds are usually not very harmful (almost 96% are released alive) because they are quickly lifted on board and released. The double hook used in this fishery does not allow the birds to swallow it and is generally lodged in the beak area or entangled in a wing, making release easy. The crews have onboard a manual that includes the different steps and techniques to release hooks in case they have an interaction with a bird (Onandia *et al.*, 2021a).

**Table 7.3.1.3** Interactions recorded by species and their release during the sampling on board the trolling vessels from 2017-2020 (Onandia *et al.*, 2021a).

Common name	Scientific name	Nºind.	Alive	Dead
Alcatraz	<i>Morus bassanus</i>	5	4	1
Pardela capriotada	<i>Puffinus gravis</i>	35	34	1
Pardela spp	<i>Puffinus spp.</i>	8	8	0
Fulmar	<i>Fulmarus glacialis</i>	1	1	0
	<b>TOTAL</b>	<b>49</b>	<b>47</b>	<b>2</b>

Summary of different observations made with the data on ETP species obtained during the period 2017-2020:

- During the 32-day monitoring conducted in the trolling fishery in 2017, no interactions with birds were recorded (Bueno *et al.*, 2018).
- During the monitoring of the Basque fleet in 2018 (Oyarzabal *et al.*, 2019), interactions with birds were recorded just in 9% of the 99 days sampled and in the Asturian trolling fleet in 2018 (Uriarte *et al.* 2019), it was also recorded some interactions with birds (shearwaters) in 21% of the 14 days sampled.
- During the monitoring of the Basque fleet in 2019, of the 88 days sampled onboard, interactions were recorded on just 2% of the days (Onandia *et al.*, 2020).
- During the fishing trips analyzed in 2020, no interactions with ETP species were detected after 100 fishing days analyzed (Onandia *et al.*, 2021a).

All these observations verify that the incidence of these interactions with birds is low and usually not very harmful (almost 96% are released alive), but also suggest that it may vary between years, or other factors such as months and/or fishing areas (Onandia *et al.*, 2021a).

ii. UoC2 (Live bait fleet). Basque fleet.

Throughout the 2016-2020 period, 67 trips and a total of 481 days have been sampled on board baitboats in commercial fishing of the Basque fleet. This sampling represents an average annual coverage relative to total certified fleet activity of 3.28% of total fishing days, with a maximum coverage of 4.2% and a minimum of 2.0% in the years 2016 and 2019 respectively (**Table 7.3.1.4**) (Onandia *et al.*, 2021b).

**Table 7.3.1.4.** Summary of the observer coverage during the period 2017-2020.

Year	Nº of fishing trips	Nº of days	% observer coverage
2016	27	180	4.2%
2017	220	151	3.4%
2018	78	60	2.6%
2019	66	43	2.0%
2020	66	100	4.1%
<b>TOTAL</b>	67	534	3.2% (average)

Live bait fishing by the Basque fleet, according to the vessels and trips sampled, is highly selective with respect to tuna species. Of more than 1,174 tons caught during the sampled trips, 94.78% corresponds to northern albacore, while bluefin tuna accounted for 4.6% and bigeye tuna for 0.6% (**Table 7.3.1.5**). Not a single discard was recorded during bait boat fishing operations, so the retained catches correspond to 100% of the catch (Onandia *et al.*, 2021b).



**Table 7.3.1.5** Summary of the observer's results in the live bait Basque fleet in the period 2016-2020 (Onandia *et al*, 2021b).

Common name	Code	2016	%	2017	%	2018	%	2019	%	2020	%	2016-2019	% TOTAL
ALBACORE	ALB	315682	88.84%	285801	93.45%	211178	98.05%	165503	99.51%	169426	100%	1.174.589	<b>94.78%</b>
BIGEYE	BET	132	0.03%	7483	2.45%	0	0%	20	0.01%	0	0%	7635	<b>0.6%</b>
BLUEFIN	BFT	39489	11.11%	12587	4.11%	4195	1.95%	787	0.47%	0	0%	57058	<b>4.6%</b>
TOTAL		355303		305871		215373		166310		169426		1239282	

**Bait species**

Pole-and-line requires the use of live bait fish (mostly small pelagics such as mackerel and anchovy, with sardine and horse mackerel to a lesser extent), which are used to keep the schools of tunas attracted to the fishing vessels whilst they are fished. Bait catching is regulated by Order AAA/1307/2013, of 1 July, establishing a Management plan for registered boats in the Caladero Nacional del Cantábrico y Noroeste, and in Annex 1.8 it specifies:

“Live bait fishing can only be practised as support for the tuna fishing practices, and as such, is exclusive to vessels authorised to fish albacore with rods and live bait, and it will be subject to the following regulations:

- Live bait catches can only be used as bait.
- The minimum mesh size must be at least 10 millimetres.
- The vessels must be equipped with tanks to keep the bait alive. The quantity of live bait caught during the specific operations must not exceed the capacity of the aforementioned tanks.
- Vessels must not use more than one support boat when fishing with artificial light to catch live bait.
- The live bait fishery activity is exempt from the guidelines that regulate fishing effort in this order, as well as compliance of those relating to small sizes included in Council Regulation (EC) No 850/98 of 30 March 1998 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms, prohibiting the catch and storage on board of species other than those specified as live bait.”

Live bait fishing involves the prior capture of the bait with a small purse seine gear, so that the maneuver is quick and the bait can be shipped in the best possible conditions to maximize its survival in the nurseries. There is no data for 2016 as the observer protocol only contemplated interactions with ETP species during that phase of the fishery certification. In 2020 there is also no data since the EM system is designed to monitor just the tuna fishery, which is the main activity.

The fate of some species is the "slipping", this occurs once the bait nurseries are completed, the remnant remaining in the net is released without being shipped. It may also happen that the catch is not of the desired species or size and in that case, slipping also takes place.

**Table 7.3.1.6** shows the data collected on the purse seine operations recorded by the observers, where quantities retained and used as bait (R) and those slipped (S) or discarded (D) can be observed.

Live bait fleet interactions with ETP species are minimal. The latter has been evidenced by the number and type of interactions recorded in the period 2016-2020, generally with birds, are scarce. Occasional interactions with birds have been recorded in 3 of the 5 years sampled. During the analyzed live bait boat trips, 10 interactions with ETPs species occurred in 5 of the 481 monitored days, which represents 1 % of the monitored live bait fleet fishing days (Onandia *et al.*, 2021b).



**Table 7.3.1.6** Summary of the species caught as bait using the purse seine and the fate of these species. Note: (R) retained and used as bait, (S) slipped, or (D) discarded (Onandia *et al*, 2021b)

Common name	Code	Scientific name	2017 (R)	2017 (S)	2018 (R)	2018 (S)	2019 (R)	2019 (S)	2019 (D)	2017-2019 (Kg)	% TOTAL *
European anchovy	ANE	<i>Engraulis encrasicolus</i>	11750	0	18000	1150	2370	980	0	34250	3.8%
Blue shark	BSH	<i>Prionace glauca</i>	0	50	0	0	0	0	0	50	0%
Ocean sunfish	MOX	<i>Mola mola</i>	0	80	0	55	0	0	0	135	0.01%
Sardine	PIL	<i>Sardina pilchardus</i>	0	20	50	0	0	0	0	70	0%
Atlantic horse mackerel	HOM	<i>Trachurus trachurus</i>	0	0	540	300	1000	0	0	1840	0.2%
Garfish	GAR	<i>Belone belone</i>	0	0	0	2	0	0	10	12	0%
Blue whiting	WHB	<i>Micromesistius poutassou</i>	0	0	0	800	0	0	0	800	0.08%
Atlantic mackerel	MAC	<i>Scomber scombrus</i>	0	0	460	0	0	0	0	460	0.05%
Harbour swimming crab	IOD	<i>Liocarcinus depurator</i>	0	0	0	0	0	0	550	550	0.06%
Common stingray	JPD	<i>Dasyatis pastinaca</i>	0	0	0	0	0	0	10	10	0%
Greater weever	WEG	<i>Trachinus draco</i>	0	0	0	0	0	0	200	200	0.02%

\* The % is calculated in relation to the total catch of the live bait fishery 2017-2019.

Interactions with birds are low and they are quickly hoisted on board and released. Angling in this fishery allows birds to be taken on board immediately, and the hook is usually lodged in the beak area or entangled in a wing, and release is simple. Of the 10 recorded interactions with birds, 6 were killed and 4 were released alive (**Table 7.3.1.7**).

**Table 7.3.1.7** Interactions recorded by species and their fate during the sampling on board the live bait vessels (Onandia *et al*, 2021b).

Common name	Scientific name	Nºind.	Alive	Dead
Alcatraz	<i>Morus bassanus</i>	4	0	4
Pardela capirotada	<i>Puffinus gravis</i>	4	2	2
Pardela spp	<i>Puffinus spp.</i>	2	2	0
	<b>TOTAL</b>	<b>10</b>	<b>4</b>	<b>6</b>

Summary of different observations made with the data on ETP species obtained during the period 2016-2020:

- During the monitoring of the Basque fleet in 2016, interactions with birds were recorded 0.9% of the 180 days (Oyarzabal, 2017).
- During monitoring of the Basque fleet in 2017 (Oyarzabal *et al.*, 2018), interactions with birds were recorded 1.3% of the 151 days sampled.
- During the monitoring of the Basque fleet in 2018, of the 60 days sampled onboard, interactions were recorded 0.6% of the days (Uriarte *et al.*, 2019).
- During the trips analyzed in 2019 (Onandia *et al.*, 2020) and 2020 (Onandia *et al.*, 2021b), no interaction with ETP species was detected after 143 fishing days analyzed.

All these observations verify that the incidence of these interactions with birds is low but also suggest that it may vary between years, or other factors such as months and/or fishing areas.

#### b. Logbooks data (information provided by the client).

##### i. UoC 1(Trolling fleet).

**Table 7.3.1. 8** Data provided by the client with the logbook information for the trolling fleet from 2016 to 2020.

Common name	Code	2016	%	2017	%	2018	%	2019	%	2020	%	Total	%
ALBACORE	ALB	805.802,1	95	1.125.155,1	97	1.370.268,9	99	2.463.210,2	99.8	2.318.647,8	99.2	8.083.084,3	98,72
BIGEYE	BET	31.630,7	3.7	12.992,4	1.1	4.991,9	0.4	910,3	0	5.507	0.2	56.032,3	0,68
BLUEFIN	BFT	1.733,00	0.2	-	0	-	0	-	0	-	0	1.733,00	0,02
ATL. BONITO	BON	8.304,5	1	18.452,4	1.6	4.081,9	0.3	3.229,8	0.1	3.065,50	0.1	37.134,2	0,45
BULLET TUNA	BLT	63,90	0	1,05	0	-	0	34,05	0	92,50	0	191,5	0,002
<b>TOTAL</b>		<b>848.242,5</b>		<b>1.156.601,1</b>		<b>1.379.342,8</b>		<b>2.467.384,3</b>		<b>2.336.412,9</b>		<b>8.187.983,7</b>	

##### ii. UoC 2(Live bait fleet).

**Table 7.3.1.9** Data provided by the client with the logbook information for the live bait fleet from 2016 to 2020.

Common name	Code	2016	%	2017	%	2018	%	2019	%	2020	%	Total	%
ALBACORE	ALB	7.941.705,2	90	7.152.047,6	84	10.499.409,8	98.6	9.156.691,2	98.3	9.282.315,6	98.4	44.032.169,4	94,29
BIGEYE	BET	178.028,5	2	592.646,6	7	613,6	0	785	0	24.248,6	0.26	796.322,3	1,71
SKIPJACK	SKJ	46,4	0	369,1	0	19,50	0	35,5	0	106.253,73	1.1	106.724,2	0,23
BLUEFIN	BFT	670.401,2	7.6	765.315,5	9	143.461,5	1.3	132.832,8	1.4	690	0	1.712.700,9	3,67
ATL. BONITO	BON	8.017,6	1	5.330,6	0	2.959,2	0.02	21.289,7	0.2	15.366,8	0.16	52.963,9	0,11
		<b>8.798.198,8</b>		<b>8.515.709,3</b>		<b>10.646.463,6</b>		<b>9.311.634,2</b>		<b>9.428.874,7</b>		<b>46.700.880,7</b>	

### 7.3.1.5 P2 species classification following MSC requirements

According to the different sources of information presented above, the assessment team elaborated the most complete list of all species susceptible to interact with the UoA, and they were classified into Primary (Main/Minor), Secondary (Main/Minor) and ETP species according to MSC requirements. See **Table 7.3.1.10** (UoC1-trolling fleet) and **Table 7.3.1.11** (UoC2-live bait fleet) for the resulting list.

The difference between 'Primary' and 'Secondary' species lies on whether management is based on biological reference points (Primary) or not (Secondary). On the other hand, the difference between 'Main' and 'Minor' lies on the proportion (in weight) that a particular species represents in the catch. According to MSC Fisheries Standard SA3.4.2, the designated weight threshold to differentiate between 'Main' and 'Minor' is 5% (or 2% in the case of less resilient species): species accounting  $\geq 5\%$  in weight of the total catch are considered as 'Main', while species falling below this threshold are classified as 'Minor' (unless the total catch of the UoA is exceptionally large, such that even small proportions of a P2 species significantly impact the affected stock, SA3.4.4).

The team shall also consider species used as bait in the UoA, whether they were caught by the UoA or purchased from elsewhere, as either primary or secondary species using the definitions provided under SA 3.1.3 and SA 3.1.4 respectively.

#### UoC1 (trolling) P2 species classification.

All the species susceptible to interact with the UoC1 classified as 'Primary' and 'Secondary', according to the client's logbook data (**Table 7.3.1.8**) and to the observer's data (**Table 7.3.1.2**) account for  $<5\%$  of the total UoC catches from 2016 to 2020, therefore, following MSC requirements, they are all classified as 'Primary minor' and 'Secondary minor' (**Table 7.3.1.10**).

When the first PCR for the initial assessment of this fishery was published (2016), the CAB (same CAB but different team) considered *Thunnus obesus* (BET) and *Katsuwonus pelamis* (SKJ) as main species despite not reaching the 5% threshold on the basis that "Although these landings are below the 5% stipulated by the MSC, these 2 tuna species have a high marketable value, and as such, will be considered the "main retained species" for this fishery. At that time the fishery was being assessed under a different version (1.3) of the standard and the classification of the bycatch species was also done differently. At the time of drafting the current report, the team has been assessing this fishery for a long period (i.e., since 2016) and the data available to assess the bycatch (both from observers and client logbooks) is now given with such detail that the species can be classified as minor following MSC Fisheries Standard SA3.4.2. Therefore, with the data available, neither the BET nor the SKJ are considered as main within UoC1, as their respective % are lower than 5%.

**Table 7.3.1.10** List of all species susceptible to interact with the UoC1 (trolling) classified according to Fisheries Standard SA3.1.3-3.1.5 and SA3.4.4.-3.4.5. The sources of information used for selecting each of the species are included in Section 7.3.1.4 (a and b). Data deficient column was assessed against **FCP7.7.3**.

Scientific name	Managed based on target or limit RPs according to SA3.1.3.3 (Y/N) Not applicable to ETPs	P2 COMPONENT (Primary / Secondary / ETP)	P2 SUBCOMPONENT (Main/Minor) in accordance to SA3.4.1-36.4.5 for Primary, and SA3.7.1 for Secondary Not applicable to ETPs	Only for ETPs Legislations applied for ETPs Quote the Regulation/s	Data deficient (Y/N) Based on the analysis to be performed in the - Triggering RBF - tab	Source of information
<i>Thunnus obesus</i>	YES	PRIMARY	MINOR	N/A	NO	(a), (b)
<i>Thunnus thynnus</i>	YES	PRIMARY	MINOR	N/A	NO	(a), (b)
<i>Tetrapturus albidus</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Sarda sarda</i>	YES	SECONDARY	MINOR	N/A	YES	(a), (b)

<i>Auxis rochei</i>	YES	SECONDARY	MINOR	N/A	YES	(b)
<i>Morus bassanus</i>	NA	ETP		RD 139/2011	NO	(a)
<i>Puffinus gravis</i>	NA	ETP		RD 139/2011	NO	(a)
<i>Fulmarus glacialis</i>	NA	ETP		RD 139/2011; UICN (EN)	NO	(a)

### UoC2 (live bait) P2 species classification.

All the species susceptible to interact with the UoC2 classified as 'Primary' and 'Secondary', according to the client's logbook data (**Table 7.3.1.9**) and the observer's data (**Table 7.3.1.5**) account for <5% of the total UoC catches from 2016 to 2020. In the case of the Bluefin tuna (*Thunnus thynnus*) the average % caught during the assessed period (2016-2020) is 4.6%, so <5% of the total UoC catches. Despite of that, the UoC2 catches of bluefin tuna during 2016 accounted for 11.11%, >5% of the total UoC catches. Therefore, following MSC requirements, all the species are classified as 'Primary minor' and 'Secondary minor' except the Bluefin tuna that the assessment team decided to consider as Main Primary following the MSC precautionary approach (**Table 7.3.1.11**).

When the first PCR for the initial assessment of this fishery was published (2016), the CAB (same CAB but different team) considered *Thunnus obesus* (BET) and *Katsuwonus pelamis* (SKJ) as main species despite not reaching the 5% threshold on the basis that "Although these landings are below the 5% stipulated by the MSC, these 3 tuna species have a high marketable value, and as such, will be considered the "main retained species" for this fishery. At that time the fishery was being assessed under a different version (1.3) of the standard and the classification of the bycatch species was also done differently. At the time of drafting the current report, the team has been assessing this fishery for a long period and the data available to assess the bycatch (both from observers and client logbooks) is now given with such detail that the species can be classified as minor following MSC Fisheries Standard SA3.4.2. Therefore, with the data available, neither the BET nor the SKJ are considered as main species within the UoC2 in this assessment. In case of the BET, even though the catch % in 2017 from the client source is 7%, the team considers that the BET catches are overall very low with the percentage average from 0.6% (observer source) to 1,71% (client source), therefore, it will be considered as minor. Despite this classification, the assessment team will look closely during the following surveillance audits and decide if any changes in classification are needed.

**Table 7.3.1.11** List of all species susceptible to interact with the UoC2 (live bait) classified according to Fisheries Standard SA3.1.3-3.1.5 and SA3.4.4.-3.4.5. The sources of information used for selecting each of the species are included in Section 7.3.1.4 (a and b). Data deficient column was assessed against **FCP7.7.3**.

Scientific name	Managed based on target or limit RPs according to SA3.1.3.3 (Y/N) Not applicable to ETPs	P2 COMPONENT (Primary / Secondary / ETP)	P2 SUBCOMPONENT (Main/Minor) in accordance to SA3.4.1-36.4.5 for Primary, and SA3.7.1 for Secondary Not applicable to ETPs	Only for ETPs Legislations applied for ETPs Quote the Regulation/s	Data deficient (Y/N) Based on the analysis to be performed in the - Triggering RBF - tab	Source of information
<i>Thunnus obesus</i>	YES	PRIMARY	MINOR	N/A	NO	(a), (b)
<i>Thunnus thynnus</i>	YES	PRIMARY	MAIN	N/A	NO	(a), (b)
<i>Katsuwonus pelamis</i>	YES	PRIMARY	MINOR	N/A	NO	(b)
<i>Engraulis encrasicolus</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Prionace glauca</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Sardina pilchardus</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Trachurus trachurus</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Micromesistius poutassou</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Scomber scombrus</i>	YES	PRIMARY	MINOR	N/A	NO	(a)
<i>Sarda sarda</i>	YES	SECONDARY	MINOR	N/A	NO	(b)

<i>Trachinus draco</i>	NO	SECONDARY	MINOR	N/A	YES	(a)
<i>Liocarcinus depurator</i>	NO	SECONDARY	MINOR	N/A	YES	(a)
<i>Dasyatis pastinaca</i>	NO	SECONDARY	MINOR	N/A	YES	(a)
<i>Mola mola</i>	NO	SECONDARY	MINOR	N/A	YES	(a)
<i>Belone belone</i>	NO	SECONDARY	MINOR	N/A	YES	(a)
<i>Morus bassanus</i>	NA	ETP	NA	RD 139/2011	NO	(a)
<i>Puffinus gravis</i>	NA	ETP	NA	RD 139/2011	NO	(a)

#### a. Primary species impacted by the UoC

##### i. UoC1 (trolling fleet)

Three species out of the 8 listed in **Table 7.3.1.10** are managed based on biological reference points and therefore assessed as Primary P2-components (orange shaded): bluefin tuna (*Thunnus thynnus*), Bigeye tuna (*Thunnus obesus*) and Atlantic white marlin (*Tetrapturus albidus*).

As shown in **Table 7.3.1.2** and **Table 7.3.1.8**, none of the species reported by the UoC1 accounted for 5% of the total catch in the total data analysed from 2016 to 2020. Therefore, all the species in the UoC1 (trolling) are being assessed as 'minor' subcomponents.

The different species assessed as Primary components of the P2 for the UoC1 (trolling) are summarised below:

- 0 main primary species.
- 3 minor primary species: bluefin tuna (*Thunnus thynnus*), Bigeye tuna (*Thunnus obesus*), and white marlin (*Tetrapturus albidus*).

##### ii. UoC2 (live bait fleet)

Nine species out of the 17 listed in **Table 7.3.1.11** are managed based on biological reference points and therefore assessed as Primary P2-components (orange shaded): bluefin tuna (*Thunnus thynnus*), Bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), anchovy (*Engraulis encrasicolus*), Atlantic horse mackerel (*Trachurus trachurus*), sardine (*Sardina pilchardus*), Atlantic mackerel (*Scomber scombrus*), blue whiting (*Micromesistius poutassou*) and blue shark (*Prionace glauca*).

As shown in **Table 7.3.1.5**, **Table 7.3.1.6** and **Table 7.3.1.9**, only one of the species reported by the UoC2 accounted for more than 5% of the total catch in the total data analysed from 2016 to 2020. Therefore, from all the species in the UoC2 (live bait) one is being assessed as 'main' and the rest are being assessed as 'minor' subcomponents.

The different species assessed as Primary components of the P2 for the UoC2 (live bait) are summarised below:

- 1 main primary species: bluefin tuna (*Thunnus thynnus*)
- 8 minor primary species: Bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), anchovy (*Engraulis encrasicolus*), Atlantic horse mackerel (*Trachurus trachurus*), sardines (*Sardina pilchardus*), Atlantic mackerel (*Scomber scombrus*), blue whiting (*Micromesistius poutassou*) and blue shark (*Prionace glauca*).

### iii. Main primary stocks (just within the UoC2)

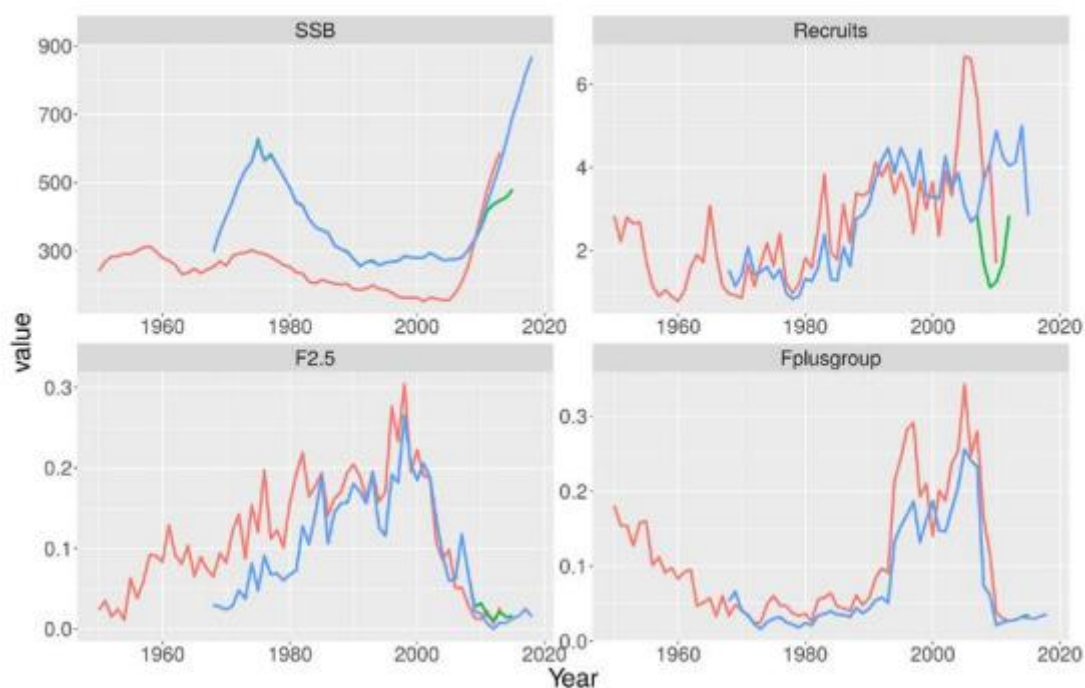
#### **Bluefin tuna (*Thunnus thynnus*) East Atlantic and Mediterranean stock**

The 2017 assessment results from the VPA base case, indicated that the spawning stock biomass (SSB) peaked in the mid-1970s after increasing initially and then declined until 1991 and remained steady up to the mid-2000s. From the late 2000s, SSB exhibited a substantial increase through 2015 (**Figure 7.3.1.8**). The extent of that increase depends on the choices of model configuration and the indices of abundance and terminal year (2014 vs 2015). This led to some concern that the model was very sensitive to adding one additional year of data (i.e., the estimating of a substantial overall increase in biomass with the addition of only the last year of data). Concerns also remain that the size composition of many eastern Atlantic and Mediterranean fleets is poorly characterized for a number of years before the implementation of stereo video camera in 2014 (ICCAT, 2019a).

Compared to 2014 the extra data available for the 2017 assessment did better confirm recent stock increase though the level of increase remained difficult to quantify.  $F_{cur}$  appeared to be clearly below  $F_{0.1}$ ,  $F_{cur}/F_{0.1} = 0.34$ . The status of the stock, and status in 2022 under a  $F_{0.1}$  strategy, relative to  $B_{0.1}$  depended on assumptions made for longer term future recruitment. For medium and low recruitment levels (averages taken over the years 1968-1980/1968-2012/1990-2005, for the low, medium and high scenarios, respectively), the stock was already above  $B_{0.1}$ , whereas for the high level it was below (ICCAT, 2019a).

In 2019, ICCAT's SCRS decided to conduct a strict update of 2017 stock assessments in 2020, following as closely as possible to the exact specifications of the 2017 advice models (ICCAT, 2019a). However, due to VPA model instability the F-ratios were fixed to the values estimated in 2017 rather than estimated. Fixing the F-ratios was necessary to stabilize historical estimates of the SSB in the 2020 model. Furthermore, the 4 most recent recruitment years were replaced by the average of 9 years (2010-2018), instead of the 6 years (2006-2011) used in the 2017 assessment. Nevertheless, the model results still showed a significant retrospective bias, with biomass and recruitment being consistently underestimated (Figure 4. E-BFT VPA from ICCAT, 2020c). Therefore, the SCRS concluded that none of the VPA model formulations tested in 2020 provided results which were sufficiently reliable to be used as the basis for projection for management advice (ICCAT, 2020c).

Based on the 2020 update assessment, the eastern Atlantic and Mediterranean bluefin tuna biomass reaches 873,000 t in 2018, which is the highest estimate ever and 30% above the maximum in the 1970s. The ASAP model estimated stock biomass to be 583,000 t in 2018. However, the uncertainty regarding the magnitude of the recent SSB increase estimated by the VPA is even higher than in the 2017 VPA assessment due to considerable instability in the recruitment estimates. Recruitment shows an antagonistic pattern between assessments years, being high in recent years but decreasing in 2018 in the 2000 assessment, while the opposite is true for the 2017 assessment (Figure 7.3.1.8). At the end, as stated above, the SCRS concluded that the VPA models tested were not sufficiently reliable to be used as the basis for management advice. However, the available data do clearly indicate that the biomass of the East Atlantic and Mediterranean bluefin tuna has increased since the late 2000s, is high at present, and that there are no concerns that overfishing may be occurring under the current TAC (36,000 t in 2020; ICCAT, 2020c).



**Figure 7.3.1.8** Comparison of the trends in spawning stock biomass (SSB), Recruitment (Recruits), fishing mortality for ages 2 to 5 (F2.5) and for the plus group (Fplusgroup), and time series of F-ratio obtained for the base cases in 2020 (Run135, blue), 2017 (green), and 2014 (red). Source: ICCAT, 2020c..

#### iv. Minor primary stocks

##### **Eastern Skipjack tuna (*Katsuwonus pelamis*) (ICCAT, 2017b)**

Skipjack tuna has been considered a difficult species to assess, mainly due to the fact that the annual recruitment is a large proportion of total biomass and that it is difficult to characterize the effect of fishing on the population with standard fisheries data and stock assessment methods. The uncertainties in the stock structure and the difficulties to estimate PS CPUE that could be considered as being proportional to SKJ biomass, are additional to these basic uncertainties.

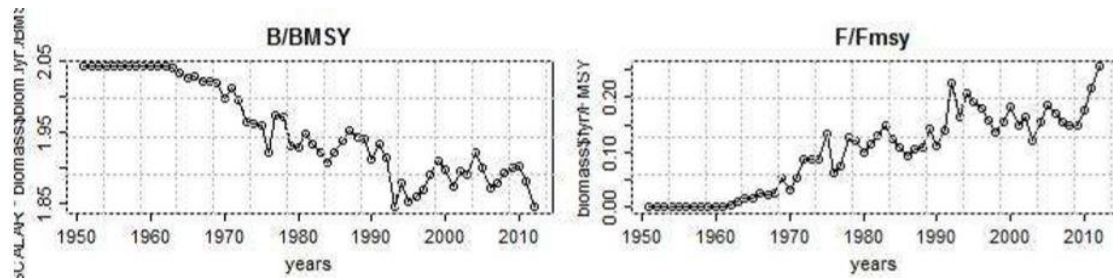
The increase in CPUE of the European purse seiners in the late 1990s is partly the consequence of the increase in the catches of positive sets under FADS. Furthermore, the regular increase in the skipjack yields of the bait boats based in Senegal may only be the result of an increase in catchability linked to the adoption of the so-called “bait boat associated school” fishing towards the mid-1980s. No marked trend has been observed for the Canary Islands bait boats, nor for the peripheral fishery of the Azorean bait boat fishery.

The most recent assessment of the stock of skipjack in the East Atlantic was done in 2014, using data until 2013. Two alternative models were used to analyse the Eastern Atlantic skipjack stock; a catch-only model and a Bayesian Surplus Production (BSP) model. The results of the Bayesian surplus production models show that the values of the posterior distribution mean for the  $B_{cur}/B_{MSY}$  can be in the range of 1.55 to 1.79 for the five different model scenarios and the



$F_{cur}/F_{MSY}$  can be from 0.22 to 0.49. Even, in the light of the clear uncertainties in the assessments, it is very likely that the Eastern Atlantic Skipjack stock is not overfished, nor does overfishing take place (**Table 7.3.1.12**) (ICCAT, 2014a).

Even if not much confidence is being put into the Production model results (**Figure 7.3.1.9**), it can reliably be said that no indicator indicates that the stock is overfished, as all the estimates point to a lightly exploited stock. Hence, the high recent landings, even if above MSY, are unlikely to reduce the stock below  $B_{MSY}$  for several years, at which time the response of landings and CPUE indicators to several years of high landings could be re-evaluated (ICCAT, 2014a).



**Figure 7.3.1.9** The current biomass relative to the Biomass at maximum sustainable yield and current fishing mortality relative to the fishing mortality as MSY until 2013.

**Table 7.3.1.12** Management measures and stock status for East Atlantic skipjack tuna.

East Atlantic	
Maximum Sustainable Yield (MSY)	Probably higher than previous estimates (143,000-170,000 t)
Current yield (2016 <sup>1</sup> )	217,363 t
Current Replacement Yield	Unknown
Relative Biomass ( $B_{2013}/B_{MSY}$ )	Likely >1
Mortality due to fishing ( $F_{2013}/F_{MSY}$ )	Likely <1
Stock Status	
Overfished:	Not likely
Overfishing:	Not likely
Management measures in force	Rec. 16-01 <sup>2</sup>

#### Bigeye tuna (*Thunnus obesus*) (ICCAT, 2019a)

Bigeye tuna are distributed throughout the Atlantic Ocean between 50°N and 45°S, but not in the Mediterranean Sea. This species swims at deeper depths than other tropical tuna species and exhibits extensive vertical movements. Bigeye tuna exhibit clear diurnal patterns: they are found much deeper during the daytime than at night. Spawning takes place in tropical waters when the environment is favourable. From nursery areas in tropical waters, juvenile fish tend to diffuse into temperate waters as they grow. Catch information from surface gears indicate that the Gulf of Guinea is a major nursery ground for this species. Dietary habits of bigeye tuna are varied and prey organisms like fish, molluscs, and crustaceans are found in their stomach contents. Bigeye tuna exhibit relatively fast growth: about 105 cm fork length at age three, 140 cm at age five and 163 cm at age seven. Bigeye tuna over 200 cm are relatively rare. Bigeye tuna become mature around 100 cm at between 3 and 4 years old. Young fish form schools mixed with other

tunas such as yellowfin tuna and skipjack. These schools are often associated with drifting objects, whale sharks and sea mounts. This association weakens as bigeye tuna grow. Bigeye tuna are assumed to be an Atlantic-wide single stock, however, the possibility of other scenarios, such as north and south stocks, should not be disregarded.

#### Stock assessment

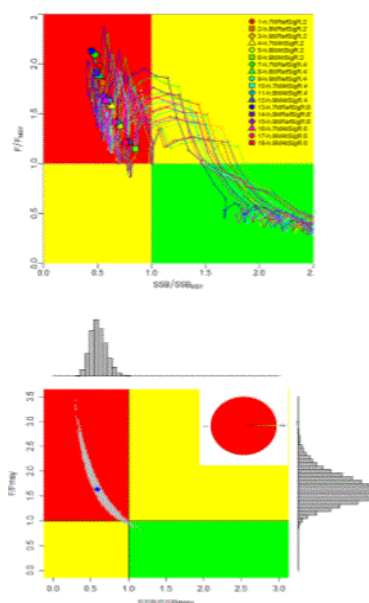
Stock status evaluations for Atlantic bigeye tuna used in 2018 several modelling approaches, ranging from non-equilibrium (MPD) and Bayesian state space (JABBA) production models to integrated statistical assessment models (Stock Synthesis). The results of different model formulations considered to be plausible representations of the stock dynamics were used to characterize stock status and the uncertainties in the status evaluations.

The Stock Synthesis integrated statistical assessment model allows the incorporation of more detailed information, both for the biology of the species as well as fishery data, including the size data and selectivity by different fleet and gear components. As Stock Synthesis allows modelling of the changes in selectivity of different fleets as well as to investigate the effect of the length/age structure of the catches of different fisheries in the population dynamic, productivity and fishing mortality, it was the agreed model to be used for the management advice. The Stock Synthesis uncertainty grid includes 18 model configurations that were investigated to ensure that major sources of structural uncertainty were incorporated and represented in the assessment results. Although the results of two production models, non-equilibrium and Bayesian state-space, are not used for management advice they supported the Stock Synthesis stock assessment results.

The SS3 uncertainty grid, despite a broad range of assumptions regarding stock productivity (steepness) and model parameterization, shows trajectories of increasing  $F$  decreasing  $B$  towards the red area of the Kobe plot ( $F > F_{MSY}$  and  $SSB < SSB_{MSY}$ ), overfishing starting in around 1994 and an overfished stock at around 1996-1997, and being in the red quadrant of the Kobe plot since then (**Figure 7.3.3.8**). According to the results of the SS3 uncertainty grid, Atlantic bigeye stock is currently overfished ( $SSB/SSB_{MSY} = 0.59$ , ranging from 0.42 to 0.80) median (90<sup>th</sup> percentile) and undergoing overfishing ( $F/F_{MSY} = 1.6$ , ranging from 1.14 to 2.12) with very high probability (99%) (**Figure 7.3.1.10**).

The current MSY may be below what was achieved in past decades because overall selectivity has shifted to smaller fish. Calculations of the time-varying benchmarks from SS3 uncertainty grid show a long-term increase in  $SSB_{MSY}$  and a general long-term decrease in MSY.

The Committee is confident that uncertainty of the stock assessment results has decreased from previous stock assessments and that the Bigeye tuna is overfishing and being overfished with a probability > 90% (**Table 7.3.1.13**). This is likely the result of the use of the improved joint LL index, the confirmation that catches continue to exceed TACs, and the use of a single model platform for the provision of the management advice.



**Figure 7.3.1.10** Stock Synthesis: (a) Kobe phase plot for the deterministic runs of the 18 Stock Synthesis uncertainty grid runs for Atlantic bigeye tuna. For each run the benchmarks are calculated from the year specific selectivity and fleet *allocations*. (b) Kobe plot of SSB/SSB<sub>MSY</sub> and F/F<sub>MSY</sub> for stock status of Atlantic bigeye tuna in 2017 based on the log multivariate normal approximation across the 18 uncertainty grid model runs of Stock Synthesis with an insert pie chart showing the probability of being in the red quadrant (99.5 %), green quadrant (0.2 %), and in yellow (0.3 %). Blue square is the median and marginal histograms represent distribution of either SSB/SSB<sub>MSY</sub> or F/F<sub>MSY</sub>.

**Table 7.3.1.13** Management measures and stock status for Atlantic bigeye tuna (ICCAT, 2020d).

ATLANTIC BIGEYE TUNA SUMMARY	
Maximum Sustainable Yield	76,232 t (72,664-79,700 t) <sup>1</sup>
Current (2018) Yield	73,366 t <sup>2</sup>
Relative Spawning Biomass (SSB <sub>2017</sub> /SSB <sub>MSY</sub> )	0.59 (0.42-0.80) <sup>1</sup>
Relative Fishing Mortality (F <sub>2017</sub> /F <sub>MSY</sub> )	1.63 (1.14-2.12) <sup>1</sup>
Stock Status (2017)	Overfished: Yes <sup>3</sup> Overfishing: Yes <sup>3</sup>
Conservation & management measures in effect:	Rec. 16-01, Rec. 18-01 <ul style="list-style-type: none"> <li>- Total allowable catch for 2016-2019 was set at 65,000 t for Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities.</li> <li>- Be restricted to the number of their vessels notified to ICCAT in 2005 as fishing for bigeye tuna.</li> <li>- Specific limits of number of longline boats; China (65), Chinese Taipei (75), Philippines (5), Korea (14), EU (269) and Japan (231).</li> <li>- Specific limits of number of purse seine boats; EU (34) and Ghana (17).</li> <li>- No fishing with natural or artificial floating objects during January and February in the area encompassed by the African coast, 20° W, 5°N and 4°S.</li> <li>- No more than 500 FADs active at any time by vessel.</li> <li>- Use of non-entangling FADs.</li> </ul>

<sup>1</sup> Combined result of SS3 18 uncertainty grid. Median and 10 and 90% percentile in brackets.

<sup>2</sup> Reports for 2018 reflect most recent data but should be considered provisional.

<sup>3</sup> Probability of overfished > 99%, probability of overfishing > 99%.

**Atlantic White Marlin (*Kajikia albida* = *Tetrapturus albidus*) (ICCAT, 2015a; 2019b)**

This marlin is found throughout warm waters of the Atlantic from 45°N to 45°S including the Gulf of Mexico, the Caribbean Sea, and the Mediterranean Sea. The results of the 2012 assessment indicated that the stock remains overfished but most likely not undergoing overfishing. Relative fishing mortality has been declining over the last ten years and is now most likely to be below  $F_{MSY}$ . Relative biomass has probably stopped declining over the last ten years, but still remains well below  $B_{MSY}$ . There is considerable uncertainty in these results. The two assessment models provide different estimates about the productivity of the stock, with the integrated model suggesting that white marlin is a stock that can rebuild relatively fast whereas the surplus production model suggests the stock will rebuild very slowly. The results from both approaches are considered equally plausible. These results are conditional on the reported catch being a true reflection of the fishing mortality experienced by white marlin. Sensitivity analyses suggest that if recent fishing mortality has been greater than reported, because discards are not reported by many fleets, estimates of stock status would be more pessimistic and current relative biomass would be lower and overfishing would continue. The presence of unknown quantities of round scale spearfish in the reported catches and data used to estimate relative abundance of white marlin increases the uncertainty for the stock status and outlook for this species (**Table 7.3.1.14**).

The median of the current (2017) biomass ratio and fishing mortality ratio with 95% confidence intervals are 0.58 (0.27-0.87) and 0.65 (0.45-0.93), respectively. This implies that in 2017 the stock of Atlantic white marlin was being overfished but not undergoing overfishing. The probability of being in the red quadrant of the Kobe plot was estimated to be 1%. The probability of being in the yellow quadrants of the Kobe plot was estimated to be 99% and that of being in the green quadrant less than 1%. The estimated MSY was determined to be 1,495 t with 95% confidence intervals (1,316 t – 1,745t).

The stock status results for 2017 showed that Atlantic white marlin stock has a 99 % probability of being overfished but not suffering overfishing. The probability of being in the red quadrant of the Kobe plot was estimated to be 1%. The probability of being in the yellow quadrants of the Kobe plot was estimated to be 99% and that of being in the green quadrant less than 1%. The estimated MSY was determined to be 1,495 t with 95% confidence intervals (1,316 t – 1,745t).

**Table 7.3.1.14** Summary of Atlantic White Marlin stock status. Source: SCRS, 2019.

ATLANTIC WHITE MARLIN/ROUNDSKALE SPEARFISH SUMMARY	
MSY	1,495 (1,316 – 1,745) t <sup>1</sup>
Current (2018) Yield	314 t <sup>2</sup>
Relative Biomass: B <sub>2017</sub> /B <sub>MSY</sub>	0.58 (0.27-0.87) <sup>1</sup>
Relative Fishing Mortality: F <sub>2017</sub> /F <sub>MSY</sub>	0.65 (0.45-0.93) <sup>1</sup>
Stock Status (2017)	Overfished: Yes Overfishing: Not
Conservation and Management Measure in Effect:	Recommendations [Rec. 15-05] and [Rec. 18-04] Landing limit of 400 t in 2016 - 2019

<sup>1</sup> Median of combined estimates from 2 Stock Synthesis models and 1 JABBA model with approximate 95% confidence intervals.

<sup>2</sup> 2018 yield should be considered provisional.

#### Atlantic Blue shark (*Prionace glauca*) (ICCAT, 2015b)

There is a discrete North Atlantic stock of blue shark *Prionace glauca* (Heessen, 2003; Fitzmaurice *et al.*, 2005; ICCAT, 2008), with 5°N latitude the southern stock boundary, and a separate South Atlantic stock (ICCAT, 2008).

The North Atlantic Blue shark stock was assessed by ICCAT in 2015 using two different approaches: Bayesian Surplus Production Model (BSPM) and length-based age-structured models: Stock Synthesis (SS3). Both models suggested sustainable spawning stock size and fishing mortality rates relative to maximum sustainable yield (ICCAT, 2015b) (**Table 7.3.1.15**).

Blue shark is a highly migratory species that both, in Europe (Sims *et al.*, 2015) and globally (Rigby *et al.*, 2019a) is listed as 'Near Threatened' by the IUCN and as 'Critically Endangered' in the Mediterranean (Sims *et al.*, 2016).

#### Blue shark stock N

Scenarios with the Bayesian Surplus Production (BSP) estimated that the stock was not overfished is B2013/BMSY = 1.50 to 1.96., while estimates obtained with the SS3 models indicate that SSF2013/SSFMSY=1.35 to 3.45.

#### Blue shark stock S

Scenarios with the BSP (Bayesian Surplus Production) estimated that the stock was not overfished (B2013/BMSY=1.96 to 2.03). Estimates obtained with the state-space BSP were generally less optimistic, especially when process error was not included, predicting that the stock could be overfished (B2013/BMSY=0.78 to 1.29).

**Table 7.3.1.15** Summary of North Atlantic Blue shark stock status. Source: Report of the ICCAT, 2015b.

NORTH ATLANTIC BLUE SHARK SUMMARY		
Provisional Yield (2014)		36,516 t <sup>2</sup>
2013 Yield		36,748 t <sup>1</sup>
Relative Biomass	$B_{2013}/B_{MSY}$	1.35-3.45 <sup>3</sup>
	$B_{2013}/B_0$	0.75-0.98 <sup>4</sup>
Relative Fishing Mortality	$F_{MSY}$	0.19-0.20 <sup>4</sup>
	$F_{2013}/F_{MSY}$	0.04-0.75 <sup>5</sup>
Overfished 2013 (Yes/No)		Not likely <sup>6</sup>
Overfishing 2013 (Yes/No)		Not likely <sup>6</sup>

<sup>1</sup> Estimated catch used in the 2015 assessments.<sup>2</sup> Task I catch.<sup>3</sup> Range obtained with the Bayesian Surplus Production (BSP) and SS3 models. Value from SS3 is SSF/SSF<sub>MSY</sub>.<sup>4</sup> Range obtained with the BSP model.<sup>5</sup> Range obtained with the BSP and SS3 models.<sup>6</sup> Although the models explored indicate the stock is not overfished and overfishing is not occurring, the Committee acknowledges that there still remains a high level of uncertainty.

### Atlantic mackerel (*Scomber scombrus*) in subareas 1–8 and 14, and in Division 9.a (the Northeast Atlantic and adjacent waters)

The NEA Mackerel is assessed by the International Council for the Exploration of the Seas (ICES) as one stock. The stock has an extensive migration pattern with widely spread spawning areas. The stock is regulated through an arrangement of Coastal states agreements and NEAFC decisions. Hence, there is management based on a set of national TACs and a TAC for international waters covering the entire stock distribution area. Management is based on a set of reference points and thus the stock is classified as 'primary'. The most recent status is found in an answer to the Norwegian government (**Figure 7.3.1.11**) (ICES, 2019b).

The estimate of SSB at spawning time in 2017 from the inter-benchmark assessment in 2019 was 4,387,307t (+5,423,622t / -3,549,005t). The SSB estimate is well above the biomass limit level,  $B_{lim}$ , and above the revised biomass precautionary approach,  $B_{pa}$ , reference point (2.5mt). This  $B_{pa}$  reference point is set at a level with a high probability of the stock being above  $B_{lim}$ . The lower 95% probability estimate of SSB in 2017 was 3,549,005t. Therefore, it is highly likely (>80% probability) that the SSB is currently above the point where recruitment might be impaired.

## Northeast Atlantic Mackerel

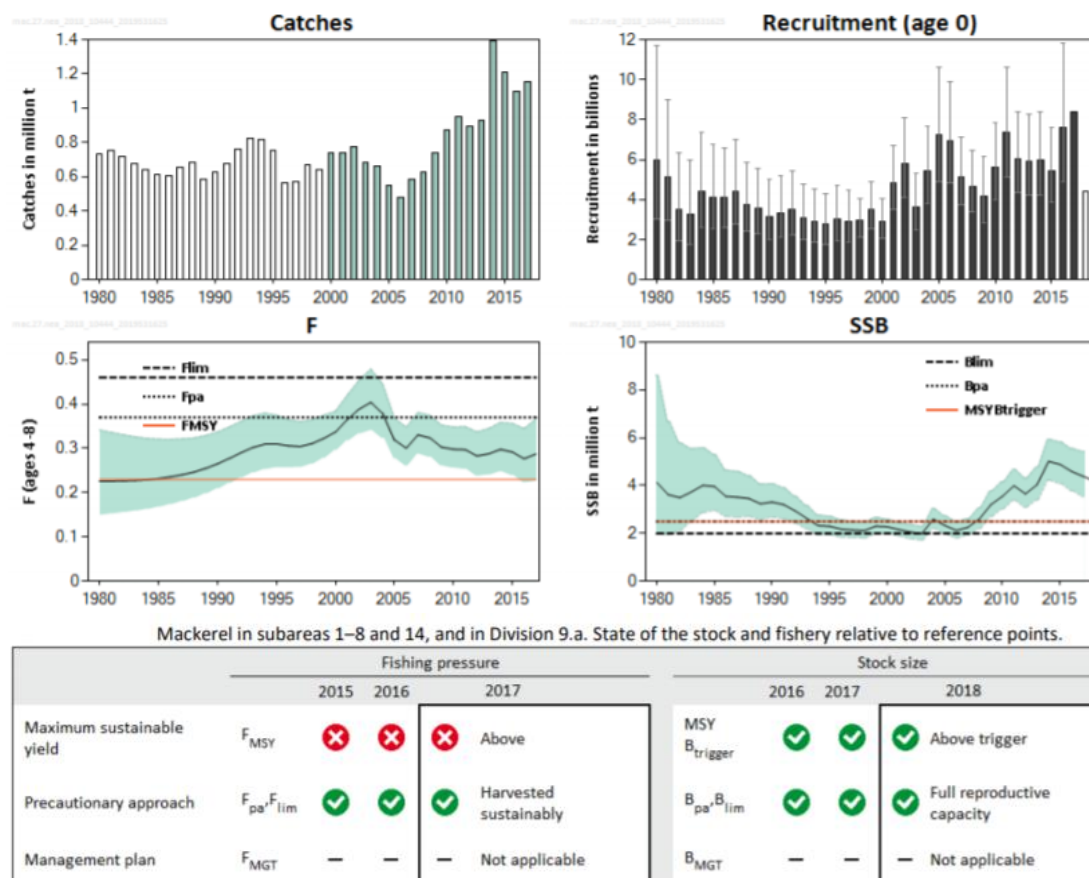


Figure 7.3.1.11 Northeast Atlantic Mackerel. Stock status and trends. Source: ICES, 2019b.

### Blue whiting (*Micromesistius poutassou*) in subareas 1–9, 12, and 14 (Northeast Atlantic and adjacent waters)

The stock is regulated through EU TACs which are based on an analytical assessment. This stock is classified as ‘minor’ in the catch composition of **Table 7.3.1.6** (where it only appears as slipped bait species in 0.08% of the total catch).

Fishing mortality (F) has increased from a historical low in 2011 to above FMSY since 2014. Spawning-stock biomass (SSB) decreased since 2017 but remains well above MSY Btrigger. Recruitments (R) in 2017 and 2018 are estimated to be low, following a period of high recruitments. ICES assesses that fishing pressure on the stock is above FMSY but below Fpa and Flim; and spawning-stock size is above MSY Btrigger and above Bpa and Blim (**Figure 7.3.1.12**) (ICES, 2018f).



		Fishing pressure				Stock size			
		2016	2017	2018		2017	2018	2019	
Maximum sustainable yield	$F_{MSY}$	✗	✗	✗ Above	MSY	✓	✓	✓ Above trigger	
Precautionary approach	$F_{pa}, F_{lim}$	✓	✓	✓ Harvested sustainably	$B_{pa}, B_{lim}$	✓	✓	✓ Full reproductive capacity	
Management plan	$F_{MGT}$	✗	✗	✗ Above	$B_{MGT}$	✓	✓	✓ Above	

**Figure 7.3.1.12** Blue whiting in subareas 1–9, 12, and 14. State of the stock and fishery relative to reference points. Source: ICES, 2018f.

Blue whiting is not one of the species landed or retained by the Basque, Galician or Cantabrian fleets. It only appears as slipped bait species in 0.08% of the total catch in the data from the Basque live bait fleet taken by observers (UoC2) and it was always slipped (**Table 7.3.1.6**).

#### **Horse mackerel (*Trachurus trachurus*) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k (the Northeast Atlantic)**

The stock is regulated through EU TACs which is based on an analytical assessment. According to **Table 7.3.1.11** this stock is classified as ‘minor’.

The stock and the fishery are very dependent on occasional high recruitments. After a series of low recruitments, the estimates since 2014 are above average (1983–2017). SSB has been declining since 2007 and has been around MSY  $B_{trigger}$  since 2014. Fishing mortality has decreased since 2013 and is currently below  $F_{MSY}$  (**Figure 7.3.1.13**). The stock is at increased risk of recruitment impairment. However, the stock is also increasing (ICES, 2018d).

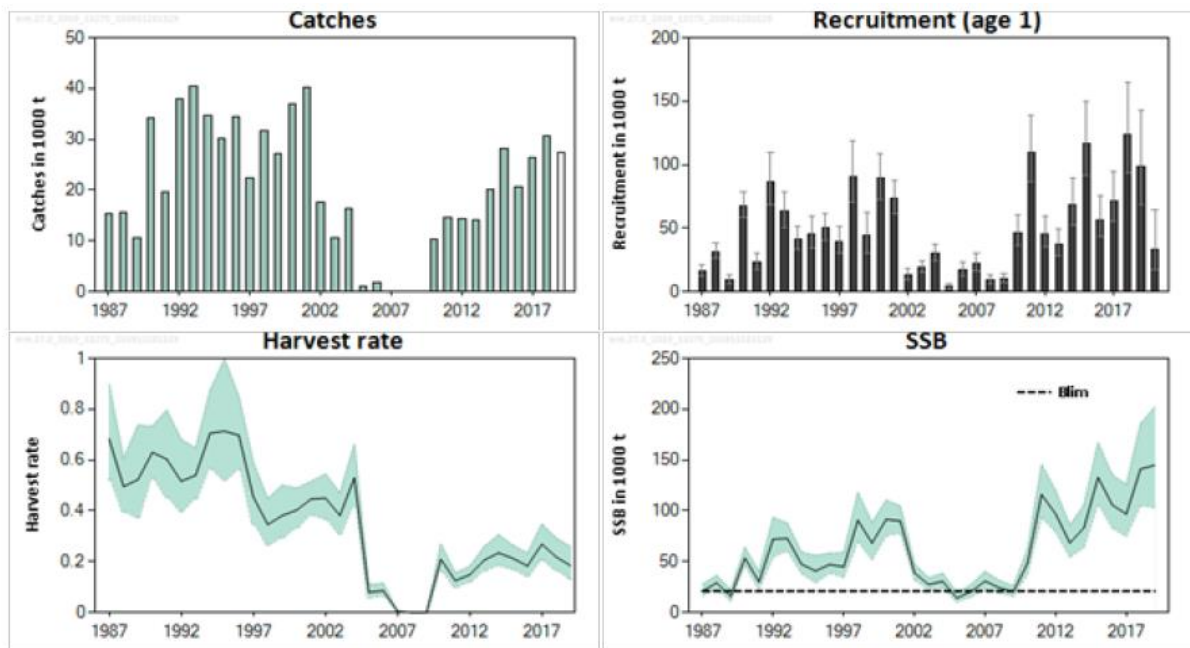
		Fishing pressure				Stock size			
		2015	2016	2017		2016	2017	2018	
Maximum sustainable yield	$F_{MSY}$	✓	✓	✓ Below	MSY $B_{trigger}$	✗	✗	✗ Below trigger	
Precautionary approach	$F_{pa}, F_{lim}$	✓	✓	✓ Harvested sustainably	$B_{pa}, B_{lim}$	○	○	○ Increased risk	
Management plan	$F_{MGT}$	—	—	— Not applicable	$B_{MGT}$	—	—	— Not applicable	

**Figure 7.3.1.13** Northeast Atlantic Horse mackerel. State of stock and fishery. Source: ICES, 2018d.

#### **European anchovy (*Engraulis encrasicolus*) in Subarea 8 (Bay of Biscay)**

The stock is regulated through EU TACs which is based on an analytical assessment. According to **Table 7.3.1.11** this stock is classified as ‘minor’.

In the latest assessment, the 2019 SSB is estimated at around 145,000 t average (between 105,000 and 185,000 t) (**Figure 7.3.1.14**), which is almost seven times more than  $B_{lim}$  (21,000 t), i.e., biomass under which recruitment is likely to be impaired. Even considering the lowest probabilistic range in the estimates of the 2019 stock biomass, it is still five times more than  $B_{lim}$ . Furthermore, since the range does not reach  $B_{lim}$ , the probability of SSB in 2019 being below  $B_{lim}$  is less than 0.001. Stock biomass has been above  $B_{lim}$  since 2010 and it is presently at historical high levels (WGHANSA, 2019).



**Figure 7.3.1.14** Anchovy in Subarea 8. Summary of the stock assessment. Trends in catch (preliminary value not shaded), recruitment (age 1 biomass, January 1), harvest rate (catch / SSB; in 2019 it is preliminary), and spawning-stock biomass (mid-May). 90% confidence limits are indicated for recruitment, harvest rate, and SSB. Source: ICES, 2019a.

### Sardine (*Sardina pilchardus*)

Two different stocks of sardine overlap the geographical area of the assessed fishery:

#### Sardine in divisions 8.a–b and 8.d (Bay of Biscay)

The stock is regulated through EU TACs which are based on an analytical assessment. According to **Table 7.3.1.1.11** this stock is classified as ‘minor’. The spawning-stock biomass (SSB) is above MSY  $B_{\text{trigger}}$  (**Figure 7.3.1.15**). Fishing mortality steeply increased in 2010–2012 and has been above  $F_{\text{MSY}}$  but below  $F_{\text{lim}}$  since then. Recruitment has been variable over time. Recruitment in 2016 and 2017 is above the time-series average (ICES, 2018b). The stock is well above  $B_{\text{lim}}$  (PRI).

Sardine in divisions 8.a–b and 8.d. State of the stock and fishery relative to reference points.							
		Fishing pressure				Stock size	
		2015	2016	2017		2016	2017
Maximum sustainable yield	$F_{\text{MSY}}$	✗	✗	✗	Above	✓	✓
Precautionary approach	$F_{\text{pa}}, F_{\text{lim}}$	○	○	○	Increased risk	✓	✓
Management plan	$F_{\text{MGT}}$	—	—	—	Not applicable	—	—
						2018	
						✓	Above trigger
						✓	Full reproductive capacity
						—	Not applicable

**Figure 7.3.1.15** Northeast Atlantic Sardine (Bay of Biscay). State of stock and fishery. Source: ICES (2018b).

### Sardine in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)

The stock is regulated through EU TACs which are based on an analytical assessment. According to **Table 7.3.1.1.11** this stock is classified as ‘minor’.

The biomass of age 1 and older fish has decreased since 2006, has been below  $B_{lim}$  since 2009, and has stabilized to a historical low since 2012. Recruitment has been below the long-term average since 2005, and in 2017 it was estimated as the lowest in the time-series. Fishing mortality has been above  $F_{lim}$  for most of the time-series but has been decreasing from a peak in 2011. In 2017, it is the lowest in the time-series and around  $F_{pa}$ . The biomass of 1+ fish is less than half of  $B_{lim}$  since 2011, and thus recruitment is considered to be impaired. Recruitment has been at the lowest historical level since 2006, and in 2017 was estimated as the lowest in the time-series. Stock is below PRI (**Figure 7.3.1.16**) and the recovery plan is not precautionary (ICES, 2018c).

Sardine in divisions 8.c and 9.a. State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size		
		2015	2016	2017		2016	2017	2018
Maximum sustainable yield	$F_{MSY}$	✗	✗	✗	Above	$MSY$	✗	✗
						$B_{trigger}$	✗	✗
								✗
Precautionary approach	$F_{pa}, F_{lim}$	✓	✓	✓	Harvested sustainably	$B_{pa}, B_{lim}$	✗	✗
								✗
Management plan	$F_{MGT}$	—	—	—	Not applicable	$B_{MGT}$	—	—
								—

**Figure 7.3.1.16** Northeast Atlantic Sardine (Cantabrian Sea and Atlantic Iberian waters). State of stock and fishery. Source: ICES (2018c).

#### b. Secondary species impacted by the UoC

In relation to the Secondary species, all the other species listed in **Table 7.3.1.10** (UoC1-trolling) and **Table 7.3.1.11** (UoC2-live bait), which were not considered ETP species, were classified as ‘secondary’ components. The resulting list includes:

- UoC1- trolling fleet: 2 species of a total of 8 are classified as Secondary, as they are managed without reference points (**Table 7.3.1.10**).
- UoC2- live bait fleet: 6 species out of the total 17 are classified as Secondary, as they are managed without reference points (**Table 7.3.1.11**).

All of them would be below the threshold to be considered ‘Main’ subcomponents. Therefore, classified as ‘Minor’ subcomponents for the purpose of this reassessment. All these components have been classified as data deficient against FCP 7.7.3.

### c. ETP species impacted by the UoC

According to MSC requirements (SA 3.1.5), the team shall assign ETP species as follows:

- a. Species that are recognized by national ETP legislation (in this case Spanish legislation).
- b. Species listed in binding international agreements given below:
  - Appendix 1 of the Convention on International Trade in Endangered Species (CITES), unless it can be shown that the particular stock of the CITES listed species impacted by the UoA under assessment is not endangered.
  - Binding agreements concluded under the Convention on Migratory Species (CMS), such as the Agreement on the Conservation of Albatrosses and Petrels (ACAP) or Annex 1 of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS).
- c. Species classified as 'out-of scope' (amphibians, reptiles, birds and mammals) that are listed in the IUCN Red list as vulnerable (VU), endangered (EN) or critically endangered (CR).

In Spain, Law 42/2007, of 13 December, on **Natural heritage and biodiversity**, establishes the basic legal framework for the conservation, sustainable use, improvement and restoration of Spain's natural heritage and biodiversity and encompasses the regulations set out in the United Nations Convention on Biological Diversity. This law gives absolute protection to wildlife throughout Spain and its surrounding marine Exclusive Economic Zone (EEZ) and its scope extends to the Spanish fleet in international waters. The aforementioned law covers the List of Wild Species under a Special Protection Regime, which includes species, subspecies and populations that need specific care or protection, based on their scientific, ecological, cultural value, as well as their uniqueness, rarity, or how endangered they are, along with those listed as protected in the annexes of the Guidelines and international agreements ratified by Spain. The list was modified by Royal Decree 1015/2013, of 20 of December, regulating annexes I, II, and V of Law 42/2007, of 13 of December, on Natural Heritage and Biodiversity.

The most abundant marine mammal and turtle species listed in the Law on Natural Heritage and Biodiversity in the Bay of Biscay are: the common dolphin (*Delphinus delphis*), the striped dolphin (*Stenella coeruleoalba*), the bottlenose dolphin (*Tursiops truncatus*), the long-finned pilot whale (*Globicephala melas*) and the harbour porpoise (*Phocoena phocoena*) (Lassale *et al.* 2011; 2012). Two marine turtle species, the loggerhead (*Caretta caretta*) and the leatherback (*Dermochelys coriacea*), occur year-round in the south of the advisory region. Among the most abundant seabirds in the area listed by Certain and Bretagnolle (2008), only common guillemot (*Uria aalge*) is cited in the Law on Natural Heritage and Biodiversity (Annex IV). None of these species have had any interactions with the fleet during the assessed period.

As mentioned above in **Section 7.3.1.4**, from all the data collected by observers (analysed by AZTI), 3 different species of birds have been found to have some interaction with the trolling fleet (UoC1), the great shearwater (*Ardenna gravis*<sup>1</sup>), northern gannet (*Morus bassanus*) and northern fulmar (*Fulmarus glacialis*), being the great shearwater the most impacted species. These 3 species are included in the Spanish list of wild species in special protection regime (Real Decreto 139/2011, de 4 de Febrero) and therefore they are considered as ETP according to the MSC requirements.

From the 3 different bird's species, two of them are considered as Least Concern (LC) by the IUCN and their populations are either stable (great shearwater) or increasing (northern gannet). Just one, *Fulmarus glacialis* population in Europe is listed in the IUCN Red List as Endangered and therefore, classified as an ETP species. From all the data collected and analysed, just 1 individual of *Fulmarus glacialis* was caught in 2018 and it was released alive.

<sup>1</sup> Note that *Ardenna gravis* appears as *Puffinus gravis* in the RD 139/2011.

In case of the live bait fleet (UoC2), from all the data collected by the observers, just 2 species of seabirds have been found to have some interaction with this fleet, the great shearwater (*Ardenna gravis*<sup>1</sup>) and the northern gannet (*Morus bassanus*), both of them included in the Spanish list of wild species in special protection regime (Real Decreto 139/2011, de 4 de Febrero) and therefore they are considered as ETP according to the MSC requirements.

### 7.3.2 Principle 2 Performance Indicator scores and rationales

#### PI 2.1.1 – Primary species outcome

PI 2.1.1		The UoA aims to maintain primary species above the point where recruitment would be impaired (PRI) and does not hinder recovery of primary species if they are below the PRI		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Main primary species stock status			
	Guide post	Main primary species are <b>likely</b> to be above the PRI.	Main primary species are <b>highly likely</b> to be above the PRI.	There is a <b>high degree of certainty</b> that main primary species are above the PRI <b>and are</b> fluctuating around a level consistent with MSY.
		OR  If the species is below the PRI, the UoA has measures in place that are <b>expected</b> to ensure that the UoA does not hinder recovery and rebuilding.	OR  If the species is below the PRI, there is either <b>evidence of recovery</b> or a demonstrably effective strategy in place <b>between all MSC UoAs which categorise this species as main</b> , to ensure that they collectively do not hinder recovery and rebuilding.	
	Met?	<b>UoC1: NA</b> <b>UoC2: Yes</b>	<b>UoC1: NA</b> <b>UoC2: Yes</b>	<b>UoC1: NA</b> <b>UoC2: No</b>
Rationale				

#### UoC1 (trolling fleet)

Taking into consideration that as explained in **section 7.3.1.5** there are not main primary species in UoC1, Sla for the UoC1 is **not applicable**.

#### UoC2 (live bait fleet)

MSC defines a default level for the PRI at  $0.5B_{MSY}$  or  $20\%B_0$  (GSA 2.2.3.1). According to Table SA9, for PI 2.1.1: Likely means greater than or equal to the 70<sup>th</sup> percentile; highly likely 80<sup>th</sup> percentile; high degree of certainty 90<sup>th</sup> percentile. However, as there is no clear quantitative analysis which would allow us to use the probabilistic definitions of likely, highly like, or high degree of certainty provided by MSC, scoring has, therefore, been based on qualitative perceptions of probability and risk.

Five different bluefin tuna stock assessment models were tried during the stock assessment workshop in 2017 (i.e., VPA, Stock Synthesis 3, ASAP 3, SAM<sup>2</sup> and SCAL). Only one (VPA) was considered sufficiently advanced at the conclusion of the meeting to be considered as the primary basis for management advice, but the Group recommended considering the four other models when developing the scientific advice (ICCAT, 2017c).

The 2017 full assessment (i.e., the latest full assessment updated in 2020) results from the VPA base case for the East Atlantic and Mediterranean Bluefin tuna (*Thunnus thynnus*) (ICCAT, 2019a), indicated that the spawning stock biomass

<sup>2</sup> The intention of using SAM was not to provide an alternative assessment to the VPA but to help identify the impact of uncertainty on the advice and to propose potential solutions that could be simulation tested using the MSE (ICCAT, 2017c).



(SSB) peaked in the mid-1970s after increasing initially and then declined until 1991 and remained steady up to the mid-2000s. From the late 2000s, SSB exhibited a substantial increase through 2015. The extent of that increase depends on the choices of model configuration and the indices of abundance and terminal year (2014 vs 2015). This led to some concern that the model was very sensitive to adding one additional year of data (i.e., the estimating of a substantial overall increase in biomass with the addition of only the last year of data).

$F_{0.1}$  was considered a reasonable proxy for  $F_{MSY}$ , although it could be higher or lower than  $F_{MSY}$  depending on the stock recruitment relationship, which in this case was poorly determined (ICCAT, 2019a). However,  $F_{0.1}$  was tested and shown to be appropriate (Rademeyer & Butterworth 2018). Moreover, compared to 2014 the extra data available in the 2017 assessment did better confirm recent stock increase though the level of increase remained difficult to quantify. Nevertheless,  $F_{cur}$  appeared to be clearly below  $F_{0.1}$  ( $F_{cur}/F_{0.1} = 0.34$ ) (ICCAT, 2019a).

Based on the 2020 update assessment, the eastern Atlantic and Mediterranean bluefin tuna biomass reaches 873,000 t in 2018, which is the highest estimate ever and 30% above the maximum in the 1970s. The ASAP model estimated stock biomass to be 583,000 t in 2018. However, the uncertainty regarding the magnitude of the recent SSB increase estimated by the VPA is even higher than in the 2017 VPA assessment due to considerable instability in the recruitment estimates. Recruitment shows an antagonistic pattern between assessments years, being high in recent years but decreasing in 2018 in the 2000 assessment, while the opposite is true for the 2017 assessment (Figure 7.3.1.8). At the end, as stated above, the SRCS concluded that the VPA models tested were not sufficiently reliable to be used as the basis for management advice. However, the available data do clearly indicate that the biomass of the East Atlantic and Mediterranean bluefin tuna has increased since the late 2000s, is high at present, and that there are no concerns that overfishing may be occurring under the current TAC (36,000 t in 2020; ICCAT, 2020c).

Based on all the above, the team concludes that the main primary species is at least highly likely to be above the PRI. Hence, **SG60** and **SG80** are met.

Minor primary species stock status				
<b>b</b>	Guide post			Minor primary species are highly likely to be above the PRI.  OR  If below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species.
	Met?			<b>UoC1: Yes (all species but BET)</b> <b>UoC1: No (BET)</b> <b>UoC2: Yes (all species but BET)</b> <b>UoC2: No (BET)</b>
Rationale				

### UoC1

Three species out of the 8 listed in **Table 7.3.1.10** are managed based on biological reference points and therefore assessed as Primary P2-components (orange shaded): bluefin tuna (*Thunnus thynnus*), Bigeye tuna (*Thunnus obesus*) and Atlantic white marlin (*Tetrapturus albidus*).

As shown in **Table 7.3.1.8**, none of the species reported by the UoC1 accounted for 5% of the total catch in the total data analysed from 2016 to 2020. Therefore, all the species in the UoC1 (trolling) are being assessed as 'minor' subcomponents.

### **UoC2**

Nine species out of the 17 listed in **Table 7.3.1.11** are managed based on biological reference points and therefore assessed as Primary P2-components (orange shaded): bluefin tuna (*Thunnus thynnus*), Bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), anchovy (*Engraulis encrasicolus*), Atlantic horse mackerel (*Trachurus trachurus*), sardine (*Sardina pilchardus*), Atlantic mackerel (*Scomber scombrus*), blue whiting (*Micromesistius poutassou*) and blue shark (*Prionace glauca*).

As shown in **Table 7.3.1.9**, only one of the species (i.e., bluefin tuna) reported by the UoC2 accounted for more than 5% of the total catch in the total data analysed from 2016 to 2020. Therefore, from all the species in the UoC2 (live bait) bluefin tuna is being assessed as 'main' and the rest are being assessed as 'minor' subcomponents.

Overall (putting together both UoCs), detailed information on the 'Primary minor' subcomponents is summarized in **Section 7.3.1.4**.

**Table 2.1.1. Summary of all Primary minor species impacted by both UoC1 and UoC2, stocks and likelihood of those species to be above the PRI.**

Species	Stocks	Latest year	Above PRI	UoC1 catches by observers	% by logbook	UoC2 catches by observers	% by logbook
Sardine	Divisions 8.a–b//8.d	2018	Highly likely	0%	0%	0%	0%
	Divisions 8.c//9.a	2018	Not highly likely				
European anchovy	Subarea 8	2019	Highly likely	0%	0%	3.8%	0%
Horse mackerel	Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k	2018	Not highly likely	0%	0%	0.2%	0%
Atlantic mackerel	Northeast Atlantic	2019	Highly likely SSB>PRI	0%	0%	0.05%	0%
Blue whiting	Subareas 1–9, 12, and 14	2018	Highly likely	0%	0%	0.08%	0%
Atlantic blue shark	Stock N	2015	Highly likely	0%	0%	0%	0%
	Stock S	2015	Highly likely				
Atlantic white marlin	Atlantic Stock	2019	Highly likely	0%	0%	0%	0%
Bigeye tuna		2020	Not Highly likely	0.07%	0.68%	0.6%	1.71%
Eastern skipjack tuna	Stock E	2017	Highly likely	0%	0%	0%	0.23%
Bluefin tuna	East Atlantic and Mediterranean	2020	Highly likely	0.03%	0.02%		

All the minor primary species that could be potentially impacted by the North Atlantic Albacore fishery in both UoC1 and UoC2, are highly likely to be above the PRI, except the Atlantic horse mackerel (*Trachurus Trachurus*), the Sardine (*Sardina pilchardus*) divisions 8.c//9.a and the bigeye tuna (*Thunnus obesus*).

The Atlantic horse mackerel SSB has been declining since 2007 and has been around MSY  $B_{trigger}$  since 2014. Fishing mortality has decreased since 2013 and is currently below  $F_{MSY}$  (**Figure 7.3.1.13**). The stock is at increased risk of recruitment impairment, although the stock is also increasing (ICES, 2018d).

The recruitment of the sardine has been below the long-term average since 2005, and in 2017 it was estimated as the lowest in the time-series. Fishing mortality has been above  $F_{lim}$  for most of the time-series but has been decreasing from a peak in 2011. In 2017, it is the lowest in the time-series and around  $F_{pa}$ . The biomass of 1+ fish is less than half of  $B_{lim}$  since 2011, and thus recruitment is considered to be impaired. Recruitment has been at the lowest historical level since 2006, and in 2017 was estimated as the lowest in the time-series. Stock is below PRI (**Figure 7.3.1.16**) and the recovery plan is not precautionary (ICES, 2018c).

Regarding the bigeye tuna, the SS3 uncertainty grid shows trajectories of increasing  $F$  decreasing  $B$  towards the red area of the Kobe plot ( $F > F_{MSY}$  and  $SSB < SSB_{MSY}$ ), overfishing starting in around 1994 and an overfished stock at around 1996-1997, and being in the red quadrant of the Kobe plot since then (**Figure 7.3.3.8**). According to the results of the SS3 uncertainty grid, Atlantic bigeye stock is currently overfished ( $SSB/SSB_{MSY} = 0.59$ , ranging from 0.42 to 0.80) median (90th percentile) and undergoing overfishing ( $F/F_{MSY} = 1.6$ , ranging from 1.14 to 2.12) with very high probability (99%) (**Figure 7.3.1.10**).

The Committee is confident that uncertainty of the stock assessment results has decreased from previous stock assessments and that the Bigeye tuna is overfishing and being overfished with a probability  $> 90\%$  (**Table 7.3.1.13**). This is likely the result of the use of the improved joint LL index, the confirmation that catches continue to exceed TACs, and the use of a single model platform for the provision of the management advice.

However, both Atlantic horse mackerel and sardine represents a total of the UoC2 catches of 0.2% and 0%, respectively, therefore, the team considers that there is evidence that the UoA does not hinder the recovery and rebuilding of these two minor primary species, hence meeting **SG100**.

On the contrary, the assessment team considers both UoCs bigeye tuna catches are slightly higher and therefore, using MSC precautionary approach, BV cannot confirm that there is evidence that the UoCs do not hinder the recovery and rebuilding of the bigeye tuna species, hence **not meeting SG100**.

## References

- ◆ ICCAT, 2017c
- ◆ ICCAT, 2018c
- ◆ ICCAT, 2018d
- ◆ ICCAT 2019
- ◆ ICES, 2018c
- ◆ ICES, 2018d

Draft scoring range

$\geq 80$

Information gap indicator

Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	See scoring per elements
Condition number (if relevant)	NA

### PI 2.1.1 – Scoring Calculation for each scoring element.

The Combining scoring per elements set out in Table 4 of MSC FCP v2.2 7.17.10 was used to determine the PI score.

(UoC1) Elements	UoC1 (S1a)	UoC1 (S1b)	PI score
Bigeye tuna	NA	80	95
Bluefin tuna	NA	100	
Atlantic white marlin	NA	100	

(UoC2) Elements	UoC2 (S1a)	UoC2 (S1b)	PI score
Bigeye tuna	80	80	85
Bluefin tuna	80	NA	
Blue shark	80	100	
Atlantic white marlin	80	100	
Skipjack tuna	80	100	
Anchovy	80	100	
Atlantic horse mackerel	80	100	
Sardine	80	100	
Atlantic mackerel	80	100	
Blue whiting	80	100	

## PI 2.1.2 – Primary species management strategy

PI 2.1.2		There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are <b>measures</b> in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to be above the PRI.	There is a <b>partial strategy</b> in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the PRI.	There is a <b>strategy</b> in place for the UoA for managing main and minor primary species.
	Met?	<b>UoC1: Yes</b> <b>UoC2: Yes</b>	<b>UoC1: Yes</b> <b>UoC2: Yes</b>	<b>UoC1: No</b> <b>UoC2: No</b>
Rationale				

**UoC 1 (Trolling fleet)**

There are no main primary species caught by the UoC 1 in the North Atlantic albacore fishery, therefore, **SG60 and SG80 are met by default.**

MSC defines a “strategy” as a cohesive and strategic arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome, and which should be designed to manage impact on that component specifically. It also states that a strategy needs to be appropriate to the scale, intensity and cultural context of the fishery and should contain mechanisms for the modification fishing practices in the light of the identification of unacceptable impacts.

For assessing SG100 all primary species (main AND minor have to be considered). There are individual regulations of all the primary species (bigeye tuna, bluefin tuna and Atlantic white marlin) but no overarching strategy for managing minor primary species, therefore, **SG100 is not met.**

**UoC2 (live bait fleet)**

MSC defines a “partial strategy” as a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically.

For the Bluefin Tuna (only main primary species in UoC2), a rebuilding strategy has been in place for the stock since 1998 with an aim to reach BMSY with 50 % certainty, though this has not been met. Rather current management advice is based on fishing mortality reference points rather than SSB due to uncertainty in long term recruitment potential. The F reference point used to assess the fishery is  $F_{0.1}$  ( $F_{MSY}$  proxy) with short term yield-based projection based on recent recruitment. The principle management measure in place is the TAC, with a number of additional measures (see set out in Recommendation 17-06 below).

The Commission in recommendation 17-06 set a TAC of 2,350 t for 2018, 2019 and 2020. Projections indicate that these catches would be unlikely to lead to overfishing for this three-year time period. As there were no signs in the fishery indicators (10 CPUEs indices and two survey data sets) in 2018 data that would indicate a reason to alter current management in 2018 this recommendation was maintained. The SCRS (in 2017) estimated that the biomass of the western stock of bluefin tuna has been increasing since about 2004, after two decades of stability, and in 2015 was at 69 % of the 1974 biomass level under one model and 45 % of the 1974 level under another (17-06).

Cohesive management measures for the stock in Recommendation 17-06 include:

- Effort and capacity limits.
- TACs, TAC allocations, and catch limits.
- Minimum fish size requirements and protection of small fish.
- Area and time restrictions.
- Transshipment prohibition.
- Development of Management Procedures / Management Strategy Evaluation (MSE)
- Scientific research and data and reporting requirements.

At the UoC2 level the following is relevant to management measures:

The high selectivity of this gear is the main strategy for managing retained species. The small proportion of bycatch (94.29%) means that a partial strategy is already in place (Onandia et al., 2021b). Moreover, the use of the "slipping practice" is an operational method that minimises mortality of by catch and increases the survivability of the species released. Therefore, **SG60 and SG80 are met**.

For assessing SG100 all primary species (main AND minor have to be considered). There are individual regulations of all the primary species (mackerel, sardine, horse mackerel, blue whiting, bluefin tuna, blue shark, European anchovy, bigeye tuna, skipjack tuna and bluefin tuna) but no overreaching strategy for managing main and minor primary species, therefore, **SG100 is not met**.

Management strategy evaluation			
<b>b</b>	Guide post	The measures are considered <b>likely</b> to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is some <b>objective basis for confidence</b> that the measures/partial strategy will work, based on some information directly about the fishery and/or species involved.
	Met?	<b>UoC1: Yes</b> <b>UoC2: Yes</b>	<b>Testing supports high confidence</b> that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved. <b>UoC1: No</b> <b>UoC2: No</b>
Rationale			

The measures that are applicable to the North Atlantic Albacore fishery include a set of TACs (for Albacore and primary by-catch species). These are based on scientific advice and precautionary fishery (MSY considerations), and with good compliance are expected to work based on general experience with these measures, therefore, **SG60 is met for both UoC1 and UoC2**.

#### UoC1 (trolling fleet)

Following the MSC Fisheries Standard v2.01 SA3.1.9, the team shall interpret key words or phrases used in P2 as shown in Table SA8. "Objective basis for confidence", as used at the SG80 level in the P2 management PIs (Management Strategy Evaluation scoring issue) refers to the levels of information required to evaluate the likelihood that the



management partial strategy will work. The SG80 level requires expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA.

Based mainly on the information available for the 3 primary minor species included in UoC1 (BET, BFT and WHM) (see **Section 7.3.1.5**), and the % of these species caught by the assessed fleet (see PI 2.1.1b), there is some objective basis for confidence that measures in place are working and, therefore, **SG80 is met**.

However, the assessment team considers that so far there is no testing to support with high confidence that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved and, therefore, **SG100 is not met**.

#### UoC2 (live bait fleet)

Based mainly on the information available for the only main primary species (BFT) (see PI 2.1.1a) and the 8 primary minor species caught by the UoC2 and the corresponding % of these species caught by the assessed fleet (see PI 2.1.1b and **Section 7.3.1.5**), there is some objective basis for confidence that measures in place are working and, therefore, **SG80 is met**.

However, the assessment team considers that so far there is no testing to support with high confidence that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved and, therefore, **SG100 is not met**.

Management strategy implementation			
<b>C</b>	Guide post	There is <b>some evidence</b> that the measures/partial strategy is being <b>implemented successfully</b> .	There is <b>clear evidence</b> that the partial strategy/strategy is being <b>implemented successfully and is achieving its overall objective as set out in scoring issue (a)</b> .
	Met?	<b>UoC1: Yes</b> <b>UoC2: Yes</b>	<b>UoC1: Yes</b> <b>UoC2: Yes</b>
Rationale			

The North Atlantic albacore fishery has a negligible % of non-target species of both the UoC1 (trolling fleet), 98.72% and the UoC2 (live bait fleet), 94.29%. Moreover, based on the PI 2.1.1 Sla), where it is shown that there are no Main primary species in UoC1 and just the BFT as Main primary species in UoC2, and PI 2.1.1b), where it is shown that all minor primary species are highly likely to be above the PRI or if below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species. For all the above-mentioned, the team considers that there is **some evidence** that the measures/partial strategy is being **implemented successfully**, therefore, **meeting both UoC1 and UoC2 SG80**.

As explained in PI 3.2.3 b), sanctions to deal with non-compliance exist, are consistently applied and are thought to provide effective deterrence. In the Initial assessment PCR report (García et al., 2016), it was mentioned that the percentage of exceedance was very small in relation to the amount of landings. In addition, during both, the first certification cycle and during the re-assessment site-visit, the Spanish Sub-directorate for Fisheries Control and Inspection considered that the fleet is complying with the management system. Therefore, the team believes that there is **clear evidence** that the partial strategy/strategy is being **implemented successfully and is achieving its overall objective as set out in scoring issue (a)**, thus, **SG100 is met for both UoC1 and UoC2**.

Shark finning				
d	Guide post	It is <b>likely</b> that shark finning is not taking place.	It is <b>highly likely</b> that shark finning is not taking place.	There is a <b>high degree of certainty</b> that shark finning is not taking place.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

The fishery takes place within European waters and therefore, UE and also Spain has also to follow Council Regulations (EC) No 1185/2003 and (EC) No 605/2013 which establish a general prohibition of the practice of 'shark finning', whereby shark's fins are removed and the remainder of the shark is discarded at sea.

There are various management Recommendations and Resolutions adopted by ICCAT that address shark finning in the ICCAT area of jurisdiction.

Moreover, Blue shark (*Prionace glauca*) is the only shark species impacted by the assessed fleet (only UoC2) and assessed as a primary minor component of the P2. Live bait fishing (UoC2) involves the prior capture of the bait with a small purse seine gear, so that the maneuver is quick and the bait can be shipped in the best possible conditions to maximize its survival in the nurseries. In 2017, 50 Kg of blue shark were caught as part of the bait catch, and all of it was "slipping" (once the bait nurseries are completed, the remnant remaining in the net is released without being shipped. It may also happen that the catch is not of the desired species or size and slipping occurs). This 50 kg of blue shark represents a 0% of the total catch of the UoC2, therefore, it was not even brought onboard so the team concludes that there is a high degree of certainty that shark finning is not taking place within this fishery. **SG 100 is met.**

Review of alternative measures				
e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all primary species, and they are implemented, as appropriate.
	Met?	NA	NA	NA
Rationale				

Following SA3.1.6, the term 'unwanted catch' shall be interpreted by the team as the part of the catch that a fisher did not intend to catch but could not avoid and did not want or chose not to use. The only main primary species caught by the assessed fleet, i.e., Bluefin tuna (*Thunnus thynnus*), cannot be considered as unwanted catch as this is a species of high marketable value that it is always retained. Regarding the minor primary species, their percentages of slipping from the observer' source of information (see **section 7.3.1.4 a**) are as follow:

Species	% Slipping
European anchovy	0.2
Blue shark	0.004
Sardine	0.0019
Atl. Horse mackerel	0.02
Blue whiting	0.07

As the fishery operates under the EU discard ban with only *de minimis* derogations from this ban, there is hardly unwanted catch of the minor primary species, and they are all slipped, therefore, as there is no mortality of unwanted catches this SI is **Not Applicable**.

#### References

- ◆ García *et al.*, 2016
- ◆ Onandia *et al.*, 2021b

Draft scoring range	≥80
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Information gap indicator	Information sufficient to score PI
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Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	90
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Condition number (if relevant)	NA
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## PI 2.1.3 – Primary species information

PI 2.1.3		Information on the nature and extent of primary species is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage primary species		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Information adequacy for assessment of impact on main primary species			
	Guide post	Qualitative information is <b>adequate to estimate</b> the impact of the UoA on the main primary species with respect to status.  <b>OR</b>  If RBF is used to score PI 2.1.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for main primary species.	Some quantitative information is available and is <b>adequate to assess</b> the impact of the UoA on the main primary species with respect to status.  <b>OR</b>  If RBF is used to score PI 2.1.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes for main primary species.	Quantitative information is available and is <b>adequate to assess with a high degree of certainty</b> the impact of the UoA on main primary species with respect to status.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

From 2016, the fishery has been collecting data both from independent observers (analysed by AZTI, Onandia et al., 2021a, Onandia et al., 2021b) and from both UoC (trolling and live bait fleets), and with all the information gathered, we can confirm that there is just one main primary species caught by the UoC2 of the North Atlantic albacore fishery. Therefore, the assessment team concludes that quantitative information is available and is **adequate to assess with a high degree of certainty** the impact of the UoA on main primary species with respect to status, therefore, reaching **SG60, SG80 and SG100**.

Information adequacy for assessment of impact on minor primary species				
<b>b</b>	Guide post	Some quantitative information is adequate to estimate the impact of the UoA on minor primary species with respect to status.		
	Met?			<b>Yes</b>
Rationale				

The North Atlantic albacore fishery has a negligible % of non-target species of both the UoC1 (trolling fleet), 98.72% and the UoC2 (live bait fleet), 94.29%. Moreover, based on the PI 2.1.1b), where it is shown that all minor primary species are highly likely to be above the PRI or if below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species. For all the above-mentioned, the team considers that there is some adequate quantitative information to estimate the impact of the UoA on minor primary species with respect to status, therefore, **meeting SG100**.

<b>c</b>	Information adequacy for management strategy
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	Guide post	Information is adequate to support <b>measures</b> to manage <b>main</b> primary species.	Information is adequate to support a <b>partial strategy</b> to manage <b>main</b> primary species.	Information is adequate to support a <b>strategy</b> to manage <b>all</b> primary species, and evaluate with a <b>high degree of certainty</b> whether the strategy is achieving its objective.
	Met?	<b>UoC1: Yes</b> <b>UoC2: Yes</b>	<b>UoC1: Yes</b> <b>UoC2: Yes</b>	<b>UoC1: Yes</b> <b>UoC2: Yes</b>
Rationale				

### UoC 1 (trolling)

As detailed in **section 7.3.1.5** there are not main primary species in UoC1, **SG 80 is met**. In addition, the North Atlantic albacore fishery has a negligible % of non-target species being the % of Albacore caught within the UoC1 (trolling fleet) of 98.72%. Moreover, based on the PI 2.1.1 (a), where it is shown that there are not Main primary species in UoC1 and PI 2.1.1(b), where it is shown that all minor primary species are highly likely to be above the PRI or if below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species. Therefore, it is considered that the Information is adequate to support a **strategy** to manage **all** primary species, and evaluate with a **high degree of certainty** whether the strategy is achieving its objective, meeting **SG100**.

### UoC2 (live bait)

There is just one main primary species in UoC2 (**see section 7.3.1.5**), the Blue fin tuna, and as detailed in PI 2.1.2a, **SG 80 is met**.

Moreover, the North Atlantic albacore fishery has a negligible % of non-target species, being the percentage of Albacore caught in the UoC2 (live bait fleet) a 94.29%. Also, based on the PI 2.1.1b, where it is shown that all minor primary species are highly likely to be above the PRI or if below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species, it is considered that the information is adequate to support a **strategy** to manage **all** primary species, and evaluate with a **high degree of certainty** whether the strategy is achieving its objective, therefore, meeting **SG100**.

### References

- ◆ Onandia *et al.*, 2021a
- ◆ Onandia *et al.*, 2021b

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>100</b>
Condition number (if relevant)	<b>NA</b>

## PI 2.2.1 – Secondary species outcome

PI 2.2.1		The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Main secondary species stock status			
	Guide post	Main secondary species are <b>likely</b> to be above biologically based limits.	Main secondary species are <b>highly likely</b> to be above biologically based limits.	There is a <b>high degree of certainty</b> that main secondary species are above biologically based limits.
		OR  If below biologically based limits, there are <b>measures</b> in place expected to ensure that the UoA does not hinder recovery and rebuilding.	OR  If below biologically based limits, there is either <b>evidence of recovery</b> or a <b>demonstrably effective partial strategy</b> in place such that the UoA does not hinder recovery and rebuilding. AND Where catches of a main secondary species outside of biological limits are <b>considerable</b> , there is either <b>evidence of recovery</b> or a, <b>demonstrably effective strategy</b> in place between those MSC UoAs that have <b>considerable catches of the species</b> , to ensure that they collectively do not hinder recovery and rebuilding.	
	Met?	<b>NA</b>	<b>NA</b>	<b>NA</b>
Rationale				

Taking into consideration that as explained in **section 7.3.1.5** there are no main secondary species either in UoC1 or UoC2, this SI is not **applicable** (see <https://mscportal.force.com/interpret/s/article/P2-species-outcome-PIs-scoring-when-no-main-or-no-minor-or-both-PI-2-1-1-1527262009344>).

<b>b</b>	Minor secondary species stock status			
	Guide post	<p>Minor secondary species are highly likely to be above biologically based limits.</p> <p>OR</p> <p>If below biologically based limits', there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species</p>		



	Met?			No
Rationale				

**UoC1 (trolling)**

Biologically based limits have not been established for any of the 2 different species assessed as minor secondary.

Since stock status reference points are not available for any of the minor secondary species impacted by the UoC, they were all classified as Data Deficient species according to FCP 7.7.3 (see **Table 7.3.1.10**) and an RBF shall be triggered for assessing this SI. However, Annex PF4.1.4 allows the team to avoid conducting RBF on 'minor' species when evaluating PI2.1.1 or 2.2.1 as far as the final PI score is adjusted downward according to clause PF5.3.2. Due to the high number of different taxa to be assessed as minor secondary species the assessment team decided to take this option. Therefore, in accordance with PF5.3.2.1 the **final PI score shall not be greater than 80**.

**UoC2 (live bait)**

Biologically based limits have not been established for any of the 6 different species assessed as minor secondary.

Since stock status reference points are not available for any of the minor secondary species impacted by the UoC, they were all classified as Data Deficient species according to FCP 7.7.3 (see **Table 7.3.1.11**) and an RBF shall be triggered for assessing this SI. However, Annex PF4.1.4 allows the team to avoid conducting RBF on 'minor' species when evaluating PI2.1.1 or 2.2.1 as far as the final PI score is adjusted downward according to clause PF5.3.2. Due to the high number of different taxa to be assessed as minor secondary species the assessment team decided to take this option. Therefore, in accordance with PF5.3.2.1 the **final PI score shall not be greater than 80**.

## References

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	80
Condition number (if relevant)	NA

## PI 2.2.2 – Secondary species management strategy

PI 2.2.2		There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Management strategy in place			
	Guide post	There are <b>measures</b> in place, if necessary, which are expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a <b>partial strategy</b> in place, if necessary, for the UoA that is expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a <b>strategy</b> in place for the UoA for managing main and minor secondary species.
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

Since no main secondary species are caught by the assessed fleet (see **Table 7.3.1.10-UoC1** and **Table 7.3.1.11-UoC2**), **SG60** and **SG80** are met by default.

**SG100** is not met because there is not a strategy in place for either the UoC1 or the UoC2 for managing main and minor secondary species.

Management strategy evaluation				
<b>b</b>	Guide post	The measures are considered <b>likely</b> to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).	There is <b>some objective basis for confidence</b> that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.	<b>Testing</b> supports <b>high confidence</b> that the partial strategy/strategy will work, based on information directly about the UoA and/or species involved.
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

As stated before, biologically-based limits have not been established for any of the different species assessed as minor secondary. However, the requirements and objectives of the CFP in relation to MSY (outlined in Article 2(2) of the Basic Regulation) need to be the basis for all relevant decisions taken at EU, national and regional level to properly implement the CFP and achieve its objectives. These decisions include discard plans, multiannual plans and the regulation of fishing opportunities. A discard plan for certain pelagic fisheries in South-Western Waters was approved in 2014 for a 3-year period (Commission Delegated Regulation (EU) No 1394/2014). This Regulation established to decrease *de minimis* exceptions for the period 2015 and 2016 (see section 5 of the 4th SA report for more details). It also established that catches released through slipping would be considered as an accepted exception to the landing obligation due to the high survival rates achieved. Recently, in 2018, after 3 years, the discard plan was reviewed and renewed until 2020 through the Commission Delegated Regulation (EU) 2018/188.

Moreover, based on both, the fisheries-dependent and independent data (see Section 7.3.1.4), the North Atlantic albacore fishery has a very low level of interaction with non-target secondary species (i.e., 98.72% of albacore in the case of the trolling fleet and 94.29% of albacore for the live bait fleet) (Onandia et al., 2021a and Onandia et al., 2021b). Therefore, **SG60 and SG80 are met**.

However, as there has not been any testing of the strategy / partial strategy, **the SG100 requirements are not met**.

Management strategy implementation				
C	Guide post	There is <b>some evidence</b> that the measures/partial strategy is being <b>implemented successfully</b> .		There is <b>clear evidence</b> that the partial strategy/strategy is being <b>implemented successfully and is achieving its objective as set out in scoring issue (a)</b> .
	Met?	Yes (both UoC)		Yes (both UoC)
Rationale				

The North Atlantic albacore fishery has a negligible % of non-target species of both the UoC1 (trolling fleet), 98.72% and the UoC2 (live bait fleet), 94.29%. Moreover, based on PI 2.1.1b), where it is shown that all minor primary species are highly likely to be above the PRI or if below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species. For all the above-mentioned, the team considers that there is **some evidence** that the measures/partial strategy is being **implemented successfully**, therefore, **meeting SG80**.

As explained in PI 3.2.3 b), sanctions to deal with non-compliance exist, are consistently applied and are thought to provide effective deterrence. In the Initial assessment PCR report (García et al., 2016), it was mentioned that the percentage of exceedance was very small in relation to the amount of landings. In addition, during both, the first certification cycle and during the re-assessment site-visit, the Spanish Sub-directorate for Fisheries Control and Inspection (SGCI) considered that the fleet is complying with the management system. Therefore, the team believes that there is **clear evidence** that the partial strategy/strategy is being **implemented successfully and is achieving its overall objective as set out in scoring issue (a)**, thus, **SG100 is met**.

Shark finning				
<b>d</b>	Guide post	It is <b>likely</b> that shark finning is not taking place.	It is <b>highly likely</b> that shark finning is not taking place.	There is a <b>high degree of certainty</b> that shark finning is not taking place.
	Met?	NA	NA	NA
Rationale				

This scoring issue does not need to be scored if no Secondary species are sharks, therefore, this SI is **Not Applicable**.

Review of alternative measures to minimise mortality of unwanted catch				
<b>e</b>	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of <b>unwanted</b>	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of <b>unwanted</b>
	Met?			

		unwanted catch of main secondary species.	catch of main secondary species and they are implemented as appropriate.	catch of all secondary species, and they are implemented, as appropriate.
	Met?	NA	NA	NA
Rationale				

Following SA3.1.6, the term 'unwanted catch' shall be interpreted by the team as the part of the catch that a fisher did not intend to catch but could not avoid and did not want or chose not to use.

#### **UoC1 (trolling)**

There are no main secondary species affected by this UoC, but regarding the minor secondary species, all of them are retained. There are not unwanted catches, therefore, this SI, is **Not Applicable**.

#### **UoC2 (live bait)**

There are no main secondary species, but regarding the minor secondary species, their percentages of slipping from the observer' source of information are as follow:

**Table 2.2.2** Percentages of minor secondary species "slipped" and "discarded" obtained from the observer's data on board the live bait fleet.

Species	% Slipping	% discarded
Ocean sunfish	0.01	0
Garfish	0	0
Harbour swimming crab		0.05
Common stingray	0	
Greater weever		0.02

As the fishery operates under the EU discard ban with only de minimis derogations from this ban, there is hardly unwanted catch of the minor primary species, and they are all slipped, therefore, as there is no mortality of unwanted catches this SI is **Not Applicable**.

#### References

- ◆ Commission Delegated Regulation (EU) No 1394/2014 of 20 October 2014
- ◆ Commission Delegated Regulation (EU) 2018/188 of 21 November 2017
- ◆ García *et al.*, 2016
- ◆ Onandia *et al.*, 2021a
- ◆ Onandia *et al.*, 2021b

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score

85

Condition number (if relevant)

NA

## PI 2.2.3 – Secondary species information

PI 2.2.3		Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Information adequacy for assessment of impacts on main secondary species			
	Guide post	Qualitative information is <b>adequate to estimate</b> the impact of the UoA on the main secondary species with respect to status.	Some quantitative information is available and <b>adequate to assess</b> the impact of the UoA on main secondary species with respect to status.	Quantitative information is available and <b>adequate to assess with a high degree of certainty</b> the impact of the UoA on main secondary species with respect to status.
		OR	OR	
		If RBF is used to score PI 2.2.1 for the UoA:  Qualitative information is adequate to estimate productivity and susceptibility attributes for main secondary species.	If RBF is used to score PI 2.2.1 for the UoA:  Some quantitative information is adequate to assess productivity and susceptibility attributes for main secondary species.	
Met?		Yes (both UoC)	Yes (both UoC)	Yes (both UoC)
Rationale				

From 2016, the fishery has been collecting data both from independent observers (analysed by AZTI. See Onandia et al, 2021a and Onandia et al, 2021b) and from both UoC (trolling and live bait fleets), and with all the information gathered, we can confirm that there is no main secondary species caught by the North Atlantic albacore fishery. Therefore, the assessment team concludes that quantitative information is available and is **adequate to assess with a high degree of certainty** the impact of the UoA on main primary species with respect to status, therefore, reaching SG60, SG80 and **SG100**.

Information adequacy for assessment of impacts on minor secondary species				
<b>b</b>	Guide post	Some quantitative information is adequate to estimate the impact of the UoA on minor secondary species with respect to status.		
	Met?			Yes (both UoC)
Rationale				

The North Atlantic albacore fishery has a negligible % of non-target species of both the UoC1 (trolling fleet), 98.72% and the UoC2 (live bait fleet), 94.29%. Moreover, data has been gathered from the client group (logbooks) and the observer's on board the assessed fleets (analysed by AZTI) since 2016. For all the above-mentioned, the team considers that there is some adequate quantitative information to estimate the impact of the UoA on minor secondary species with respect to status, therefore, **meeting SG100**.



Information adequacy for management strategy				
<b>C</b>	Guide post	Information is adequate to support <b>measures</b> to manage <b>main</b> secondary species.	Information is adequate to support a <b>partial strategy</b> to manage <b>main</b> secondary species.	Information is adequate to support a <b>strategy</b> to manage <b>all</b> secondary species, and <b>evaluate</b> with a <b>high degree of certainty</b> whether the strategy is <b>achieving its objective</b> .
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>
Rationale				

As detailed in **section 7.3.1.5** there are not main secondary species either in UoC1 or UoC2, **SG 80 is met**. In addition, the North Atlantic albacore fishery has a negligible % of non-target species of both the UoC1 (trolling fleet), 98.72% and the UoC2 (live bait fleet), 94.29%. Therefore, as the fishery has a negligible catch of non-target species, no strategy is needed. Nevertheless, in case a strategy was needed, it is considered that the information is adequate to support a strategy to manage all secondary species, and evaluate with a high degree of certainty whether the strategy is achieving its objective, as detailed data has been gathered from the client group (logbooks) and the observer's on board the assessed fleets (analysed by AZTI) since 2016, thus, meeting **SG60, SG80 and SG100**."

#### References

- ◆ Onandia *et al.*, 2021a
- ◆ Onandia *et al.*, 2021b

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>100</b>
Condition number (if relevant)	<b>NA</b>

## PI 2.3.1 – ETP species outcome

PI 2.3.1		The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Effects of the UoA on population/stock within national or international limits, where applicable			
	Guide post	Where national and/or international requirements set limits for ETP species, the <b>effects of the UoA</b> on the population/stock are known and <b>likely</b> to be within these limits.	Where national and/or international requirements set limits for ETP species, the <b>combined effects of the MSC UoAs</b> on the population /stock are known and <b>highly likely</b> to be within these limits.	Where national and/or international requirements set limits for ETP species, there is a <b>high degree of certainty</b> that the <b>combined effects of the MSC UoAs</b> are within these limits.
	Met?	<b>NA</b>	<b>NA</b>	<b>NA</b>
Rationale				

This scoring issue (SIa) is not scored on the reason that there are not known national nor international requirements that set limits pertaining to the ETP species of the relevant UoA.

Direct effects				
<b>b</b>	Guide post	Known direct effects of the UoA are likely to not <b>hinder recovery</b> of ETP species.	Direct effects of the UoA are <b>highly likely</b> to not <b>hinder recovery</b> of ETP species.	There is a <b>high degree of confidence</b> that there are no <b>significant detrimental direct effects</b> of the UoA on ETP species.
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

**UoC 1(Trolling fleet)**

OPEGUI and OPESCAYA hired AZTI to get observers on board the Basque and Asturian trolling fleets. OPEGUI had observers on board from 2017-2019. In the case of the Asturian fleet, the coverage by physical observers was done during 2018 and 2019. During 2020, due to the COVID-19 pandemic situation, both fleets used EMS on board. The report prepared by AZTI which included the analyses and results of both fleets was handed to the assessment team (Onandia *et al.*, 2021a).

Eleven vessels (9 from the Basque country and 2 from Asturias), 21 fishing trips (19 from the Basque fleet and 2 from the Asturian fleet) and a total of 343 days (319 from the Basque fleet and 24 from the Asturian fleet) were observed between 2017 and 2020 (Onandia *et al.*, 2021a). This represented an average observer coverage of around 2.05%, reaching a maximum coverage of a 3% during 2020 and a minimum coverage of 0.8% in 2017 (**Table 7.3.1.1**). After the implementation of the EMS system in this fleet, the observer coverage could be increased substantially in the future.

Interactions with ETP species are minimal. Occasional interactions with birds have been recorded, in 2 of the 4 years sampled. Interactions recorded in the period 2017-2020, generally with birds, were very scarce. During the 343 fishing

days monitored in the period 2017-2020, interactions took place only in 14 of those days (4.08 %) with a total of 49 interactions with birds recorded, of which only one was killed (**Table 7.3.1.3**) (Onandia *et al.*, 2021a).

Interactions with birds are not very harmful because they are quickly lifted on board and released. The double hook used in this fishery does not allow the birds to swallow it and is generally lodged in the beak area or entangled in a wing, making release easy. The crews have onboard a manual that includes the different steps and techniques to release hooks in case they have an interaction with a bird (Onandia *et al.*, 2021a).

**Table 7.3.1.3** Interactions recorded by species and their release during the sampling on board the trolling vessels (Onandia *et al.*, 2021a).

Common name	Scientific name	Nºind.	Alive	Dead
Alcatraz	<i>Morus bassanus</i>	5	4	1
Pardela capriotada	<i>Puffinus gravis</i>	35	34	1
Pardela spp	<i>Puffinus spp.</i>	8	8	0
Fulmar	<i>Fulmarus glacialis</i>	1	1	0
	<b>TOTAL</b>	<b>49</b>	<b>47</b>	<b>2</b>

Summary of different observations made with the data on ETP species obtained during the period 2017-2020:

- During the 32-day monitoring conducted in the trolling fishery in 2017, no interactions with birds were recorded (Bueno *et al.*, 2018).
- During the monitoring of the Basque fleet in 2018 (Oyarzabal *et al.*, 2019), interactions with birds were recorded just in 9% of the 99 days sampled and in the Asturian trolling fleet in 2018 (Uriarte *et al.* 2019), it was also recorded some interactions with birds (shearwaters) in 21% of the 14 days sampled.
- During the monitoring of the Basque fleet in 2019, of the 88 days sampled onboard, interactions were recorded on just 2% of the days (Onandia *et al.*, 2020).
- During the fishing trips analyzed in 2020, no interactions with ETP species were detected after 100 fishing days analyzed (Onandia *et al.*, 2021a).

All these observations verify that the incidence of these interactions with birds is low and usually not very harmful (almost 96% are released alive), but also suggest that it may vary between years, or other factors such as months and/or fishing areas (Onandia *et al.*, 2021a).

As mentioned above in **Section 7.3.1.4**, from all the data collected by observers (analysed by AZTI), 3 different species of birds have been found to have some interaction with the trolling fleet (UoC1), the great shearwater (*Ardenna gravis*<sup>3</sup>), northern gannet (*Morus bassanus*) and northern fulmar (*Fulmarus glacialis*), being the great shearwater the most impacted species. These 3 species are included in the Spanish list of wild species in special protection regime (Real Decreto 139/2011, de 4 de Febrero) and therefore they are considered as ETP according to the MSC requirements.

<sup>3</sup> Note that *Ardenna gravis* appears as *Puffinus gravis* in the RD 139/2011.

From the 3 different bird's species, two of them are considered as Least Concern (LC) by the IUCN and their populations are either stable (great shearwater) or increasing (northern gannet). Just one, *Fulmarus glacialis* population in Europe is listed in the IUCN Red List as Endangered and therefore, classified as an ETP species. From all the data collected and analysed, just 1 individual of *Fulmarus glacialis* was caught in 2018 and it was released alive. For all the above, the team concludes that direct effects of the UoA are **highly likely** to not **hinder recovery** of ETP species, thus both **SG60 and SG 80 are met**.

However, it cannot be confirmed that there is a **high degree of confidence** that there are no **significant detrimental direct effects** of the UoA on ETP species, therefore, **SG 100 is not met**.

#### **UoC2 (live bait)**

Throughout the 2016-2020 period, 67 trips and a total of 481 days have been sampled on board baitboats in commercial fishing of the Basque fleet. This sampling represents an average annual coverage relative to total certified fleet activity of 3.28% of total fishing days, with a maximum coverage of 4.2% and a minimum of 2.0% in the years 2016 and 2019 respectively (**Table 7.3.1.4**) (Onandia *et al.*, 2021b).

Live bait fleet interactions with ETP species are minimal. The latter has been evidenced by the number and type of interactions recorded in the period 2016-2020, generally with birds were scarce. Occasional interactions with birds have been recorded in 3 of the 5 years sampled. During the analyzed live bait boat trips, 10 interactions with ETPs species occurred in 5 of the 481 monitored days, which represents 1% of the monitored live bait fleet fishing days (Onandia *et al.*, 2021b).

Interactions with birds are low-injurious because they are quickly hoisted on board and released. Angling in this fishery allows birds to be taken on board immediately, and the hook is usually lodged in the beak area or entangled in a wing, and release is simple. Of the 10 recorded interactions with birds, 6 were killed and 4 were released alive (**Table 7.3.1.7**).

**Table 7.3.1.7** Interactions recorded by species and their fate during the sampling on board the live bait vessels (Onandia *et al.*, 2021b).

Common name	Scientific name	Nºind.	Alive	Dead
Alcatraz	<i>Morus bassanus</i>	4	0	4
Pardela capirotada	<i>Puffinus gravis</i>	4	2	2
Pardela spp	<i>Puffinus spp.</i>	2	2	0
	<b>TOTAL</b>	<b>10</b>	<b>4</b>	<b>6</b>

Summary of different observations made with the data on ETP species obtained during the period 2016-2020:

- During the monitoring of the Basque fleet in 2016, interactions with birds were recorded 0.9% of the 180 days (Oyarzabal, 2017).
- During monitoring of the Basque fleet in 2017 (Oyarzabal *et al.*, 2018), interactions with birds were recorded 1.3% of the 151 days sampled.
- During the monitoring of the Basque fleet in 2018, of the 60 days sampled onboard, interactions were recorded 0.6% of the days (Uriarte *et al.*, 2019).

- During the trips analyzed in 2019 (Onandia *et al.*, 2020) and 2020 (Onandia *et al.*, 2021b), no interaction with ETP species was detected after 143 fishing days analyzed.

All these observations verify that the incidence of these interactions with birds is low, but also suggest that it may vary between years, or other factors such as months and/or fishing areas.

In case of the live bait fleet (UoC2), from all the data collected by the observers, just 2 species of seabirds have been found to have some interaction with this fleet, the great shearwater (*Ardenna gravis*<sup>1</sup>) and the northern gannet (*Morus bassanus*), both of them included in the Spanish list of wild species in special protection regime (Real Decreto 139/2011, de 4 de Febrero) and therefore they are considered as ETP according to the MSC requirements.

For all the above, the team concludes that direct effects of the UoA are **highly likely** to not **hinder recovery** of ETP species, thus both **SG60 and SG 80 are met**.

However, it cannot be confirmed that there is a **high degree of confidence** that there are no **significant detrimental direct effects** of the UoA on ETP species, therefore, **SG 100 is not met**.

Indirect effects			
C	Guide post	Indirect effects have been considered for the UoA and are thought to be <b>highly likely</b> to not create unacceptable impacts.	There is a <b>high degree of confidence</b> that there are no <b>significant detrimental indirect effects</b> of the UoA on ETP species.
	Met?	Yes (both UoC)	No (both UoC)
Rationale			

Potential indirect impacts for ETP species could be a result of getting hooked while they are trying to eat the tuna capture or through becoming accidentally entangled in or ingesting lost gear.

Troll gear is always attached to the vessel; the potential for gear loss is low. Even if gear is lost, though, the lines are short and the attached hook or jig should ensure that any lost lines quickly sink to the seabed, rather than continuing to be available to ETP species such as seabirds or turtles near to the surface.

Regarding the impacts on the trophic level of these ETPs, potential indirect effects are considered to be through the capture of albacore that would otherwise be consumed by ETP species. In addition, the indirect effects by way of competition within the ecosystem, destruction of habitat or disturbance have also been considered and are thought to be highly unlikely to create unacceptable impacts, so the fishery meets the requirements of the **SG80 level**. However, due to a lack of specific information and evidence available, it is not considered that there is a high degree of confidence that there are no detrimental indirect effects. Therefore, the scoring at **SG100 level was not met**.

#### References

- ◆ Bueno *et al.*, 2018
- ◆ Onandia *et al.*, 2020
- ◆ Onandia *et al.*, 2021a
- ◆ Onandia *et al.*, 2021b
- ◆ Oyarzabal *et al.*, 2019
- ◆ Oyarzabal *et al.*, 2018
- ◆ Royal Decree 139/2011, of February 4 (Real Decreto 139/2011, de 4 de Febrero)
- ◆ Uriarte *et al.*, 2019

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	80
Condition number (if relevant)	NA

## PI 2.3.2 – ETP species management strategy

PI 2.3.2		The UoA has in place precautionary management strategies designed to: <ul style="list-style-type: none"> <li>- meet national and international requirements;</li> <li>- ensure the UoA does not hinder recovery of ETP species.</li> </ul> Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place (national and international requirements)			
	Guide post	There are <b>measures</b> in place that minimise the UoA-related mortality of ETP species, and are expected to be <b>highly likely to achieve</b> national and international requirements for the protection of ETP species.	There is a <b>strategy</b> in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to be <b>highly likely to achieve</b> national and international requirements for the protection of ETP species.	There is a <b>comprehensive strategy</b> in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to <b>achieve above</b> national and international requirements for the protection of ETP species.
	Met?	NA	NA	NA
Rationale				

This scoring issue (SIa) is not scored based on the fact that there are not known national nor international requirements that set limits pertaining to the ETP species of the relevant UoA.

Management strategy in place (alternative)				
b	Guide post	There are <b>measures</b> in place that are expected to ensure the UoA does not hinder the recovery of ETP species.	There is a <b>strategy</b> in place that is expected to ensure the UoA does not hinder the recovery of ETP species.	There is a <b>comprehensive strategy</b> in place for managing ETP species, to ensure the UoA does not hinder the recovery of ETP species.
	Met?	Yes (both UoC)	Yes (both UoC)	No (both UoC)
Rationale				

**UoC1 (trolling fleet)**

The troll fishery for albacore is not listed in any of the relevant recovery or spotlight species action plans for marine mammals, turtles or seabirds, and no additional measures are specified in any of them (e.g., FAO, 2010; ACAP's bycatch mitigation fact sheets; Birdlife Seabird Bycatch Mitigation Factsheets; Løkkeborg, 2008; etc.).

The characteristics of troll fishery, particularly that the lines are always attached and actively worked in close proximity to the vessel, as well as being retrieved as soon as anything is hooked, provide an objective basis for confidence in that the strategy will work. For this reason, both **SG60 and SG80 are met**.

Even though the fleet has an average observer coverage of 2.05% in the last 4 fishing years, we consider that gathering and reporting of ETP's interactions need to be improved in consistency and homogeneity, therefore we cannot state that there is high confidence that the strategy is working and **SG 100 is not met**.



**UoC2 (live bait fleet)**

Live bait fishing by the Basque fleet, according to the vessels and trips sampled, is highly selective with respect to tuna species. Of more than 1174 tons caught during the sampled trips, 94.78% corresponds to northern albacore, while bluefin tuna accounted for 4.6% and bigeye tuna for 0.6% (**Table 7.3.1.5**). Not a single discard was recorded during bait boat fishing operations, so the retained catches correspond to 100% of the catch (Onandia *et al.*, 2021b).

All the observations made in **section 7.3.1.4** verify that the incidence of these interactions with birds is low and not very harmful, but also suggest that it may vary between years, or other factors such as months and/or fishing areas (Onandia *et al.*, 2021a). The team considers that there is a **strategy** in place that is expected to ensure the UoA does not hinder the recovery of ETP species, therefore **meeting SG60 and SG 80**.

Even though the fleet has an average observer coverage of 3.02% in the last 4 fishing years, we consider that gathering and reporting of ETP's interactions need to be improved in consistency and homogeneity, therefore we cannot state that there is high confidence that the strategy is working, and **SG 100 is not met**.

Management strategy evaluation				
<b>C</b>	Guide post	The measures are <b>considered likely</b> to work, based on <b>plausible argument</b> (e.g. general experience, theory or comparison with similar fisheries/species).	There is an <b>objective basis for confidence</b> that the measures/strategy will work, based on <b>information</b> directly about the fishery and/or the species involved.	The strategy/comprehensive strategy is mainly based on information directly about the fishery and/or species involved, and a <b>quantitative analysis</b> supports <b>high confidence</b> that the strategy will work.
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

The scientific literature consulted and the information gathered during the previous assessment site visits with different stakeholders like AZTI and fishers about the interaction of the trolling and live bait fleets with ETP species lead the team to the conclusion that interactions are very rare. The team consider that there is an **objective basis for confidence** that the measures/strategy will work, based on information directly collected by observers (Onandia *et al.*, 2020, 2021a and 2021b) about the fishery and or the species involved thus, **SG 60 and SG 80 are met**.

Even though the fleet had an average observer coverage of 2.05% (UoC1-trolling fleet) and 3.02% (UoC2-live bait) in the last 4 fishing years, we consider that gathering and reporting of ETP's interactions need to be improved in consistency and homogeneity, therefore we cannot state that there is a **quantitative analysis** supporting with a **high confidence** that the strategy will work, therefore, **SG 100 is not met**.

Management strategy implementation		
<b>d</b>	Guide post	There is some <b>evidence</b> that the measures/strategy is being implemented successfully. There is <b>clear evidence</b> that the strategy/comprehensive strategy is being implemented successfully and <b>is achieving its objective as set out in scoring issue (a) or (b)</b> .

	Met?	Yes (both UoC)	No (both UoC)
Rationale			

The capture of ETP species has been reported to be minimal by all parties interviewed in the assessment process, both for the trolling and the live bait fleets, therefore, there is some evidence that the strategy to minimize impact and mortality of ETP species by both the trolling and the live bait fleet in the Bay of Biscay is achieving its objective, thus, **meeting SG80**.

However, as the gathering and reporting of ETP's interactions need to be improved in consistency and homogeneity, we cannot state that there is clear evidence that the strategy is being implemented successfully, therefore, **not meeting SG100**.

Review of alternative measures to minimise mortality of ETP species				
e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality ETP species, and they are implemented, as appropriate.
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

The ICCAT Sub-Committee on Ecosystems integrates the monitoring and research activities related to the ecosystem that are required by the SCRS in fulfilling its advisory role to the Commission, including investigating the impact that changes in fishing gears or fishing technology have on the catch of target and non-target species and investigating, through operational models, potential benefits (at an ecosystem level) of alternative management strategies, such as time-area closures. The Committee meets regularly, and conclusions and recommendations are presented during annual meeting of the ICCAT Commission for further discussion and consideration. Furthermore, AZTI annually reports the by-catch of non-target species and ETP interactions of the Atlantic albacore fleet fishing operations (Onandia *et al.*, 2020; Onandia *et al.*, 2021a; 2021b). Thus, requirements for **SG 60 and SG 80 are met for both UoCs**.

As there is no biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality ETP species **SG 100 is not met**.

## References

- ◆ ACAP bycatch mitigation fact sheets
- ◆ BirdLife Seabird Bycatch Mitigation Factsheets
- ◆ FAO, 2010
- ◆ Løkkeborg, 2008
- ◆ Onandia *et al.*, 2020
- ◆ Onandia *et al.*, 2021a
- ◆ Onandia *et al.*, 2021b

Draft scoring range	<b>60-79</b>
Information gap indicator	<b>More information sought</b> The assessment team lacks information regarding the implementation from the Client group of these measures, so we will need to ask STKH during the site visit if the fishery is implementing the measures reviewed regularly by ICCAT regarding the effectiveness and practicality of the alternative measures to minimise the UoA related mortality of ETP species.

## Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>80</b>
Condition number (if relevant)	<b>NA</b>

## PI 2.3.3 – ETP species information

PI 2.3.3		Relevant information is collected to support the management of UoA impacts on ETP species, including:		
		<ul style="list-style-type: none"> <li>- Information for the development of the management strategy;</li> <li>- Information to assess the effectiveness of the management strategy; and</li> <li>- Information to determine the outcome status of ETP species</li> </ul>		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impacts			
	Guide post	Qualitative information is <b>adequate to estimate</b> the UoA related mortality on ETP species.	Some quantitative information is <b>adequate to assess</b> the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species.	Quantitative information is available to assess with a high degree of certainty the <b>magnitude of UoA-related impacts, mortalities and injuries and the consequences for the status</b> of ETP species.
		OR If RBF is used to score PI 2.3.1 for the UoA: Qualitative information is <b>adequate to estimate productivity and susceptibility</b> attributes for ETP species.	OR If RBF is used to score PI 2.3.1 for the UoA: Some quantitative information is <b>adequate to assess productivity and susceptibility attributes</b> for ETP species.	
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

**UoC 1(Trolling fleet)**

OPEGUI and OPESCAJA hired AZTI to get observers on board the Basque and Asturian trolling fleets. OPEGUI had observers on board from 2017-2019. In the case of the Asturian fleet, the coverage by physical observers was done during 2018 and 2019. During 2020, due to the COVID-19 pandemic situation, both fleets used EMS on board. The report prepared by AZTI which included the analyses and results of both fleets was handed to the assessment team (Onandia *et al.*, 2021a).

Eleven vessels (9 from the Basque country and 2 from Asturias), 21 fishing trips (19 from the Basque fleet and 2 from the Asturian fleet) and a total of 343 days (319 from the Basque fleet and 24 from the Asturian fleet) were observed between 2017 and 2020 (Onandia *et al.*, 2021a). This represented an average observer coverage of around 2.05%, reaching a maximum coverage of a 3% during 2020 and a minimum coverage of 0.8% in 2017 (**Table 7.3.1.1**). After the implementation of the EMS system in this fleet, the observer coverage could be increased substantially in the future.

Interactions with ETP species are minimal. Occasional interactions with birds have been recorded, in 2 of the 4 years sampled. Interactions recorded in the period 2017-2020, generally with birds, were very scarce and not very injurious. During the 343 fishing days monitored in the period 2017-2020, interactions took place only in 14 of those days (4.08 %) with a total of 49 interactions with birds recorded, of which only one was killed (**Table 7.3.1.3**) (Onandia *et al.*, 2021a).

Interactions with birds are not very harmful because they are quickly lifted on board and released. The double hook used in this fishery does not allow the birds to swallow it and is generally lodged in the beak area or entangled in a wing, making release easy. The crews have onboard a manual that includes the different steps and techniques to release hooks in case they have an interaction with a bird (Onandia *et al.*, 2021a).

**Table 7.3.1.3** Interactions recorded by species and their release during the sampling on board the trolling vessels (Onandia *et al.*, 2021a).

Common name	Scientific name	Nºind.	Alive	Dead
Alcatraz	<i>Morus bassanus</i>	5	4	1
Pardela capirotada	<i>Puffinus gravis</i>	35	34	1
Pardela spp	<i>Puffinus spp.</i>	8	8	0
Fulmar	<i>Fulmarus glacialis</i>	1	1	0
	<b>TOTAL</b>	<b>49</b>	<b>47</b>	<b>2</b>

Summary of different observations made with the data on ETP species obtained during the period 2017-2020:

- During the 32-day monitoring conducted in the trolling fishery in 2017, no interactions with birds were recorded (Bueno *et al.*, 2018).
- During the monitoring of the Basque fleet in 2018 (Oyarzabal *et al.*, 2019), interactions with birds were recorded just in 9% of the 99 days sampled and in the Asturian trolling fleet in 2018 (Uriarte *et al.*, 2019), it was also recorded some interactions with birds (shearwaters) in 21% of the 14 days sampled.
- During the monitoring of the Basque fleet in 2019, of the 88 days sampled onboard, interactions were recorded on just 2% of the days (Onandia *et al.*, 2020).
- During the fishing trips analyzed in 2020, no interactions with ETP species were detected after 100 fishing days analyzed (Onandia *et al.*, 2021a).

All these observations verify that the incidence of these interactions with birds is low, but also suggest that it may vary between years, or other factors such as months and/or fishing areas (Onandia *et al.*, 2021a).

As mentioned above in Section 7.3.1.4, from all the data collected by observers (analyzed by AZTI), 3 different species of birds have been found to have some interaction with the trolling fleet (UoC1), the great shearwater (*Ardenna gravis*<sup>4</sup>), northern gannet (*Morus bassanus*) and northern fulmar (*Fulmarus glacialis*), being the great shearwater the most impacted species. These 3 species are included in the Spanish list of wild species in special protection regime (Real Decreto 139/2011, de 4 de Febrero) and therefore they are considered as ETP according to the MSC requirements.

From the 3 different bird's species, two of them are considered as Least Concern (LC) by the IUCN and their populations are either stable (great shearwater) or increasing (northern gannet). Just one, *Fulmarus glacialis* population in Europe is listed in the IUCN Red List as Endangered and therefore, classified as an ETP species. From all the data collected and

<sup>4</sup> Note that *Ardenna gravis* appears as *Puffinus gravis* in the RD 139/2011.

analysed, just 1 individual of *Fulmarus glacialis* was caught in 2018 and it was released alive. For all the above, the team concludes that some quantitative information is **adequate to assess** the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species, therefore both **SG60** and **SG80** are met.

However, as stated above in several PIs, the team considers that the gathering and reporting of ETP's interactions need to be improved in consistency and homogeneity (a recommendation was opened in the 4<sup>th</sup> SV- see **section 5.2.4**) and therefore, not enough quantitative information is available to assess with a high degree of certainty the **magnitude of UoA-related impacts, mortalities and injuries and the consequences for the status** of ETP species, thus, **SG 100** is not met.

#### **UoC2 (live bait)**

Throughout the 2016-2020 period, 67 trips and a total of 481 days have been sampled on board bait boats in commercial fishing of the Basque fleet. This sampling represents an average annual coverage relative to total certified fleet activity of 3.28% of total fishing days, with a maximum coverage of 4.2% and a minimum of 2.0% in the years 2016 and 2019 respectively (**Table 7.3.1.4**) (Onandia *et al.*, 2021b).

Live bait fleet interactions with ETP species are minimal. The latter has been evidenced by the number and type of interactions recorded in the period 2016-2020, generally with birds, very scarce and not very injurious. Occasional interactions with birds have been recorded in 3 of the 5 years sampled. During the analyzed live bait boat trips, 10 interactions with ETPs species occurred in 5 of the 481 monitored days, which represents 1 % of the monitored live bait fleet fishing days (Onandia *et al.*, 2021b).

Interactions with birds are low and they are quickly hoisted on board and released. Angling in this fishery allows birds to be taken on board immediately, and the hook is usually lodged in the beak area or entangled in a wing, and release is simple. Of the 10 recorded interactions with birds, 6 were killed and 4 were released alive (**Table 7.3.1.7**).

**Table 7.3.1.7** Interactions recorded by species and their fate during the sampling on board the live bait vessels (Onandia *et al.*, 2021b).

Common name	Scientific name	Nºind.	Alive	Dead
Alcatraz	<i>Morus bassanus</i>	4	0	4
Pardela capirotada	<i>Puffinus gravis</i>	4	2	2
Pardela spp	<i>Puffinus spp.</i>	2	2	0
	<b>TOTAL</b>	<b>10</b>	<b>4</b>	<b>6</b>

Summary of different observations made with the data on ETP species obtained during the period 2016-2020:

- During the monitoring of the Basque fleet in 2016, interactions with birds were recorded 0.9% of the 180 days (Oyarzabal, 2017).
- During monitoring of the Basque fleet in 2017 (Oyarzabal *et al.*, 2018), interactions with birds were recorded 1.3% of the 151 days sampled.
- During the monitoring of the Basque fleet in 2018, of the 60 days sampled onboard, interactions were recorded 0.6% of the days (Uriarte *et al.*, 2019).

- During the trips analyzed in 2019 (Onandia *et al.*, 2020) and 2020 (Onandia *et al.*, 2021b), no interaction with ETP species was detected after 143 fishing days analyzed.

All these observations verify that the incidence of these interactions with birds is low but also suggest that it may vary between years, or other factors such as months and/or fishing areas.

In case of the live bait fleet (UoC2), from all the data collected by the observers, just 2 species of seabirds have been found to have some interaction with this fleet, the great shearwater (*Ardenna gravis*<sup>1</sup>) and the northern gannet (*Morus bassanus*), both of them included in the Spanish list of wild species in special protection regime (Real Decreto 139/2011, de 4 de Febrero) and therefore they are considered as ETP according to the MSC requirements.

For all the above, the team concludes that some quantitative information is **adequate to assess** the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species, therefore, both **SG60 and SG80 are met**.

However, as stated above in several PIs, the team considers that the gathering and reporting of ETP's interactions need to be improved in consistency and homogeneity (a recommendation was opened in the 4<sup>th</sup> SV- see **section 5.2.4**) and therefore, not enough quantitative information is available to assess with a high degree of certainty the **magnitude of UoA-related impacts, mortalities and injuries and the consequences for the status** of ETP species, thus, **SG 100 is not met**.

Information adequacy for management strategy				
b	Guide post	Information is adequate to support <b>measures</b> to manage the impacts on ETP species.	Information is adequate to measure trends and support a <b>strategy</b> to manage impacts on ETP species.	Information is adequate to support a <b>comprehensive strategy</b> to manage impacts, minimise mortality and injury of ETP species, and evaluate with a <b>high degree of certainty</b> whether a strategy is achieving its objectives.
	Met?	<b>Yes (both UoC)</b>	<b>Yes (both UoC)</b>	<b>No (both UoC)</b>
Rationale				

From what has been stated in PI 2.3.1 and 2.3.2, information collected by the UoA fleet and the observers is adequate to support a comprehensive strategy to manage impacts on ETP species. **SG60 and 80 are, therefore, met**.

The fleet could use the DEA to record the interactions with ETP species, although, so far, it has not been used for this purpose. In addition, as the gathering and reporting of ETP's interactions need to be improved in consistency, homogeneity and quality (see **Section 5.2.4 – Recommendations**), the assessment team considers that there is insufficient information to evaluate with a high degree of certainty whether the strategy is achieving its objectives, hence, **SG100 is not met**.

## References

- ◆ Bueno *et al.*, 2018
- ◆ Onandia *et al.*, 2020



- ◆ Onandia *et al*, 2021a
- ◆ Onandia *et al*, 2021b
- ◆ Oyarzabal, 2017
- ◆ Oyarzabal *et al.*, 2018.
- ◆ Oyarzabal *et al.*, 2019
- ◆ Royal Decree 139/2011, of February 4 (Real Decreto 139/2011, de 4 de Febrero)
- ◆ Uriarte *et al.*, 2019

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	80
Condition number (if relevant)	NA

## PI 2.4.1 – Habitats outcome

PI 2.4.1		The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates		
Scoring Issue		SG 60	SG 80	SG 100
a	Commonly encountered habitat status			
	Guide post	The UoA is <b>unlikely</b> to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	The UoA is <b>highly unlikely</b> to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	There is <b>evidence</b> that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

Commonly encountered habitats are defined by MSC Requirements as those preferred by the target species, that the UoA's gear is designed to exploit, and/or make up a reasonable portion of the UoA's fishing area.

There is good information regarding the habitat characteristics of many areas of the European seas, through several international projects and integrated efforts (EUSeaMap, EMODnet, MeshAtlantic), which can provide predicted habitats for many areas including the Bay of Biscay (**Figures 7.3.1.4, 7.3.1.5, 7.3.1.6**). Although only 19% of the total EEZ area of the Bay of Biscay and Iberian Peninsula is mapped, most of the habitat mapping effort is located at 200 meters depths and shallower (Galparsoro *et al.*, 2014). Since a large area of the Bay of Biscay is delimited by the 200 meters bathymetry, the percentage of seabed mapping coverage is significantly higher. In total, the Bay of Biscay encompasses 42 benthic habitats. Furthermore, some protection frameworks (MPAs, Biosphere reserves, Natural parks) have been put in place in some locations in the Bay of Biscay (e.g., Cabo Peñas, El Cachucho, Urdaibai, Marismas de Santoña, Arcachon Bay et Cap Ferret, Golfe du Morbihan, etc.; **Figure 7.3.1.3**). These areas have been studied extensively and provide some knowledge on the seabed habitat of the Bay of Biscay.

Troll fishing gear used in the Cantabrian Sea North Atlantic Albacore fishery operates at the surface in deep oceanic water. The fishing gear consists of a towing line with artificial bait behind the boat at the speed of 7 knots (3-4 knots when fish are being caught). Troll vessels are usually fitted with large poles or rods and can tow between 12-14 lines (up to a maximum of 15) at the same time. The lines are dragged along the surface. As such, impacts will be limited to the pelagic habitat, and are expected to be imperceptible, highly transient, and have a negligible effect. In addition, there is no risk of the fishery touching the seabed given the nature of the gear. Only pelagic species living in their habitats are landed. This is further evidence it is highly unlikely the fishery will ever come into contact with the seabed. Lost gear is another possible impact of the fishing. The fishermen informed during the previous assessment cycle that gear loss is very limited. This will be checked again during the next site visit.

The Cantabrian sea North Atlantic albacore fishery live bait fishing gear is also used at the surface in deep oceanic water. The fishing gear comprises 4-6 meter long rods for catching tuna that are attached and kept close to the vessel, with live fish periodically thrown overboard. As such, impacts will be limited to the pelagic habitat, and are expected to be imperceptible, highly transient, and have a negligible effect. In addition, there is no risk of the fishery coming into contact with the seabed given the nature of the gear. Only pelagic species living in their habitats are landed.

In addition, pelagic habitats function is mostly determined by their physico-chemical properties (Raymond, 2011). The status of pelagic habitats is affected by human induced pressures such as eutrophication and hazardous substances, as well as by natural and human-induced changes in climate (HELCOM, 2018). The fishery, however, will not change the characteristics of the water column (for example, the temperature, salinity, currents) and it does not come into contact with benthic habitats.

Therefore, it is highly unlikely that the fishery will reduce the structure and function of the pelagic habitat to a point where there is serious or irreversible damage. Hence, **meeting both SG60 and SG80**.

Furthermore, the seasonal nature of this fishery (June to October) reduces the intensity of any habitat damage caused by the fishery. A small purse seine is used to catch the live bait species and they are kept alive on board the vessel in large tanks. Smaller gear than the Spanish Bay of Biscay purse seiners targeting anchovy, sardine, or mackerel (80 meters depth by 550 meters length) is used. It is designed to operate in midwater and catch pelagic species, and is likely to have negligible impact on benthic habitats. The fishermen informed during the previous assessment cycle that gear loss is very limited. Depending on the fishing area, shipwrecks can lead to gear breakage, but losing all or part of the gear is very unlikely.

Lastly, VMS data on the fishing fleet using both gears is available for the Spanish authorities (Dirección General de Ordenación Pesquera y Acuicultura) and there is no evidence that fishing occurred in protected areas. As such, the team considers that there is evidence that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm, **therefore SG100 is met**.

VME habitat status				
b	Guide post	The UoA is <b>unlikely</b> to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	The UoA is <b>highly unlikely</b> to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	There is <b>evidence</b> that the UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.
	Met?	NA	NA	NA
Rationale				

No VMEs have been identified, therefore, this SI(b) is Not Applicable.

Minor habitat status				
c	Guide post	There is <b>evidence</b> that the UoA is highly unlikely to reduce structure and function of the minor habitats to a point where there would be serious or irreversible harm.		
	Met?			<b>Yes</b>
Rationale				

Minor habitats are defined by MSC as those that do not fall within the classification of Commonly Encountered Habitats or VMEs (GSA3.13.3).

Taking into account that the whole fishing area presented in **Figures 7.3.1.6** is considered an epipelagic commonly encountered habitat, no minor habitats have been identified in this assessment.

Moreover, since the fishery uses a gear designed to operate in mid-water and to catch pelagic species it is likely to have negligible impact on benthic habitats. The troll fishing gear used in the Cantabrian Sea North Atlantic Albacore fishery operates at the surface in deep oceanic water. The lines are dragged along the surface. Also, the live bait fishing gear is used at the surface in deep oceanic water. In addition, the small purse seine used to catch the live bait species uses a gear smaller than the Spanish Bay of Biscay purse seiners targeting anchovy, sardine, or mackerel (80 meters depth by 550 meters length). Therefore, the team considers that there is evidence that the UoA is highly unlikely to reduce structure and function of the minor habitats to a point where there would be serious or irreversible harm. **SG100 is met.**

#### References

- ◆ EMODnet, <https://www.emodnet-seabedhabitats.eu/>
- ◆ EUSeaMap, <https://www.emodnet-seabedhabitats.eu/about/euseamap-broad-scale-maps/>
- ◆ Galparsoro *et al.*, 2014
- ◆ HELCOM, 2018
- ◆ MeshAtlantic, <https://www.msp-platform.eu/projects/mapping-atlantic-area-seabed-habitats-better-marine-management>
- ◆ Raymond, 2011

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	100
Condition number (if relevant)	NA

## PI 2.4.2 – Habitats management strategy

PI 2.4.2		There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Management strategy in place			
	Guide post	There are <b>measures</b> in place, if necessary, that are expected to achieve the Habitat Outcome 80 level of performance.	There is a <b>partial strategy</b> in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above.	There is a <b>strategy</b> in place for managing the impact of all MSC UoAs/non-MSC fisheries on habitats.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

There is a partial strategy to manage the fishery habitat impact. The fishery is managed through closed areas and seasons, among other management measures (see Section 7.3.1.1b). Although these closures are not specific to protect habitats, they reduce the opportunity for the gear to enter into contact with the bottom and thus limits its impact. For the same reason, the MPAs established in the Bay of Biscay also contribute to minimize the fishery impact to the habitat.

In addition, the fishing operation in itself is also considered to be a strategy for the impact of the fishery on habitat types. The actual methods for each fishing practice explained in PI 2.4.1 are measures designed to ensure the fishery does not pose a risk to the habitat.

Lost gear is another possible impact of the fishing. The fishermen interviewed during the previous assessment cycle informed that gear loss is very limited. There are national and international strategies, which are not specific to the fishery, but cover all Spanish vessels given that Spain is a contracting party ([http://www.magrama.gob.es/es/costas/legislacion/convenios\\_internacionales.aspx](http://www.magrama.gob.es/es/costas/legislacion/convenios_internacionales.aspx)). Protected areas in Spain are defined and regulated by Law 42/2007, of 13 December, on Natural Heritage and Biodiversity, which groups them into three types based on their respective legal frameworks of origin: Protected Natural Areas, Natura 2000 protected areas, and areas protected by international instruments. MARPOL ([http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258)) also covers all vessels.

In addition, VMS data on the fishing fleet is available for the Spanish authorities (Dirección General de Ordenación Pesquera y Acuicultura) and there is no evidence that fishing occurred in protected areas.

The negligible impact of the fishery on the habitat was considered in previous MSC assessment and the fishery could be considered an operational strategy for managing the impact of the fishery on habitat types (Albacore Fishing Association South Pacific Albacore Troll/Jig Fishery, and American Albacore Fishing Association North Pacific Albacore Pole & Line and Troll/Jig Fishery). Moreover, stakeholders consulted during the first assessment period stated that the fishery does not have any impacts on the habitat and therefore, a strategy itself did not need to be created. Based on all the above, **SG60, SG80 and SG100 are reached.**

<b>b</b>	Management strategy evaluation			
	Guide post	The measures are <b>considered likely</b> to work, based on	There is some <b>objective basis for confidence</b> that the	<b>Testing</b> supports <b>high confidence</b> that the partial strategy/strategy

		plausible argument (e.g. general experience, theory or comparison with similar UoAs/habitats).	measures/partial strategy will work, based on <b>information directly about the UoA and/or habitats</b> involved.	will work, based on <b>information directly about the UoA and/or habitats</b> involved.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

Based on the negligible impact on the habitat, the current operational strategy for managing the impact of the fishery on habitats it is considered adequate. VMS data on the fishing fleet is available for the Spanish authorities and there is no evidence that fishing occurred in protected areas. Therefore, **SG60** and **SG80** are met.

However, as there is no testing to support with high confidence that the partial strategy/strategy will work, therefore, **SG100** is not met.

Management strategy implementation				
<b>C</b>	Guide post		There is <b>some quantitative evidence</b> that the measures/partial strategy is being implemented successfully.	There is <b>clear quantitative evidence</b> that the partial strategy/strategy is being implemented successfully and is achieving its objective, as outlined in scoring issue (a).
	Met?		<b>Yes</b>	<b>Yes</b>
Rationale				

During the previous certification cycle site visits, when members of the General Secretariat for Fishing were consulted, it was confirmed that the fishery is fully compliant with national and international regulations. Even though this information will be checked again with this fishery relevant stakeholders during the next site visit, the team considers that if there are no changes in this matter, the implementation of a partial strategy/strategy is being successfully achieved. Therefore, **SG80** is met.

Through the VMS data and stakeholders' interviews (Spanish and Basque inspection authorities, AZTI, IEO, NGOs, and fishers) there is clear quantitative evidence that the fishery has negligible impact on the habitat as the gear does not come into contact with the seabed, and any pelagic impacts would be imperceptible and highly transient, and that the closed areas, seasons and MAPs are being mostly respected, thus, **SG 100** is met.

Compliance with management requirements and other MSC UoAs'/non-MSC fisheries' measures to protect VMEs				
<b>d</b>	Guide post	There is <b>qualitative evidence</b> that the UoA complies with its management requirements to protect VMEs.	There is <b>some quantitative evidence</b> that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.	There is <b>clear quantitative evidence</b> that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.
	Met?	<b>NA</b>	<b>NA</b>	<b>NA</b>
Rationale				

As mentioned in PI 2.4.1, the fishery takes place only in the epipelagic habitat where there are no VMEs.

Therefore, as there are no management requirements to protect VMEs, this SI is Not Applicable.

#### References

- ◆ MARPOL convention
- ◆ Law 42/2007, of 13 December (Ley 42/2007, de 13 de diciembre)

Draft scoring range

**≥80**

Information gap indicator

**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score

**95**

Condition number (if relevant)

**NA**



## PI 2.4.3 – Habitats information

PI 2.4.3		Information is adequate to determine the risk posed to the habitat by the UoA and the effectiveness of the strategy to manage impacts on the habitat		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Information quality			
	Guide post	<p>The types and distribution of the main habitats are <b>broadly understood</b>.</p> <p><b>OR</b></p> <p><b>If CSA is used to score PI 2.4.1 for the UoA:</b> Qualitative information is adequate to estimate the types and distribution of the main habitats.</p>	<p>The nature, distribution and <b>vulnerability</b> of the main habitats in the UoA area are known at a level of detail relevant to the scale and intensity of the UoA.</p> <p><b>OR</b></p> <p><b>If CSA is used to score PI 2.4.1 for the UoA:</b> Some quantitative information is available and is adequate to estimate the types and distribution of the main habitats.</p>	<p>The distribution of all habitats is known over their range, with particular attention to the occurrence of vulnerable habitats.</p>
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

There is good information regarding the habitat characteristics of many areas of the European seas, through several international projects and integrated efforts (EUSeaMap, EMODnet, MeshAtlantic), which can provide predicted habitats for many areas including the Bay of Biscay (**Figures 7.3.1.4, 7.3.1.5, 7.3.1.6**). Although only 19% of the total EEZ area of the Bay of Biscay and Iberian Peninsula is mapped, most of the habitat mapping effort is located at 200 meters depths and shallower (Galparsoro *et al.*, 2014). Since a large area of the Bay of Biscay is delimited by the 200 meters bathymetry, the percentage of seabed mapping coverage is significantly higher. In total, the Bay of Biscay encompasses 42 benthic habitats. Furthermore, some protection frameworks (MPAs, Biosphere reserves, Natural parks) have been put in place in some locations in the Bay of Biscay (e.g., Cabo Peñas, El Cachucho, Urdaibai, Marismas de Santoña, Arcachon Bay et Cap Ferret, Golfe du Morbihan, etc.; **Figure 7.3.1.3**). These areas have been studied extensively and provide some knowledge on the seabed habitat of the Bay of Biscay. Therefore, **SG60, SG80 and SG100 are met**.

Information adequacy for assessment of impacts				
<b>b</b>	Guide post	Information is adequate to broadly understand the nature of the main impacts of gear use on the main habitats, including spatial overlap of habitat with fishing gear.	Information is adequate to allow for identification of the main impacts of the UoA on the main habitats, and there is reliable information on the spatial extent of interaction and on the timing and location of use of the fishing gear.	The physical impacts of the gear on all habitats have been quantified fully.
		<b>OR</b>	<b>OR</b>	
		<b>If CSA is used to score PI 2.4.1 for the UoA:</b>	<b>OR</b>	

		Qualitative information is adequate to estimate the consequence and spatial attributes of the main habitats.	<b>If CSA is used to score PI 2.4.1 for the UoA:</b> Some quantitative information is available and is adequate to estimate the consequence and spatial attributes of the main habitats.	
	Met?	Yes	Yes	Yes
Rationale				

There is sufficient data on the fishing operations, namely on effort, time and area fished through VMS and catch data, to determine the impacts of the fishery on the habitat. There is also stakeholder information on seabed habitats where the fishing takes place. This fishery has a negligible impact on the seabed.

Therefore, **meeting SG60, SG80 and SG100.**

Monitoring				
c	Guide post		Adequate information continues to be collected to detect any increase in risk to the main habitats.	Changes in all habitat distributions over time are measured.
	Met?		Yes	No
Rationale				

The fishery continues to be monitored at port through the Data Collection Framework, but also through routine surveillance and control inspections. The seabed habitat continues also to be monitored and mapped at a finer scale. Therefore, **meeting SG80.**

However, the seabed habitat is not systematically monitored and therefore changes in habitat distributions over time will not be detected. **SG100 is not met.**

#### References

- ♦ EMODnet, <https://www.emodnet-seabedhabitats.eu/>
- ♦ EUSeaMap, <https://www.emodnet-seabedhabitats.eu/about/euseamap-broad-scale-maps/>
- ♦ Galparsoro *et al.*, 2014
- ♦ MeshAtlantic, <https://www.msp-platform.eu/projects/mapping-atlantic-area-seabed-habitats-better-marine-management>

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	95
Condition number (if relevant)	NA

## PI 2.5.1 – Ecosystem outcome

PI 2.5.1		The UoA does not cause serious or irreversible harm to the key elements of ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Ecosystem status			
	Guide post	The UoA is <b>unlikely</b> to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	The UoA is <b>highly unlikely</b> to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	There is <b>evidence</b> that the UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

The assessed fishery does not impact abiotic elements. The key elements of the fishery ecosystem consider albacore as a high trophic-level predator, LTL species as a forage fish, and other species as both competitors and predators of albacore. This mode of fishing typically results in very small bycatch rates of non-target species (ISSF, 2015), which also minimizes the impacts on the ecosystem. In the Bay of Biscay ecosystem, anchovy, together with sardine, sprat, mackerel and horse mackerel, are the dominant low trophic level species, and as such they transfer a very large proportion of the total primary production through the lower part of the food web (Lassalle *et al.*, 2011). In the Bay of Biscay ecosystem the phytoplanktonic and zooplanktonic compartments are the keystone groups (Lassalle *et al.*, 2011). Bottom-up processes play a significant role in the population dynamics of upper-trophic-levels and in the global structuring of this marine ecosystem. There is also a marked bottom-up control of small pelagic fish by mesozooplanktonic prey and not by their predators (Lassalle *et al.*, 2011).

Albacore is widely spread throughout the north Atlantic (Arrizabalaga *et al.*, 2011). It is a seasonal predator in the North-Eastern Atlantic, meaning it does not exert top-down pressure on this ecosystem throughout the year. Additionally, only a proportion of the population visits the trophic area of the NE Atlantic in summer. The feeding habits of the albacore in this area are known (Goñi *et al.*, 2011) and like other tunas, it is considered an opportunistic predator, capable of feeding on a wide range of prey, and adapting to the available type of prey.

Several works containing “mass-balance” models (EwE) included tuna in the Bay of Biscay and adjacent waters (Ainsworth and Feriss, 2001; Lopez, 2010; Sánchez and Olaso, 2004). Functional groups that include albacore with other tuna or tuna-like species are normally used in the model.

In addition, Astarloa *et al.* (2019) showed that the co-occurrence patterns of top predators and prey were driven by a combination of environmental and biotic factors, which highlights the importance of considering both components to fully understand the community structure in the Bay of Biscay.

In a more recent study (Lassalle *et al.*, 2014a), benthivores and planktivores were identified as functional groups sensitive to foodweb changes, independent of model structure and type. For planktivores, commonly referred to as small pelagics, two robust predictions were identified: a high risk of decline associated with an increase in demersal piscivorous fish abundance, and a potential increase following a rise in primary productivity, the reverse being also true. Moreover, a given fishery could also affect the opposite food chain, e.g., pelagic fleets could change the abundance of functional groups in the benthic-demersal food chain (Lassalle *et al.*, 2014a). This is in line with the findings of Rochet *et al.* (2013) which demonstrated that the less-selective multispecies fisheries operating in the

Northeast Atlantic might create antagonistic pressures, the impacts of which are less predictable. Nevertheless, quantitative outputs of Lassalle *et al.* (2014a) work did not confirm the propagation of fishing pressure. A possible explanation for this discrepancy was that direct impacts of individual fishing fleets on their targeted stocks (i.e., small pelagic fish, demersal fish, and invertebrates) were not strong and consequently indirect impacts on opposite food chain components were even less detectable (Lassalle *et al.*, 2014a).

Considering the above, i.e. that the system is bottom-up controlled and detritus based, that the albacore stock is healthy, that the fishery is both localized and seasonal, and that the fishing operation has a negligible impact on both habitats and ETP species, with very small quantities of species retained and discarded, there is clear evidence that the fishery is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm. Therefore, **SG60, SG80 and SG 100 are met.**

## References

- ◆ Ainsworth and Feriss, 2001
- ◆ Arrizabalaga *et al.*, 2011
- ◆ Astarloa *et al.*, 2019
- ◆ Goñi *et al.*, 2012
- ◆ ISSF, 2015
- ◆ Lassalle *et al.*, 2011.
- ◆ Lassalle *et al.*, 2014a
- ◆ Lopez, 2010
- ◆ Rochet *et al.*, 2013
- ◆ Sánchez and Olaso, 2004

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	100
Condition number (if relevant)	NA

## PI 2.5.2 – Ecosystem management strategy

PI 2.5.2		There are measures in place to ensure the UoA does not pose a risk of serious or irreversible harm to ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Management strategy in place			
	Guide post	There are <b>measures</b> in place, if necessary which take into account the <b>potential impacts</b> of the UoA on key elements of the ecosystem.	There is a <b>partial strategy</b> in place, if necessary, which takes into account <b>available information and is expected to restrain impacts</b> of the UoA on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.	There is a <b>strategy</b> that consists of a <b>plan</b> , in place which contains measures to <b>address all main impacts of the UoA</b> on the ecosystem, and at least some of these measures are in place.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

As stated in previous PIs (i.e., PI 2.1.2, 2.2.2, 2.3.2 and 2.4.2), there is a partial strategy in place to manage habitats, ETPs and by-catch species (including minimizing their mortality, specifically by slipping), through reducing discards, limits on fishery size, TACs, and catches monitoring. There are also closed areas, and the VMS implementation. Limits on the size and scale of the fishery represent also an effective strategy restraining any other impacts from the fishery that would affect the ecosystem structure and function. Therefore, both **SG60 and SG80 are met**.

However, as there is no plan that addresses all main impacts of the UoA on the ecosystem, **SG100 is not met**.

Management strategy evaluation				
<b>b</b>	Guide post	The <b>measures</b> are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar UoAs/ ecosystems).	There is <b>some objective basis for confidence</b> that the measures/ partial strategy will work, based on some information directly about the UoA and/or the ecosystem involved.	<b>Testing</b> supports <b>high confidence</b> that the partial strategy/ strategy will work, based on information directly about the UoA and/or ecosystem involved.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

There is some objective basis for confidence that the strategy will work based on the usual fishing operation methodology of the fishery in question (records available with information on fishing location, effort, and fishing operations). Any possible bycatch or ETP species are considered negligible and they are recorded and monitored. This mode of fishing typically results in very small bycatch rates of non-target species (ISSF, 2015).

It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem. The gear lost and the gear contact with the seabed are both considered negligible. The low level of interaction with non-target species (i.e., average of 98.72% of albacore in the UoC1 and 94.29% of albacore in UoC2 recorded in the logbooks provided by the client), and the TACs implemented to manage albacore based on scientific advice. Therefore, **SG60 and SG80 are met**.

However, as there is no testing to support this, **SG100 is not met.**

Management strategy implementation			
<b>C</b>	Guide post	There is <b>some evidence</b> that the measures/partial strategy is being <b>implemented successfully.</b>	There is <b>clear evidence</b> that the partial strategy/strategy is being <b>implemented successfully and is achieving its objective as set out in scoring issue (a).</b>
	Met?	Yes	Yes
Rationale			

Through stakeholders interviews during previous assessment cycle site visits (Spanish and Basque administrations, AZTI, IEO, NGOs, and fishers) and the information provided by them, there is some evidence that the partial strategy is being implemented successfully, therefore, **SG80 is met.**

It is considered highly unlikely that the fishery poses a risk to key elements of the ecosystem. Evidence that the fishery is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm is considered to exist. No additional measures are considered necessary.

During the previous assessment site visits, the General Secretariat for Fishing informed us that both fleets are fully compliant with the current regulation. This will be continuously checked in future site visits. There is clear evidence from all stakeholders that the fishing effort limit strategy is successfully implemented. **SG 100 is met.**

#### References

- ◆ ISSF, 2015

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	85
Condition number (if relevant)	NA

## PI 2.5.3 – Ecosystem information

PI 2.5.3		There is adequate knowledge of the impacts of the UoA on the ecosystem		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Information quality			
	Guide post	Information is adequate to <b>identify</b> the key elements of the ecosystem.	Information is adequate to <b>broadly understand</b> the key elements of the ecosystem.	
	Met?	<b>Yes</b>	<b>Yes</b>	
Rationale				

Information is adequate to broadly understand the key elements of the ecosystem. Key elements include the trophic structure of the Bay of Biscay ecosystem such as key prey, predators and competitors, community composition, productivity patterns and characteristics of biodiversity. This information has been collected and is available through different scientific studies (i.e., Astarloa *et al.*, 2019; Goñi *et al.*, 2012; Hosack and Trenkel, 2019; Lassalle *et al.*, 2011, 2012, 2014a, 2014b; Rochet *et al.*, 2013). **SG60 and SG80 are met.**

Investigation of UoA impacts				
<b>b</b>	Guide post	Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, but <b>have not been investigated</b> in detail.	Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, and <b>some have been investigated in detail.</b>	Main interactions between the UoA and these ecosystem elements can be inferred from existing information, and <b>have been investigated in detail.</b>
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

Main interactions between the fishery and these ecosystem elements can be inferred from existing information, and have been investigated. Several of studies have modelled the food web in the Bay of Biscay (i.e., Astarloa *et al.*, 2019; Hosack and Trenkel, 2019; Lassalle *et al.*, 2011, 2012, 2014a, 2014b). Therefore, **SG60, SG80 and SG100 are met.**

Understanding of component functions				
<b>c</b>	Guide post		The main functions of the components (i.e., P1 target species, primary, secondary and ETP species and Habitats) in the ecosystem are <b>known</b> .	The impacts of the UoA on P1 target species, primary, secondary and ETP species and Habitats are identified and the main functions of these components in the ecosystem are <b>understood</b> .
	Met?		<b>Yes</b>	<b>Yes</b>
Rationale				

The Bay of Biscay has been studied extensively, and as shown above, the main function of each component in the ecosystem is known and understood through food web modelling (Astarloa *et al.*, 2019; Lassalle *et al.*, 2011, 2014a,



2014b). The main impact of the fishery on each component has been identified in PI 2.1, 2.2, 2.3, 2.4. Therefore, **SG80 and SG100 are met**.

Information relevance				
<b>d</b>	Guide post		Adequate information is available on the impacts of the UoA on these components to allow some of the main consequences for the ecosystem to be inferred.	Adequate information is available on the impacts of the UoA on the components <b>and elements</b> to allow the main consequences for the ecosystem to be inferred.
	Met?		<b>Yes</b>	<b>No</b>
Rationale				

As abovementioned (see PI 2.1.3, 2.2.3, 2.3.3 and 2.4.3), there is adequate information on the impacts of the UoA on these components to allow some of the main consequences for the ecosystem to be inferred. Therefore, **meeting SG80**.

However, as the gathering and reporting of ETP's interactions and discards need to be improved in consistency and homogeneity (see **Section 5.2.4 – Recommendations**), **SG100 is not met**.

Monitoring				
<b>e</b>	Guide post		Adequate data continue to be collected to detect any increase in risk level.	Information is adequate to support the development of strategies to manage ecosystem impacts.
	Met?		<b>Yes</b>	<b>Yes</b>
Rationale				

The monitoring programmes of the fishery and top predators and the environmental research of the Bay of Biscay continue. In addition, sufficient and adequate information is now being collected to detect any increase in risk to main bycatches of commercial and non-commercial species, hence, permitting the development of strategies to manage ecosystem impacts. **SG80 and SG100 are, therefore, met**.

## References

- ◆ Astarloa *et al.*, 2019
- ◆ Goñi *et al.*, 2012
- ◆ Hosack and Trenkel, 2019
- ◆ Lassalle *et al.*, 2011
- ◆ Lassalle *et al.*, 2012
- ◆ Lassalle *et al.*, 2014a
- ◆ Lassalle *et al.*, 2014b
- ◆ Rochet *et al.*, 2013

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>95</b>
Condition number (if relevant)	<b>NA</b>

## 7.4 Principle 3

### 7.4.1 Principle 3 background

#### 7.4.1.1 Fisheries Administrative Management

As explained in **section 5.1**, the operational area of the fishery is the Atlantic Ocean and the Bay of Biscay in European Union-managed waters (see **Figure 5.1.1.1**).

In addition to the relevant fishery organisations and associations, the Spanish central government, the relevant Autonomous Regions (Asturias, Cantabria and the Basque Country), and the European Union are the main interested groups in this fishery. The fishery under assessment is legal, legitimate and takes place within the context, restrictions and limitations of the EU Common Fisheries Policy (CFP) and the agreed resolutions of International Commission for the Conservation of Atlantic Tunas (ICCAT).

#### a. International Commission for the Conservation of Atlantic Tunas (ICCAT)

The Management of the stock is coordinated by ICCAT. All countries involved in targeting the stock to a large extent are Contracting Parties (CPCs) to ICCAT, with the exception of Taiwan, which nevertheless contributes scientific data to ICCAT stock analyses and participates in scientific meetings, as do all members.

ICCAT manages the regional fishing activity of this species and is responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas (<https://www.iccat.int/en/index.asp>). It is the only fishing organisation capable of handling the work required for the study and regulation of tuna and tuna-like species in the Atlantic. Those studies include research into the biology and ecology of the species and the effects of fishing on the abundance of the different stocks. The Commission collects and analyses statistical data related to current trends and conditions of fishery resources in the constituted Convention area. There is a Standing Committee on Research and Statistics (SCRS), which is responsible for the Commission having the most comprehensive and up to date statistics on fishery activities undertaken in the Convention area, as well as biological data on the fished stocks.

In accordance with the Convention, the ICCAT Commission holds a general meeting every two years and one extraordinary meeting on alternate years. Based on scientific proof provided by the SCRS and other relevant data, the Commission can adopt recommendations and resolutions aimed at sustaining the populations of the ICCAT species at levels that ensure the maximum sustainable catch. The recommendations and resolutions are usually written by already established support bodies (such as the Subcommittees of the four groups of species, or the Compliance Committee), and they are presented to the Commission for adoption. In accordance with Article VIII.2 of the Commission's Basic texts (ICCAT, 2019c), the Recommendations shall be applicable to the CPCs and enter into force 6 months after the official date of communication by the Commission (although point 3 of the same Article provides some exceptions). On the other hand, Resolutions are non-binding guidelines for the Commission. Moreover, ICCAT conducts assessments of albacore tuna on a regular basis. The latest stock assessment was carried out in 2020 (ICCAT, 2020a) (see **Section 7.2.1.3** for more information).

#### b. European Union

The European Union fisheries management system is essentially governed by the European Commission and, after the Treaty of Lisbon, its Parliament and Council are also involved in the governing. The Commission, through the Directorate-General for Maritime Affairs and Fisheries (DG MARE) is responsible for proposing, approving, and applying EU fishing regulations throughout the European Union. The **Common Fisheries Policy** is the current European Union management framework, which has gone through successive updates, the most recent of which (Regulation (EU) n° 1380/2013 of the European Parliament and of the Council, of 11 December 2013) entered into force on 1 January 2014.

On the Commission's proposal, TACs and quotas are set annually for each of the fisheries managed through this system. Council Regulation (EU) 2021/92 of 28 January 2021, in force since 29 January 2021, establishes the TAC that corresponds to Ireland, Spain, France, and Portugal (see **section 7.2.3**).

European fisheries management also involves making decisions based on the best available scientific data. The European Commission receives advice from various scientific organisations. In addition, in the event of data gaps, the EU has the means to fund studies and projects in the short, medium, and long term with the aim of rectifying the lack of data and, as such, fulfilling the CFP objectives. The Commission's scientific advisory bodies for fisheries are the following:

- The **Scientific, Technical and Economic Committee for Fisheries (STECF)**, which was created in 1993 to advise the Commission on fishing management issues. It is not a permanent body, but rather a group of experts that collaborate as temporary members or experts in working groups.
- The **International Council for the Exploration of the Sea (ICES)**, an intergovernmental body founded in 1902 to investigate and coordinate research on marine ecosystems in the North Atlantic. Other than the EU, they also advise several governments and regional fishing organisations.
- The Scientific Advisory Committee of the **General Fisheries Commission for the Mediterranean (GFCM)**, a regional organisation for managing fishing in the Mediterranean Sea.

#### c. Spanish central government

The Ministerio de Agricultura, Pesca y Alimentación (MAPA, Ministry of Agriculture, Fishing and Food) is responsible for managing the fishing activity in Spain. The Secretaría General de Pesca (SGP, General Secretariat for Fishing) is part of this ministry and is responsible for carrying out this task.

#### **SECRETARÍA GENERAL DE PESCA (SGP, General Secretariat for Fishing)**

The SGP is structured into the following bodies:

- 1) The **Dirección General de Pesca Sostenible** (Directorate General for Sustainable Fisheries) has the following roles:
  - a) Those derived from exercising competences in matters of maritime fishing in the national fishing grounds and in EU waters.
  - b) The coordination of all the activities related to the Common Fisheries Policy concerning fishing resources.
  - c) The coordination for the preparation of the European Union Council of Ministers, within the area of competence of the General Secretariat for Fishing.
  - d) The regulation of maritime recreational fishing in external waters.
  - e) The compliance with the Spanish fishing policy for the sustainable use of the fishing resources, in the national fishing grounds and in the European Union waters.
  - f) The proposal and elaboration of fishing management plans and measures, based on the best scientific knowledge, including technical measures, closed areas, management of fishing effort, fishing possibilities and their definitive transmission, access to fishing grounds, census management and the application of the landing obligation.
  - g) The negotiation and management of the fishing quota exchanges with other countries of the European Union.
  - h) The monitoring of the negotiation and the implementation of the fishing agreements between the European Union and third countries on matters within the General Secretariat for Fishing competence.

- i) The search for new fishing possibilities and the development of instruments for cooperation and collaboration with third countries.
- j) The monitoring and management of the licenses of the fleets that fish in international and third country waters.
- k) Those derived from the participation of the European Union and, in its case, of the Kingdom of Spain in the regional fisheries management organizations and other international fisheries organizations, without prejudice to the competencies of other Departments of the General Administration of the State.
- l) The planning of fishing research activity in coordination with other Departments of the General Administration of the State competent in this field.
- m) The monitoring of the fishing resources' status in order to providing advice on the adoption of measures aimed at protecting, managing, conserving, and regenerating fishing resources, within the framework of the General Secretariat for Fishing competencies.
- n) The management and proposal to declare fishing protected areas and the establishment of closures or other conservation or protection measures that the resources' status may require.
- o) The management of marine reserves of fishing interest and the planning and authorization of the activities carried out therein in coordination with the Autonomous Communities, where appropriate.
- p) The impact analysis of climate change and other activities on marine ecosystems due to their repercussions on fishing stocks, in coordination with other ministerial departments.
- q) The participation in the preparation and monitoring of the Basic Data National Program for the Spanish fishing sector within the framework for the collection of data from the European Union.
- r) The management of the fishing research vessels and oceanographic vessels of the General Secretariat for Fishing, the planning and management of their scientific surveys and the development of marine research.
- s) The planning and management of the activities of the fishing cooperation training ship of the General Secretariat for Fishing, including those of cooperation with third countries.
- t) The acquisition and processing of oceanographic data with the aim of planning and managing maritime fishing activities.

The following General Subdirectorates are part of this Directorate:

- Subdirección General de Caladero Nacional y Aguas de la Unión Europea (Subdirectorato General of National Fishing Grounds and European Union waters).
- Subdirección General de Acuerdos y Organizaciones Regionales de Pesca (Subdirectorato General for Fishing Agreements and Regional Fishing Organizations).
- Subdirección General de Investigación Científica y Reservas Marinas (Subdirectorato General for Scientific Research and Marine Reserves).

2) The **Dirección General de Ordenación Pesquera y Acuicultura** (Directorate General for Fisheries and Aquaculture Management) has the following fishing roles:

- a) Those deriving from its role as managing authority of the European Maritime and Fisheries Fund, the European Fisheries Fund, and any other fund that may replace it in the future. The coordination of the designated intermediate management bodies.
- b) Coordination in the field of participatory local development in fishing and aquaculture areas.
- c) The planning and management of the financing instruments for the fishing sector, especially the financial instrument of the European Maritime and Fisheries Fund.
- d) The planning and management of the competitiveness strategy for the fishing sector, including coordination with the financial agents.

- e) The planning and management of the fleet, including the determination of the balance between fishing capacity and possibilities and the action plans for those segments in imbalance.
- f) The management and monitoring of the registry of the maritime fishing vessels, specifically the General Registry of the Fishing Fleet, the Census of the Operational Fishing Fleet, the Official Registry of Fishing Companies in Third Countries and the Special Registry of Companies of Spanish Fishing Vessels that fish exclusively in extra-EU waters and the Registry of Vessels destined to Fishing-Tourism.
- g) The institutional relations in maritime fishing training and the promotion of the continuous training of the professionals of the sector. The high inspection in the field of training.
- h) The management of the Registry of Professionals of the Fishing Sector and the management of qualifications within the competence framework of the General Administration of the State.
- i) The elaboration and compilation of economic data of the fishing sector, without detriment of the competences of the Statistical Service of the Ministry of Agriculture, Fishing and Food, as well as the harmonization of economic data.
- j) Carrying out studies and reports on national plans for national fishing production.
- k) Planning and management of the integration and equality policies in the fishing sector.
- l) The planning and institutional coordination in the scope of the competencies of the Ministry of Agriculture, Fishing and Food of the fishing activity social aspects.
- m) The validation and recognition of fishing licenses issued by non-EU countries, as well as the relations with autonomous communities, national and international organizations in matters of fishing licenses, safety on board and maritime rescue in the fishing field. The issuance, revalidation and renewal of nautical-fishing licenses to residents in Ceuta and Melilla and to foreigners not residing in Spain.
- n) The planning, coordination and promotion of the economic diversification of the fishing and aquaculture sector, especially Fishing-Tourism.
- o) The planning, coordination and management, within the scope of the fishing sector, of the Integrated Maritime Policy and of the blue growth strategies that affect it, and its coordination with other ministerial departments.
- p) The planning, coordination and support for innovation in the fisheries and aquaculture sector.
- q) The planning of the economic activity in the commercialization and processing of fishing, shellfish and aquaculture products, within the scope of the competencies of the General Administration of the State and the Common Organization of the Fisheries Markets, as well as the relations with the competent international bodies in foreign trade and fisheries markets, without prejudice to the competencies of other ministerial departments.
- r) The development of market orientation tasks for fishery and aquaculture products.
- s) The management of structural actions for the fishing fleet, and the coordination of State and de minimis aid to the fishing sector.
- t) The control of fisheries marketing data so that the General Secretariat of Fisheries complies with the obligations derived from the Common Fisheries Policy and the Common Organization of the Markets.
- u) The planning, coordination and promotion of fishery products' traceability, market transparency and consumer information, within the framework of the Common Fisheries Policy and the Common Organization of the Markets.
- v) The promotion of the creation and control of the activity of fisheries' producer organizations and other entities representing the sector within the framework of the Common Organization of the Markets.
- w) The promotion of associations in the fishing industry.
- x) The coordination, together with the General Directorate of the Food Industry, of the actions for the promotion of fishery products within the framework of the competencies of that General Directorate as regards promotion.
- y) The control of the fishing activity so that the General Secretariat of Fisheries complies with the obligations derived from the Common Fishing Policy, including the control of quotas, of the main species subject to

total allowable catches (TAC) and quotas for taking management measures, including the closure of fisheries.

- z) The control of quota transfers, exchanges with other Member States (swaps); the authorization of temporary transfers of fishing possibilities, transfers of effort and transfers of special conditions.
- aa) Continuous monitoring and tracking of fishing activity by means of satellite tracking devices on board vessels (VMS and ERS).
- bb) The issuance and control of licenses for the Spanish fleet in coordination with the General Directorate of Sustainable Fishing, as well as the issuance of the authorizations foreseen in the specific regulations for species of special protection and the authorization of competitions.
- cc) The authorization of temporary changes of modality, the issuance of temporary fishing permits and other authorizations for the Spanish fleet, fishing trials and experimental fishing surveys in coordination with the General Directorate for Sustainable Fisheries, as well as the monitoring of the control observers' activity and the control of the fishing effort.
- dd) The management, monitoring and control of the processing of catch certificates for the export of fishery products.
- ee) The collection, processing and verification of information on activities within the scope of the Common Fisheries Policy.
- ff) The fishing inspection tasks and the coordination of the peripheral inspection services, both with the inspection units of the Government Delegations and with the corresponding services of the Autonomous Communities, as well as with the Navy, the Civil Guard, the European Fisheries Control Agency, FRONTEX, INTERPOL and other international organizations.
- gg) Those derived from the European Union regulations as the sole liaison office in charge of the application of the Community Mutual Assistance System. Also, all the consequences and competencies in the application of the European regulations to prevent, deter and eliminate illegal, unreported and unregulated fishing.
- hh) The coordination in matters of integral control of the activities included in the scope of the Common Fishing Policy between the bodies of the General Secretariat determined by the Secretary General with other bodies of the Department, of other ministerial departments or of the autonomous communities, as well as the international and with third countries cooperation in matters of control and inspection and fight against illegal, unreported and unregulated fishing.

The following General Subdirectorates are part of this Directorate:

- Subdirección General de Sostenibilidad Económica y Asuntos Sociales (Subdirectorato General for Economic Sustainability and Social Affairs)
- Subdirección General de Acuicultura, Comercialización Pesquera y Acciones Estructurales (Subdirectorato General for Aquaculture, Fisheries Commercialization and Structural Actions)
- Subdirección General de Vigilancia Pesquera y Lucha contra la Pesca Ilegal (Subdirectorato General for Fisheries Surveillance and Fight against Illegal Fishing)

The legislative framework for fisheries in Spain is the **State Maritime Fishing Law** from 2001 (**Law 3/2001** - LEY 3/2001, de 26 de marzo, de Pesca Marítima del Estado), which covers the directives of the EU CFP, adapts them to the specific circumstances of the Spanish fishing sector, and applies them through a range of Royal Decrees and Ministerial Orders in order to regulate the different fleets and fisheries:



- a) **Council Regulation (EC) No 1224/2009** of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, amended by Regulations 1379/2013, 1380/2013, 1385/2013, 508/2014, 2015/812, 2019/473, and 2019/1241.
- b) Commission Implementing **Regulation (EU) No 404/2011** of 8 April 2011 laying down detailed rules for the implementation of Council Regulation (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the Common Fisheries Policy, amended by Regulations 2015/1962 and 2020/30.
- c) **Council Regulation (EC) No 1005/2008** establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amended by Regulations 1010/2009, 86/2010, and 202/2011.
- d) **Commission Regulation (EC) No 1010/2009** laying down detailed rules for development of Regulation (EC) No 1005/2008, amended by Regulations 86/2010, 395/2010, 202/2011, 1222/2011, 336/2013 and 865/2013.
- e) **Regulation (EU) No 2017/2403** of the European Parliament and of the Council on the sustainable development of the external fishing fleets.
- f) **Regulation (EU) No 1380/2013** of the European Parliament and of the Council on the Common Fisheries Policy Common Fisheries Policy, amended by Regulations 1385/2013, 2015/812, 2017/2092, and 2019/1241.

#### d. Autonomous Regions

##### ASTURIAS

In Asturias, the Dirección General de Pesca Marítima (General Directorate of Maritime Fisheries) is the one responsible for issues dealing with maritime fisheries. The General Directorate is divided into two Services: i) Servicio de Estructuras Pesqueras (Fisheries Structures Service) and ii) Servicio de Ordenación Pesquera (Fisheries Management Service).

The Fisheries Structures Service carries out the tasks related to the sector infrastructure programs, the renewal, modernization and restructuring of the fishing fleet, industries and aquaculture, the improvement of marketing and the promotion of quality and markets. While the Fisheries Management Service is responsible for the management of fisheries, shellfish and marine aquaculture, the protection of marine resources, the inspection and surveillance of extraction, transport, commercialization and consumption centers, the tasks related to training and non-university maritime education, as well as fishing research and experimentation.

##### CANTABRIA

For Cantabria, the Consejería de Desarrollo Rural, Ganadería, Pesca, Alimentación y Medio Ambiente (Rural Development, Livestock, Fisheries, Food and Environment Council) is responsible for fishing. The Dirección General de Pesca y Alimentación (Directorate General for Fish and Food) within the Council has the following main fishing related tasks:

- Promoting the fishing and food and agriculture industries.
- Providing guidance for the Fisherman Associations and their Federation.
- Proposing general regulations. Monitoring and controlling compliance of the current regulation, including the processing of inquiries, the corresponding proposals or resolutions, and ensuring they are applied effectively.

The Directorate is responsible for collecting fish market sales notes, and the Inspection Service shares responsibility with the SGP inspection and control services for controlling the landings and sizes only in inland waters (therefore, contrary what was stated in the PCR from 2016 (available at: <https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@@assessments>)).

## BASQUE COUNTRY

The Departamento de Desarrollo Económico, Sostenibilidad y Medio Ambiente del Gobierno Vasco (Department of Economic Development, Sustainability and Environment of the Basque Country Government) is responsible for issues related to fishing and aquaculture in the Autonomous Region. Within it, there is the Dirección de Pesca y Acuicultura (Directorate of Fisheries and Aquaculture) which has, among others, the following main fishing related tasks:

- To order, manage and promote the exploitation of maritime-fishing, shellfish, aquaculture and inland fishing resources.
- To grant the licenses, authorizations and concessions established by Law 6/1998 (of the Basque Government), of March 13, 1998, on Maritime Fishing, as well as to manage the registers and other instruments provided for in the aforementioned Law.
- To plan and lead the Fishing Inspection Service, carrying out the necessary actions to guarantee its effective functioning.
- To assume the representation and tasks that correspond to the Department in the commissions and collegiate bodies that are established to develop norms, plans and programs of the European Union in the matters attributed to the Directorate of Fisheries and Aquaculture.

### 7.4.1.2 Details of the decision-making process, including the recognised participants

The EU fisheries management system has the tools available for all the involved parties to be represented and consulted during the decision-making processes. As such, the **Advisory Councils** (ACs) are stakeholder-led organisations that provide the Commission and EU countries with recommendations on fisheries management matters. This may include advice on conservation and socio-economic aspects of management, and on simplification of rules. Advisory Councils are consulted in the context of regionalisation. Advisory Councils should also contribute to data for fisheries management and conservation measures.

The **South West Waters Advisory Council (SWWAC)** covers the Atlantic zone running from the tip of Brittany in the north to Strait of Gibraltar in the south. The purpose of the SWWAC is to help achieve the sustainable fishing objectives set by the Common Fisheries Policy, integrating the ecosystem approach and based on the precautionary principle. The SWWAC must, therefore:

- Give opinions arising from agreements between the Fishing sector and civil society to the European Commission and the Member States.
- Reply to the different consultations (communications, proposed Regulations), organised by the European Commission.

The SWWAC includes 60% of the representatives of the fishing sector (fishermen, shipowners, producers' organisations, processors, wholesale fishmongers and market organisations) in five Member States (Portugal, Spain, France, Belgium and the Netherlands); and 40% of the members of the civil society (aquaculture, consumer associations, environmental associations, seaman's wives associations, non-professional fishing associations, etc.).

At a **national level**, Spanish fishermen are grouped locally and regionally into associations and are represented nationally by fishing federations or large fisheries associations. Fisheries federations and associations are usually proactively involved in sector fora and meetings when it comes to putting forward and working on solutions to issues alongside the regional, national, or European governments.

The key roles and responsibility in the Spanish fishery management process include:

- Management / administration
- Scientific Advice
- Control & Enforcement
- Industry Representation
- Industry / NGO / Scientific liaison

The Spanish Government regularly convenes the sector to inform them about the resolutions and changes that affect or may affect the fishery, and they work hand in hand to find the best solution. This also means that the Government has first-hand knowledge of the sector's worries and concerns.

At a regional level, **ICCAT** has taken and continues to take measures to encourage countries to become contracting parties, and for non-contracting parties to cooperate with the organisation's conservation measures. The success is shown by the increase in membership in recent decades and the high level of participation.

ICCAT has made it easy for interested parties to participate, and they also offer training and support for countries without capabilities in the areas of data management and fishing science, which helps them to be fully and effectively involved in their activities.

#### 7.4.1.3 Management Objectives

By means of the CFP, the European Union management system creates, respects, and ensures legal rights, which are expressly created or established for people that are dependent on fishing for their food or livelihood.

Through the application of the most recent updates of the Common Fisheries Policy, the EU has set quantifiable objectives over the long term to achieve and / or maintain secure levels of fish stocks in European waters, as well as the necessary measures to achieve those levels. As such, the annual TAC is part of a set of management tools within the framework of a multi-annual strategy to manage fisheries in the form of Management Plans.

#### 7.4.1.4 Monitoring, Control and Surveillance

With regard to MCS activities, **ICCAT** strategies to improve compliance with their requisites and procedures revolve around the registry of vessels, catch monitoring, diplomatic pressure, as well as other types of pressure applied to countries. There is also a fishing vessel registry based on the data presented by the Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities. It is important to note that the non-registered vessels are not considered authorised to fish, retain on board, tranship, or unload tuna and tuna-like species. ICCAT has a set of measures, including the prohibition to tranship and land tuna and tuna-like species from large-scale fishing vessels that are not included in the registry.

EU Member States are responsible for complying with the agreed regulations within the CFP framework at an EU level. The **European Fisheries Control Agency (EFCA)** was established in 2005 by Regulation Council Regulation (EC) 768/2005 (the current Regulation (EU) 2019/473 on the European Fisheries Control Agency is in force since 14 April 2019). Its goal is to coordinate the fisheries inspection and control operational activities of Member States and provide assistance to the Member States in their application of the Common Fisheries Policy.

Moreover, Council Regulation (EC) No 1224/2009 is the most important regulation on control mechanisms at European level. This Regulation establishes a Community system for control, inspection and enforcement to ensure compliance

with the rules of the common fisheries policy. For example: (i) Member States shall control the activities carried out by any natural or legal person within the scope of the CFP on their territory and within waters under their sovereignty or jurisdiction, in particular fishing activities, transshipments, transfer of fish to cages or aquaculture installations, landing, import, transport, processing, marketing and storage of fisheries and aquaculture products; (ii) Member States shall also control access to waters and resources and control activities outside Community waters carried out by Community fishing vessels flying their flag; (iii) Member States shall adopt appropriate measures, allocate adequate financial, human and technical resources and set up all administrative and technical structures necessary for ensuring control, inspection and enforcement of activities carried out within the scope of the common fisheries policy; or (iv) Each Member State shall ensure that control, inspection and enforcement are carried out on a non-discriminatory basis as regards sectors, vessels or persons, and on the basis of risk management.

In Spain, the Subdirección General de Vigilancia Pesquera y Lucha contra la Pesca Ilegal (Subdirector General for Fisheries Surveillance and Fight against Illegal Fishing) is part of the Directorate General for Fisheries and Aquaculture Management (see section 7.4.1.1 – Spanish central government), which is the competent authority for MCS activities both at sea and on land, for coordinating the different activities in this field, sometimes with the support from the Autonomous Regions.

Also, since Regulation (EC) Nº 1077/2008 (now repealed by Regulation (EU) No 404/2011 of 8 April 2011) took effect in 2008, laying down detailed rules on electronic recording and reporting of fishing activities and on means of remote sensing, it has become compulsory to use an on-board Electronic Fishing Logbook (ELB) on most fishing boats (i.e., vessels above 12 m), through which the data on each boat's catch is reported to the control centres. In Spain, these data are sent to the Centro de Seguimiento de Pesca (CSP, Fisheries Monitoring Centre), located in the facilities of the Subdirección General de Vigilancia Pesquera y Lucha contra la Pesca Ilegal of the SGP. The national order transposing this regulation is Order ARM/3145/2009, of November 19, 2009.

In addition, vessels over 15 metres long are obliged to use the so-called “blue box” or VMS (Vessel Monitoring System), which allows the vessel to be monitored every two hours, indicating its precise position and the nature of the activity being undertaken at the time (fishing, sailing, etc.).

Moreover, there is a list of authorised ports to land catches, which are subject to the control measures specified in the management plans.

The Autonomous Regions' duties in the management involve coordination between Madrid and the Autonomous Region with respect to the fishery closure and sending the sales notes to the Secretaría General de Pesca for collation with the ELB data.

#### **7.4.1.5 Fisheries Research institutions**

According to the CFP (Article 25(1)), Member States shall, in accordance with the rules adopted in the area of data collection, collect biological, environmental, technical, and socio-economic data necessary for fisheries management, manage those data and make them available to end-users, including bodies designated by the Commission. Thus, EU fisheries management relies on data collected, managed and supplied by EU countries under the Data Collection Framework.

The CFP (article 25(2)) sets out the key principles for data collection:

- accuracy
- reliability and timeliness
- avoidance of duplication through improved coordination

- safe storage in database systems
- improved availability of data
- compliance with laws on personal data protection
- access for the European Commission, enabling it to check the availability and quality of data and the methodology used to collect them.

Through their national research institutions or in conjunction with organisations from other countries, Member States carry out the research that will provide the scientific basis for decision-making.

In Spain, the Instituto Español de Oceanografía (IEO – Spanish Oceanographic Institute), AZTI and the Consejo Superior de Investigaciones Científicas (CSIC- Advanced Council for Scientific Research), as well as a range of universities and other regional research centres undertake the research projects that constitute the essential aspects of fisheries management. Specifically, for the fishery under assessment, the IEO and AZTI are the two main research bodies:

### **Instituto Español de Oceanografía (IEO)**

The Instituto Español de Oceanografía (IEO – Spanish Oceanographic Institute) has a key role in the SCRS of ICCAT, and is the official Spanish representative in both, this organisation and its working groups, contributing with resources and knowledge.

The Institute's scientific research forms the basis for their advisory work with the Spanish government. The Institute provides the following data to the SGP: the status of the fishery resources caught by Spanish fleets, where they operate; fishing possibilities in new areas; the maintenance and improvement of coastal areas; the areas appropriate for the establishment of marine reserves or of aquaculture interest; and related issues. It also informs about issues involving marine pollution and environmental protection.

### **AZTI-Tecnalia**

AZTI-Tecnalia, which is part of the Basque Government, undertakes research on the Basque fisheries with the collaboration from the sector and the main European research centres, within the framework of international organisations such as ICCAT, IOTC, ICES/CIEM, NAFO, STECF, etc. They are involved by means of preparing scientific advice on the fishery resource exploitation so the respective political authorities can establish the appropriate management measures to ensure the activity remains sustainable.

AZTI monitors all landings in the Basque Country, comparing the fish market data with the data in the logbooks, and gathers scientific data as required by ICCAT (e.g., catch, effort, size as well as other data such as tag-recapture information). These data are put together with the rest of the national data and submitted to ICCAT.

Annual oceanographic surveys are undertaken to assess the status of the small pelagic populations in the Cantabrian Sea and the results are incorporated into the management plans. All the data are used to update the management plans according to the best available scientific data.

## 7.4.2 Principle 3 Performance Indicator scores and rationales

### PI 3.1.1 – Legal and/or customary framework

PI 3.1.1		The management system exists within an appropriate legal and/or customary framework which ensures that it: <ul style="list-style-type: none"> <li>- Is capable of delivering sustainability in the UoA(s);</li> <li>- Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and</li> <li>- Incorporates an appropriate dispute resolution framework</li> </ul>		
Scoring Issue		SG 60	SG 80	SG 100
a	Compatibility of laws or standards with effective management			
	Guide post	There is an effective national legal system <b>and a framework for cooperation</b> with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	There is an effective national legal system and <b>organised and effective cooperation</b> with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.	There is an effective national legal system and <b>binding procedures governing cooperation with other parties</b> which delivers management outcomes consistent with MSC Principles 1 and 2.
	Met?	Yes	Yes	Yes
Rationale				

At an international level, UNFSA, in its Article 5 notes that coastal States and States fishing in the high seas shall adopt objectives that are fully consistent with MSC Principles 1 and 2. Both, the UNFSA and other FAO guidelines (e.g., the Code of Conduct for Responsible Fisheries, although it is non-binding) require cooperation between States through international institutions where appropriate and, in the case of Atlantic tunas, ICCAT is the organization that has this role.

The International Commission for the Conservation of Atlantic Tunas (ICCAT) is responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas. The organisation was founded during the Plenipotentiary Conference, which prepared and adopted the International Convention for the Conservation of Atlantic Tunas, signed in Rio de Janeiro, Brazil, in 1966. The Convention formally entered into force in 1969 after the ratification process. The Convention establishes that ICCAT is the only fishing organisation capable of handling the work required for the study and regulation of tuna and tuna-like species in the Atlantic. ICCAT is responsible for coordinating scientific research and formulating recommendations (which are binding) aimed at maintaining tuna stocks at levels consistent with MSY. The Standing Committee on Research and Statistics (SCRS) is the body in charge of developing and recommending to the Commission policies and procedures for the collection, compilation, analysis and dissemination of fishery statistics to ensure that the Commission has available at all times complete, current and equivalent statistics on fishery activities in the Convention area. The SCRS also performs stock assessments of the target stocks within the Convention area, provides advice and promotes and implements specific sampling programmes (e.g., AOTTP, SMTYP, SRDCP, ...). According to the scientific based advice provided by the SCRS, the Commission sets minimum allowed weight limits for the capture and retention of tuna, TACs of various species, temporary closures, as well as regulations of gear and regimes of international and port inspection. The management objectives of ICCAT, expressed both in the Basic Texts of the Convention (Article VIII - ICCAT, 2019c) and in subsequent Recommendations (in particular Recommendation [11-13], ICCAT, 2011b) are consistent with the P1 of MSC, while the



Resolution [15-11] (ICCAT, 2015c) determines that ICCAT should apply both the ecosystem approach when formulating Recommendations, therefore, consistent with the P2 of MSC.

ICCAT's basic texts of the Convention are binding procedures for all CPCs. Article VIII of the Basic Texts of the Convention notes that: "The Commission may, on the basis of scientific evidence, make recommendations designed to maintain the populations of tuna and tuna-like fishes that may be taken in the Convention area at levels which will permit the maximum sustainable catch". Six months after being communicated by the Commission, ICCAT Recommendations enter into force and are applicable to the CPCs, and therefore they are also binding procedures. Recommendation 11-13 (ICCAT, 2011b) describes ICCAT's decision-making principles to ensure Article VIII is accomplished. Therefore, within ICCAT there are binding procedures governing cooperation with other parties which deliver management outcomes consistent with MSC Principle 1. Moreover, in relation to the assessed fishery this Recommendation applies to, both, P1 (North Atlantic albacore) and P2 primary species (skipjack, bigeye, yellowfin tuna, bluefin tuna, marlin, blue shark, ...). Therefore, it could be considered as a binding procedure which delivers management outcomes consistent with MSC Principle 2. Furthermore, Rec 15-07 (ICCAT, 2015d) established a work plan to examine ways to further define the management framework building on Rec 11-13 (ICCAT, 2011b), in particular to evaluate precautionary management reference points and robust HCRs through MSE. According to the plan established, the process started with the North Atlantic Albacore, and Rec 17-04 finally determined precautionary biological reference points and HCRs guiding the decision-making process for this stock. Progress made on MSE for this and other stocks is reported in ICCAT (2019d).

There is, however, no explicit mentioning about delivering outcomes consistent with P2 in the Basic Text of the Convention. In its preamble, Resolution 15-11 (ICCAT, 2015c) reflects the discussions that are taking place within the Convention Amendment Working Group to modify the Basic Text of the Convention so as to incorporate the ecosystem approach in the text, since Resolutions are not binding. Therefore, this Resolution can be understood as interim until the modification of the Basic Text occurs. In any case, this Resolution is determining principles that ICCAT shall apply when formulating the Recommendations. This situation could raise doubts about whether there are already binding procedures for the CPCs in place that seek to achieve management outcomes consistent with MSC P2. However, the assessment team considers that there is evidence that the principles established in Resolution 15-11 (ICCAT, 2015c) have already been applied to fisheries managed by ICCAT. For instance, there are Recommendations on reducing incidental bycatch of seabirds in longline fisheries (Rec 07-07 and 11-09), on the bycatch of sea turtles in ICCAT fisheries (Rec 10-09 amended by Rec 13-11), many recommendations on sharks caught in association with ICCAT fisheries (e.g., Recs 95-02, 04-10, 07-06, 09-07, 10-06, 10-07, 10-08, 11-08, 12-05, 13-10, 14-06, 15-06, 16-12, 16-13, 17-08, 18-06), and also Recommendations on information collection and harmonization of data on bycatch and discards in ICCAT fisheries (Rec 11-10, ICCAT, 2011a). Lastly, ICCAT has also formed a permanent Sub-Committee on Ecosystems that is part of the SCRS.

Moreover, as the assessed vessels are only flying Spanish flags:

Spain is a contracting party of ICCAT since 1969 and the European Union since 1997. Even though 28 of the 52 contracting parties of ICCAT are yet to ratify UNCLOS straddling and highly migratory fish stocks Agreement (UNFSA) (as of 27 June 2019, available from [https://www.un.org/depts/los/convention\\_agreements/convention\\_overview\\_fish\\_stocks.htm](https://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm)), it is worth noting that the EU (and Spain) ratified it in 2003.

The European Union is a Contracting Party of UNCLOS, is pursuant to Council Decision 98/414/EC on the ratification by the European Community of the Agreement for the implementing of the provisions of the United Nations Convention on the Law of the Sea (UNCLOS) of 10 December 1982 relating to the conservation and management of straddling stocks and highly migratory fish stocks, as well as to Council Decision 96/428/EC of 25 June 1996 and the United Nations Food and Agriculture Organisation Agreement of 24 November 1993 to promote compliance with international conservation and management measures by fishing vessels on the high seas. At national level, Spain



ratified the UNCLOS in 1996 and adopted the FAO Code of Conduct for Responsible Fisheries in 1995 (FAO, 1995). Spain is also a contracting party of the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR).

Based on the general framework of the CFP, the EU establishes suitable management and control measures for each fishery operating in their waters or involves the participation of vessels with European flag (or even EU citizens) in fisheries in non-European waters. It must be noted that the CFP is in accordance with the objectives of MSC principles 1 and 2, e. g., Article 2(2) states: “The CFP shall apply the precautionary approach to fisheries management, and shall aim to ensure that exploitation of living marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield.”

At national level, the Spanish Government, through the General Secretariat for Fishing (Secretaría General de Pesca, SGP), belonging to the Ministerio de Agricultura, Pesca y Alimentación (MAPA, Ministry of Agriculture, Fishing and Food) is responsible for applying the management measures to the national fisheries sector. Law 3/2001, of 26 March, on the State Maritime Fisheries has as objective (Article 3) to: “Ensure the sustainable and responsible exploitation of fishery resources, favouring their sustainable development and adopt the necessary measures to protect, conserve and regenerate these resources and their ecosystems”. This law covers the directives of the European CFP, adapts them to the specific circumstances of the Spanish fishing sector, and applies them through a range of Royal Decrees and Ministerial Orders in order to regulate the different fleets and fisheries. This Fishing Law was amended in 2014 (by Law 33/2014, of 26 December) to align it with the new content of the updated European CFP.

European fisheries management also involves making decisions based on the best available scientific data. The European Commission receives advice from various scientific organisations. In addition, in the event of data gaps, the EU has the means to fund studies and projects in the short, medium, and long term with the aim of rectifying the lack of data and, as such, fulfilling the CFP objectives. The Commission's scientific advisory bodies for fisheries are the following:

- The **Scientific, Technical and Economic Committee for Fisheries (STECF)**, which was created in 1993 to advise the Commission on fishing management issues. It is not a permanent body, but rather a group of experts that collaborate as temporary members or experts in working groups.
- The **International Council for the Exploration of the Sea (ICES)**, an intergovernmental body founded in 1902 to investigate and coordinate research on marine ecosystems in the North Atlantic. Other than the EU, they also advise several governments and regional fishing organisations.
- The Scientific Advisory Committee of the **General Fisheries Commission for the Mediterranean (GFCM)**, a regional organisation for managing fishing in the Mediterranean Sea.

Member states are also obliged (CFP Article 25(1)) to collect data on their fleets, and through their national research institutions or in conjunction with organisations from other countries, they carry out the research that will provide the scientific basis for decision-making.

In Spain, the Instituto Español de Oceanografía (IEO – Spanish Oceanographic Institute), AZTI and the Consejo Superior de Investigaciones Científicas (CSIC- Advanced Council for Scientific Research), as well as a range of universities and other regional research centres undertake the research projects that constitute the essential aspects of fisheries management.

Based on all the above, it is considered that an effective national legal system and binding procedures governing cooperation with other parties are in place which deliver management outcomes consistent with MSC Principles 1 and 2. Hence, **SG60, SG80 and SG100 are met.**

Resolution of disputes				
b	Guide post	The management system incorporates or is subject by law to a <b>mechanism</b> for the resolution of legal disputes arising within the system.	The management system incorporates or is subject by law to a <b>transparent mechanism</b> for the resolution of legal disputes which is <b>considered to be effective</b> in dealing with most issues and that is appropriate to the context of the UoA.	The management system incorporates or is subject by law to a <b>transparent mechanism</b> for the resolution of legal disputes that is appropriate to the context of the fishery and has been <b>tested and proven to be effective</b> .
	Met?	Yes	Yes	No
Rationale				

At European level, when the Commission considers that national authorities are not managing fisheries properly and in accordance with current legislation, the first thing they try to do is to resolve issues through consultations, or in certain circumstances they can temporarily cancel the access to the European Fishing Fund until the issue has been resolved, or reduce quotas, which can be deducted from future quotas, or in extreme cases, the Commission may refer the concerned Member State to the Court of Justice of the European Union.

At regional level, even though ICCAT does not have a formal dispute resolution procedure within the Convention, annual meetings provide the opportunity to resolve disputes between CPCs informally through consultations and conciliation. There is also the possibility that technical disputes are resolved through an expert or a technical panel appointed for the occasion. A Standing Working Group to Enhance Dialogue between Fisheries Scientists and Managers (SWGSM) was created in 2014. The importance of the work of this group was highlighted at the latest Regular Meeting of the Commission in 2019, and the Commission agreed that its work should continue. Moreover, it is also possible for unresolved disputes to be settled in the International Court of Justice (ICJ) or the International Tribunal for the Law of the Sea.

At national level, the Spanish legal system is used as the main mechanism to resolve legal disputes. When it comes to fishing infractions, disciplinary procedures will invariably be opened as a result of the resolution adopted to that effect by the Delegate of the Regional Government in the Spanish Autonomous Region in question.

The following procedures will be initiated:

- at the initiative of the Government Delegate;
- through an order from a higher authority;
- by petition of the General Director of Fisheries Resources, or other maritime fishing authorities or bodies;
- as a result of a request against any act or conduct that could constitute a violation;
- as a result of a procedure initiated by maritime fishing inspectors or other governmental employees or agents

The management system is subject by law to apply a transparent mechanism for resolving legal disputes. The maritime fishing disciplinary procedures will be undertaken in accordance with the principle of transparency in the procedures.

To those effects, the interested parties will have the right to receive updated data on the current status of their procedures, and to access and obtain copies of the relevant documents. Similarly, and prior to the hearing, the interested parties could present allegations and provide documents they consider relevant. Access to documents

related to the concluded disciplinary procedures is governed by the contents of Article 37 of Law 30/1992, of November 26, 1992, on the Legal Regime of Public Administrations and Common Administrative Procedure.

With the aim of ensuring a completely transparent procedure and the efficacy of the government itself, and to also ensure the due defence of the defendant and the interests of all the other parties that may be affected, each initiated disciplinary procedure will follow a systematic course, incorporating in succession all the documents, statements, acts, administrative applications, notifications, and other appropriate procedures in the right order. A procedure initiated as such will be completed and remain the responsibility of the competent body at all times. The fishers, the sector or their representatives can use the complete legal process.

This transparent mechanism for resolving legal disputes is considered effective in dealing with most issues in the context of fisheries, therefore **SG60 and SG80 are met**.

ICCAT has a process established for the submission and resolution of objections by the CPCs to the adopted Recommendations. This process is detailed in Article 8.3 (a-g) – 8.5 of the Basic Texts (ICCAT, 2019c) and allows CPCs not to adopt a Recommendation with which they do not agree. This mechanism, coupled with the fact that there is a lack of an effective arbitration procedure, has led to the use of objections to prevent recommendations being fully implemented (Medley et al., 2020). Within the context of an international system, the dispute cannot override a nation's sovereign rights, nevertheless a better dispute mechanism could be provided through providing formal arbitration and conciliation procedures to remove the necessity for objections over conservation issues (Medley et al., 2020). Therefore, **SG100 is not met**.

Respect for rights				
<b>C</b>	Guide post	The management system has a mechanism to <b>generally respect</b> the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to <b>observe</b> the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to <b>formally commit</b> to the legal rights created explicitly or established by custom of people dependent on fishing for food and livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

ICCAT only deals with granting fishing rights to CPCs, while the way in which these rights are distributed internally within each State depends on national legislation. At national level, the management of Albacore is based on Law 3/2001, the mandatory provisions of ICCAT Recommendation 17-04 as well as Spain's fishing opportunities for the North Atlantic albacore tuna stock which are contained in Council Regulation (EU) 2020/123 of 27 January 2020 and Council Regulation (EU) 2021/92 of 28 January 2021, fixing for 2020 and 2021, respectively, the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters.

By means of the CFP (e.g., Article 31(6)), the European Union management system creates, respects, and ensures legal rights, which are expressly created or established for people that are dependent on fishing for their food or livelihood in a manner consistent with MSC Principles 1 and 2 objectives. The implementation of the CFP by Spain, as a member country of the EU, ensures that these legal rights are considered in the national context of the fishery.

Concerning ICCAT, Resolution 15-13 (ICCAT, 2015e) establishes a series of criteria for the allocation of fishing possibilities. As well as taking into account the historical catches and interests of the CPCs, the criteria regarding the state of the stocks and on the level of compliance, data submission and scientific research accomplished by the CPCs, this Resolution also takes into consideration the following criteria:

- The interests of artisanal, subsistence and small-scale coastal fishers
- The needs of the coastal fishing communities which are dependent mainly on fishing for the stocks.
- The needs of the coastal States of the region whose economies are overwhelmingly dependent on the exploitation of living marine resources, including those regulated by ICCAT.
- The socio-economic contribution of the fisheries for stocks regulated by ICCAT to the developing States, especially small island developing States and developing territories from the region.
- The respective dependence on the stock(s) of the coastal States, and of the other States that fish species regulated by ICCAT
- The economic and/or social importance of the fishery for qualifying participants whose fishing vessels have habitually participated in the fishery in the Convention area
- The contribution of the fisheries for the stocks regulated by ICCAT to the national food security/needs, domestic consumption, income resulting from exports, and employment of qualifying participants
- The contribution of the fisheries of the stocks regulated by ICCAT to the national food security / needs, domestic consumption, income from exports and employment of the candidates for qualification
- The right of qualified participants to engage in fishing on the high seas for the stocks to be allocated

Moreover, Resolution 15-13 (ICCAT, 2015e) also establishes the conditions / mechanisms for applying the aforementioned established criteria.

In the case of the albacore tuna, Rec [16-06] established an annual Total Allowable Catch (TAC) of 28,000 t for 2017 and 2018. However, later Rec [17-04] adopted a new HCR and consequently the TAC established via Rec [16-06] had to be re-established according to the new adopted HCR. Rec [17-04] established an annual TAC of 33,600 t for 2018 - 2020. This TAC was allocated among 4 different CPCs (i.e., EU, Chinese Taipei, USA and Venezuela). Other ICCAT CPCs had to limit their annual catches to 200 t in 2017-18. ICCAT management is based on establishing a scientific-based TAC which aims to ensure the sustainability of the stock.

Thus, **SG60** and **SG80** are met.

Mechanisms established in Resolution 15-13 (ICCAT, 2015e) are only suggestions to the CPCs since, while the Basic Text and the Recommendations are effectively binding procedures for all CPCs, the Resolutions are only guidelines. Thus, criteria established by ICCAT on this issue are less binding than in other RFMOs (e.g., WCPFO) and it is not clear exactly how conflicting interests among these criteria can be resolved (Medley et al., 2020). Although ICCAT has demonstrated the intention to develop and implement methods to allow a fair distribution and mechanisms to achieve this objective, such mechanisms are not formal commitments, just statements of what arguments might be admissible in determining fishing rights allocation (Medley et al., 2020).

Hence, **SG100** is not met.

## References

- ◆ Council Decision 96/428/EC of 25 June 1996
- ◆ Council Decision 98/414/EC of 8 June 1998
- ◆ Council Regulation (EU) 2020/123 of 27 January 2020
- ◆ Council Regulation (EU) 2021/92 of 28 January 2021

- ◆ FAO, 1995
- ◆ ICCAT, 2011a
- ◆ ICCAT, 2011b
- ◆ ICCAT, 2015c
- ◆ ICCAT, 2015d
- ◆ ICCAT, 2015e
- ◆ ICCAT, 2016b
- ◆ ICCAT, 2017a
- ◆ ICCAT, 2019c
- ◆ ICCAT, 2019d
- ◆ Law 3/2001, of 26 March
- ◆ Law 33/2014, of December 26
- ◆ Regulation (EU) No 1380/2013
- ◆ The UN Agreement for the Implementation of the Provisions of the UNCLOS of 10 December 1982
- ◆ United Nations Convention on the Law of the Sea of 10 December 1982 (UNCLOS)

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>85</b>
Condition number (if relevant)	<b>NA</b>

## PI 3.1.2 – Consultation, roles and responsibilities

PI 3.1.2		The management system has effective consultation processes that are open to interested and affected parties The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties		
Scoring Issue		SG 60	SG 80	SG 100
a	Roles and responsibilities			
	Guide post	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>generally understood</b> .	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>explicitly defined and well understood for key areas</b> of responsibility and interaction.	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>explicitly defined and well understood for all areas</b> of responsibility and interaction.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

The EU fisheries management system has the tools available for all the involved parties to be represented and consulted during the decision-making processes. As such, the Advisory Councils (ACs) are stakeholder-led organisations that provide the Commission and EU countries with recommendations on fisheries management matters. This may include advice on conservation and socio-economic aspects of management, and on simplification of rules. Advisory Councils are consulted in the context of regionalisation. Advisory Councils should also contribute to data for fisheries management and conservation measures.

The South West Waters Advisory Council (SWWAC) (<https://www.cc-sud.eu/index.php/en/>) covers the Atlantic zone running from the tip of Brittany in the north to Strait of Gibraltar in the south. The purpose of the SWWAC is to help achieve the sustainable fishing objectives set by the Common Fisheries Policy, integrating the ecosystem approach and based on the precautionary principle. The SWWAC must, therefore:

- Give opinions arising from agreements between the Fishing sector and civil society to the European Commission and the Member States.
- Reply to the different consultations (communications, proposed Regulations), organised by the European Commission.

The SWWAC includes 60% of the representatives of the fishing sector (fishermen, shipowners, producers' organisations, processors, wholesale fishmongers and market organisations) in five Member States (Portugal, Spain, France, Belgium and the Netherlands); and 40% of the members of the civil society (aquaculture, consumer associations, environmental associations, seaman's wives associations, non-professional fishing associations, etc.).

At a national level, Spanish fishermen are grouped locally and regionally into associations and are represented nationally by fishing federations or large fisheries associations. Fisheries federations and associations are usually proactively involved in sector fora and meetings when it comes to putting forward and working on solutions to issues alongside the regional, national, or European governments.

The key roles and responsibility in the Spanish fishery management process include:

- Management / administration
- Scientific Advice
- Control & Enforcement
- Industry Representation
- Industry / NGO / Scientific liaison

At a regional level, ICCAT has taken and continues to take measures to encourage countries to become contracting parties, and for non-contracting parties to cooperate with the organisation's conservation measures. The success is shown by the increase in membership in recent decades and the high level of participation.

ICCAT has made it possible for interested parties to participate, and they also offer training and support for countries without capabilities in the areas of data management and fishing science, which helps them to be more effectively involved in their activities.

Based on all the above, it can be concluded that the roles and responsibilities of all the players involved in fisheries are explicitly defined and well understood by all parties for all areas of responsibility and interaction. Hence, **SG60, SG80 and SG100 are met.**

Consultation processes				
<b>b</b>	Guide post	The management system includes consultation processes that <b>obtain relevant information</b> from the main affected parties, including local knowledge, to inform the management system.	The management system includes consultation processes that <b>regularly seek and accept</b> relevant information, including local knowledge. The management system demonstrates consideration of the information obtained.	The management system includes consultation processes that <b>regularly seek and accept</b> relevant information, including local knowledge. The management system demonstrates consideration of the information and <b>explains how it is used or not used.</b>
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

The Management system includes consultation processes that provide relevant data on the status of the fisheries via technical and scientific knowledge from all the involved parties, including local knowledge from fishermen and all sectors of society that wish to take part. The reform of the Common Fisheries Policy, approved in 2013, which is the basis for fisheries management in the European Union, was undertaken using an open consultation process with all stakeholders and civil society so they could forward their concerns and provide their knowledge with the aim of reaching the best consensus on the management tool between all parties.

Consultation mechanisms for making decisions that affect all the stakeholders are usually used in each fishery.

The EU Advisory Councils are the main tool for transmitting to the European Commission the concerns and problems of the fisheries sector, as well as the industry's fisheries management proposals for consideration.

The management system allows all interested parties to express their opinions and proposals through consultation mechanisms or specific fora.

In the case of ICCAT, it stems from the organization's objective to obtain data on a regular basis, and to monitor the data and catches of the fishing activity in particular. ICCAT holds a plenary meeting every two years, and ICCAT's



specialized working groups (made up of scientists from the contracting parties) hold annual technical meetings. Data from the contracting parties and input from the specialized working groups provide the basis of ICCAT's advice.

As the competent government might not accept all the opinions generated in the above-mentioned working groups as compromises during the decision making, the management system does include consultation processes that regularly seek and accept relevant information, including local knowledge. Therefore, the management system demonstrates consideration of the information obtained, thus, **meeting SG60 and SG80**.

Nevertheless, there is no evidence on how the information is considered and no explanation is given as to how the information generated is or is not used in decisions. This could include information on compliance, economics and social issues. Therefore, **SG 100 is not met**.

Participation				
<b>C</b>	Guide post		The consultation process <b>provides opportunity</b> for all interested and affected parties to be involved.	The consultation process provides <b>opportunity and encouragement</b> for all interested and affected parties to be involved, and <b>facilitates</b> their effective engagement.
	Met?		<b>Yes</b>	<b>Yes</b>
Rationale				

There are consultation processes that allow the effective participation of all stakeholders through different representation mechanisms. The EU Advisory Councils are one of the main mechanisms, but at a national level, fishers are also represented by fisher's associations and federations in the different fora and consultation mechanisms, whether of general nature or specific to each fishery.

At national level, the Spanish government regularly meets with the sector to address issues of common interest and hear their opinion on matters affecting their activity.

There are different levels of consultation involving all parties affected and interested in fisheries management, as follows:

- National Fisheries Sector Advisory Committee
- EMFF Monitoring Committee
- Spanish Technological Platform for Fisheries and Aquaculture
- IEO (Spanish Institute of Oceanography) Advisory Board

The Consejo Asesor de Medio Ambiente (CAMA, Environment Advisory Council) of the Ministerio para la Transición Ecológica y el Reto Demográfico (Ministry for Ecological Transition and Demographic Challenge) has been established as a forum in which environmental NGOs and fishing sector agents have the opportunity to discuss environmental issues, including those related to the health of the seas and existing problems, and in which action measures are proposed to try to improve the negative aspects identified. Aspects related to fishing activities are discussed at the CAMA.

The CFP Reform process allowed all stakeholders, including the public, to provide comments to the Green Paper on Fisheries in Europe, which established the basis of the new CFP. As far as the EU is concerned, the advisory committees provide an opportunity for stakeholders to express their views on the status of the fisheries. The SWWAC, in particular,

involves all interested parties in the management of Atlantic fisheries from southern Europe, including the fishery under assessment.

As for ICCAT, each country is responsible for defining the interests of its fishery. With respect to ICCAT, the opportunity to become a Contracting Party or a Cooperating Non-Contracting Party is open to all. ICCAT has taken and continues to take measures to encourage countries to become contracting parties, and for non-contracting parties to cooperate with the organisation's conservation measures. The success is shown by the increase in membership in recent decades and the high level of participation. For all these reasons, the team believes that the consultation process provides opportunity and encouragement for all interested and affected parties to be involved, and facilitates their effective engagement, therefore, **meeting SG60, SG80 and SG100**.

#### References

- ◆ Council Decision 2004/585/EC of 19 July 2004
- ◆ Commission Decision 2007/222/EC of 4 April 2007
- ◆ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>95</b>
Condition number (if relevant)	<b>NA</b>

## PI 3.1.3 – Long term objectives

PI 3.1.3		The management policy has clear long-term objectives to guide decision-making that are consistent with MSC Fisheries Standard, and incorporates the precautionary approach		
Scoring Issue		SG 60	SG 80	SG 100
a	Objectives			
	Guide post	Long-term objectives to guide decision-making, consistent with the MSC Fisheries Standard and the precautionary approach, are <b>implicit</b> within management policy.	<b>Clear</b> long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach are <b>explicit</b> within management policy.	<b>Clear</b> long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach, are <b>explicit</b> within <b>and required by</b> management policy.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

One of the main objectives of the new CFP is to reach MSY exploitation rates for all stocks by 2015 where possible, and by 2020 at the latest. A range of control and management actions are being used to that end, including fishing effort regulation, access to waters, technical measures such as minimum sizes or gear selectivity, and the imposition of TACs and quotas for most of the fisheries.

Currently, almost all the stocks and important fishing grounds in EU waters are managed using multiannual plans, which establish the objective of stock management in terms of fish mortality and size. Some plans also establish detailed and specific route maps to achieve the objective or include fishing effort limits to complement the total allowable catches (TAC) and specific control regulations.

With the new CFP, the multiannual plans will include the maximum sustainable yield target and a deadline for achieving it, measures to implement landing obligations and, among other things, guarantees to implement corrective measures if necessary and a review of the clauses. Technical measures can also be included.

It should also be considered that the CFP ensures consistency with the fisheries objectives, which are set out in the Decision adopted by the Conference of the Parties to the Convention on Biological Diversity of the Strategic Plan for Biodiversity 2011-2020 and through the biodiversity targets adopted by the European Council in 2010 (<https://www.cbd.int/decision/cop/?id=12268>), and considers that the sustainable exploitation of marine biological resources should be based on the precautionary approach, which derives not only from the precautionary principle mentioned in the first subparagraph of Article 191(2) of the Treaty on the Functioning of the European Union, but also from the best available scientific evidence.

As for ICCAT, its basic texts (ICCAT, 2019c) provide clear long-term objectives that guide decision-making for Principle 1. As such, Recommendation 11-13 (ICCAT, 2011b) suggests how a stock needs to be assessed and managed and sets objectives based on the status of stocks as represented by the Kobe Plot. Depending on the Kobe Plot quadrant in which the stock is located, the Commission shall adopt/design different management measures.

With regard to Principle 2, ICCAT's Agreement Between the Food and Agriculture Organization of the United Nations and the International Commission for the Conservation of Atlantic Tunas (ICCAT, 2019c) does not contain an explicit

provision for a precautionary or ecosystem-based approach to management, which is part of the MSC principles and criteria. However, ICCAT Rec 11-13 (ICCAT, 2011b) can also be applied to Principle 2 species, such as tunas or tuna-like species. With other types of species such as ETPs (e.g., turtles) ICCAT is applying the ecological risk assessment (ERA). After receiving advice from the SCRS, the Commission shall consider additional measures to mitigate sea turtle by-catch in ICCAT fisheries, if necessary. There is evidence that these principles are applied to national and European fisheries management. Therefore, clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach are explicit within management policy, thus, **meeting SG60 and SG80**.

However, as there is no evidence that they are required within ICCAT's management policy, **SG100 is not met**.

#### References

- ◆ Consolidated version of the Treaty on the Functioning of the European Union
- ◆ ICCAT, 2011b
- ◆ ICCAT, 2019c
- ◆ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>80</b>
Condition number (if relevant)	<b>NA</b>

## PI 3.2.1 – Fishery-specific objectives

PI 3.2.1		The fishery-specific management system has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2		
Scoring Issue		SG 60	SG 80	SG 100
a	Objectives			
	Guide post	Objectives, which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <b>implicit</b> within the fishery-specific management system.	Short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <b>explicit</b> within the fishery-specific management system.	Well defined and measurable short and long-term objectives, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <b>explicit</b> within the fishery-specific management system.
	Met?	Yes	Yes	No
Rationale				

The management of the albacore fishery in Spain is limited to live bait and trolling vessels, as regulated in Article 3 of the Order of February 17, 1998 regulating tuna fishing in the Atlantic Ocean north of 36° North. During the meeting held with the SGP representatives during the 3<sup>rd</sup> surveillance audit of the initial assessment, it was confirmed that there are no intentions to modify this Order as they already consider that this regulation is ambitious in terms of conservation of the tuna stocks, since it restricts the authorised fishing gears to troll and live bait when targeting albacore and/or Bluefin tuna (in France it is allowed to target albacore using midwater trawl). Since these two fishing gears are highly selective and have a negligible impact on marine habitats, it can be considered that it contributes to achieving MSC P2-related objectives (i.e., low impact on non-target and ETP species and marine habitats).

Moreover, recent efforts made by the SCRS have managed to provide the fishery with objectives consistent with MSC P1 and P2, such as:

- Interim HCRs for the North Atlantic albacore have been adopted (Rec 17-04, ICCAT, 2017a).
- During 2018, the Committee was able to complete the peer review to develop criteria for the identification of exceptional circumstances, and to test several variants of the interim HCR, with a view to adopt a long term HCR in 2020 (ICCAT, 2018a).
- The main priority for 2019 is to address the recommendations identified by the external peer reviewer to improve the MSE framework, in anticipation to adopting a long-term HCR in 2020 (ICCAT, 2018a). This objective is already included in the work plans for the SCRS and the Albacore Working Group.
- In accordance with Rec 15-07 (ICCAT, 2015d), it was established that at its 2017 meeting the SCRS shall provide performance indicators for tropical tunas, bluefin tuna and North Atlantic swordfish with the perspective to develop MSE for tropical tunas (bigeye, skipjack and North Atlantic swordfish are species assessed against the P2 of the North Atlantic albacore artisanal fishery). In the case of the tropical tunas, the challenge of running so many MSE for different stocks has been identified by the SCRS, the RFMO MSE Working Group and SWGSM. In its latest meeting (ICCAT, 2018a), the SCRS recommended to slow down the existing roadmap for MSE processes and that also proposed that the MSE processes within ICCAT be made more consistent among the different species. The SCRS also recommends that the MSE processes adopt a standard set of principles that should guide and facilitate the coordination process. The Committee did agree to a new road map and request feedback from the Commission on the relative priority of each MSE. The new road map for the development of MSE and HCRs details the necessary steps (different meetings, stock assessments and external reviews)

which culminate in 2022 with the adoption by the Commission of an interim management procedure for tropical tunas in 2022 (ICCAT, 2018a). In the case of the North Atlantic swordfish the work has started in 2018 with the development of the MSE framework, and work planned for 2019 is to finalize the conditioning of the operating model and start testing alternative management procedures.

Furthermore, the Basic Text of the Convention (ICCAT, 2019c), in Article VIII, states that the long-term objective of ICCAT fisheries is to maintain populations of tuna and tuna-like species within limits consistent with the MSY.

Moreover, ICCAT Resolutions note the application of both the ecosystem approach (Resolution [15-11], ICCAT, 2015c) and the precautionary principle (Resolution [15-12], ICCAT, 2015f) when formulating Recommendations. The formulation of these Resolutions is consistent with UNFSA and the FAO Code of Conduct for Responsible Fisheries (FAO, 1995).

Recommendation 11-13 (ICCAT, 2011b) reinforces the objective expressed in Article VIII of the ICCAT Basic texts by establishing a set of principles for making decisions based on the status of the stocks to be managed. In relation to the assessed fishery this Recommendation applies both to all P2 primary species (skipjack, bigeye, swordfish, marlins and sailfish), while interim HCR are still not developed.

Lastly, it was proved that the internal fishery-specific objectives developed with the assistance of AZTI (a complete set of objectives for the medium and short term to ensure that the certified fishery is performing in agreement with MSC Principle 2 and consistent with the Spanish environmental policy. See progress on year 1 for further details) were adopted by the entire certified fleet, including the vessels which were included in the certificate at a later stage.

Therefore, **SG60 and SG80 are met.**

However, as these short- and long-term objectives were just recently adopted, the team believes that it cannot be stated that they are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2. Therefore, **SG100 is not met.**

## References

- ◆ COUNCIL REGULATION (EU) 2021/92 of 28 January 2021
- ◆ FAO, 1995
- ◆ ICCAT, 2011b
- ◆ ICCAT, 2015c
- ◆ ICCAT, 2015d
- ◆ ICCAT, 2015f
- ◆ ICCAT, 2017a
- ◆ ICCAT, 2018a
- ◆ ICCAT, 2019c
- ◆ Order of February 17, 1998

Draft scoring range

**≥80**

Information gap indicator

**Information sufficient to score PI**

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>80</b>
Condition number (if relevant)	<b>NA</b>



## PI 3.2.2 – Decision-making processes

PI 3.2.2		The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Decision-making processes			
	Guide post	There are <b>some</b> decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives.	There are <b>established</b> decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.	
	Met?	Yes	Yes	
Rationale				

There is an established decision-making mechanism in ICCAT that is reliable and transparent. This mechanism, however, has some weaknesses, for example, contracting parties can vote, but cooperating parties do not have voting rights. This means that Chinese Taipei (one of the parties that has an allocation of the total North Atlantic albacore TAC), which is a cooperating fishing entity, can only observe. Nevertheless, most decisions are taken by consensus rather than by voting.

In relation to the EU, under Article 300 of the Treaty, the Community is represented in the Regional Fisheries Management Organizations (RFMOs) by the European Commission (EC). When the Community participates in the creation of new RFMOs or becomes a member of a new one, the EC negotiates on its behalf in accordance with the negotiating directives of the EU Council and in consultation with a specially appointed committee of the EU Council. Once these organizations are created or when the EU becomes a member, the EC represents the EU's interests in them and is accountable to them and to the other contracting parties for the commitments the EU has made. The EC defends the coherence of its various policies in RFMOs. In relation to the obligations arising from participation in the RFMOs, the EC participates in the work of the RFMOs; it incorporates the recommendations of the RFMOs into EU legislation to implement the conservation and management measures adopted by the RFMO.

EU member countries, including Spain, must either incorporate the EU regulations into their national legislation or directly incorporate RFMO measures into their national legislation.

Therefore, decision-making processes are in place, and generally result in measures and strategies to achieve the objectives. **SG60 and SG80 are, therefore, met.**

Responsiveness of decision-making processes				
<b>b</b>	Guide post	Decision-making processes respond to <b>serious issues</b> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and	Decision-making processes respond to <b>serious and other important issues</b> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive	Decision-making processes respond to <b>all issues</b> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.

		take some account of the wider implications of decisions.	manner and take account of the wider implications of decisions.	
	Met?	Yes	Yes	No
Rationale				

Regarding ICCAT, Article VIII of ICCAT's basic texts (ICCAT, 2019c) establishes the procedure governing the mechanism of recommendations. These must be based on scientific evidence. A recommendation can be proposed by the Commission or by a specific panel, for example, and must be approved by at least two-thirds of the Contracting Parties (CPCs). The system allows any CPC to submit an objection, which will be analyzed, but if any NCPC still objects to a conservation recommendation, it will not be binding on the CPCs. The fact that the CPC does not currently have to justify its objection means that there are no limits on when an objection may or may not be accepted.

ICCAT resolves most conflicts by consensus at the annual meetings. The results of these decisions are transparent, and the initial positions and data used for the decision are available. The system ensures that all contracting parties are fully informed of the issues raised at the meeting and can participate in decision-making.

As there are many meetings throughout the year which may result in some less developed countries not having the means to attend and participate in the limited Committee meetings, ICCAT ensures that final decisions and adoption of recommendations occur only during the annual plenary meeting.

European fisheries management also involves making decisions based on the best available scientific data. The European Commission receives advice from various scientific organisations (i.e., STECF, ICES and GFCM). The results from the scientific organisations together with the advisory structure composed of STECF / AC / European Commission and ACFA (Advisory Committee on Fisheries and Aquaculture) are taken into account in fisheries management decisions.

The decision-making process can, therefore, be considered to meet the requirements of this indicator, integrating scientific knowledge, monitoring, evaluation and stakeholder consultation processes, thus, **meeting SG60 and SG80**.

ICCAT is making substantial progress on this issue in joint meetings between the Commission and scientists. However, its response is not timely and does not answer all the questions. Therefore, decision-making processes do not respond to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions, hence, **SG100 is not met**.

Use of precautionary approach				
<b>C</b>	Guide post	Decision-making processes use the precautionary approach and are based on best available information.		
	Met?	Yes		
Rationale				

ICCAT's current decision-making processes use the best available information from the various meetings and from the discussions of reports that provide analysis and advice based on that information.

There is an implicit precautionary approach in decision-making processes, which is used in most circumstances in practice (Resolution [15-12], ICCAT, 2015f). However, because this approach and its use are not explicitly defined, it is

difficult to assess whether it is used appropriately in all decisions. Nevertheless, ICCAT's decision-making processes are generally based on the best available information, and in most cases can be shown to be based on the precautionary principle.

Specifically for Albacore, the precautionary approach is taken into account in Recommendation 17-04 (Harvest Control Rule for North Atlantic Albacore).

In addition, through the IEO's National Basic Data Program of the Spanish fishing sector together with the monitoring of landings and control of catches with on-board logbooks, the scientific data for this fishery can be considered optimal for decision making based on scientific advice. Thus, **meeting SG80**.

Accountability and transparency of management system and decision-making process				
<b>d</b>	Guide post	Some information on the fishery's performance and management action is generally available on request to stakeholders.	<b>Information on the fishery's performance and management action is available on request,</b> and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.	Formal reporting to all interested stakeholders <b>provides comprehensive information on the fishery's performance and management actions</b> and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

ICCAT formally publishes recommendations for research, monitoring, evaluation and review of the activity. Likewise, the reports of the plenary sessions of the meetings are formally published and made available to the public. This formal publication can be considered adequate. In addition, all available information is published for decision making, which means that any interest group can draw its own conclusions, with frequent comments from NGOs, scientists and other stakeholders. Other decisions, such as reducing bycatch, improving size composition or setting overall catch and effort limits, can be clearly linked to scientific reports. Overall, all stakeholders have access to relevant information on the status of the fishery in terms of its technical and administrative management, as well as available scientific data. It is also possible to access the STECF and ACFA reports and recommendations. The outcome of the deliberations of the EU Fisheries Commission is also available through its communications and regulations.

All reports, regulations and recommendations on this fishery are analysed and discussed at the SWWAC, which means that all stakeholders have access to most of the available data.

The Spanish Government regularly convenes the sector to inform them about the resolutions and changes that affect or may affect the fishery, and they work hand in hand to find the best solution. This also means that the Government has first-hand knowledge of the sector's worries and concerns.

Formal reporting to all interested stakeholders provides comprehensive information on the fishery's performance and management actions and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity. Therefore, **SG60, SG80 and SG100 are met**.

Approach to disputes				
e	Guide post	Although the management authority or fishery may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability for the fishery.	The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges.	The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.
	Met?	Yes	Yes	No
Rationale				

So far, even though ICCAT's COC has warned CPCs for failing to submit data on their fishing activities (e.g., in the latest 2018 COC annual report Brazil requested the Committee a derogation of the application of the retention ban under Rec 11-15 to enable Brazil to submit its Task I data to ICCAT, justifying the delay due to the economic and institutional instability experienced by this CPC in the past year), there have been no cases of repeated violations of the ICCAT Recommendations by the CPCs (see PI3.1.1).

#### SG60 is met.

There are also no pending legal disputes, since until now CPCs have not used international law to resolve disputes. It can therefore be considered that by implementing the existing mechanisms (multi-stakeholder Panels and Committees, and the recent Standing Working Group to Enhance Dialogue between Fisheries Scientists and Managers - SWGSM) ICCAT has been proactive in avoiding disputes.

Recently, the management system has demonstrated its ability to comply in a timely manner with decisions adopted by the Commission (even before any judicial decision had been taken): Brazil managed to report to ICCAT's Secretariat the reviewed and updated Task I catch data in time (by April 2018) to avoid the application of the retention ban as established in rec 11-15. These data have already been assessed and accepted by ICCAT's Secretariat and they were presented to the SCRS meeting held in Madrid between 1-5 October 2018.

#### SG80 is met.

However, it would be useful to have better mechanisms for the resolution of legal disputes to avoid the possibility of a CPC using the objection process to not comply with a certain Recommendation with which it does not agree (see PI3.1.1 for more details). In 2006, for example, two ICCAT CPCs – Turkey and Libya – objected to its allocated quotas by ICCAT and unilaterally decided to increase their own allocations, arguing that the allocation of quotas was unfair. And again in 2014 Turkey lodged a formal objection to the recovery plan for the Bluefin tuna in the Eastern Atlantic and Mediterranean [Rec 14-04] (ICCAT, 2014b) on fishing quotas for 2015, 2016 and 2017, and unilaterally assigned an additional quota of 600 tonnes for that year and future years.

UNFSA has recommended that RFMOs should ensure that post opt-out behaviour is constrained by rules to prevent opting-out CPCs from undermining conservation. To do so, they recommend clear processes for dispute resolution, and a description of alternative measures that will be implemented in the interim (Medley et al., 2020, and references therein). This is aligned with the recommendation made by the external reviewers to ICCAT during the latest external review of the ICCAT performance (ICCAT, 2016c): *“The Panel recommends that ICCAT urges its CPCs to reach agreement on the inclusion of compulsory dispute settlement procedures entailing binding decisions in the Amended ICCAT*

*Convention, which also devote attention to provisional arrangements of a practical nature pending the establishment of a dispute”.*

Based on all the above, **SG100 is not met.**

## References

- ◆ Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union.
- ◆ ICCAT, 2011
- ◆ ICCAT, 2014b
- ◆ ICCAT, 2015f
- ◆ ICCAT, 2017a
- ◆ ICCAT, 2016c
- ◆ ICCAT, 2019c

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>85</b>
Condition number (if relevant)	<b>NA</b>

## PI 3.2.3 – Compliance and enforcement

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	MCS implementation			
	Guide post	Monitoring, control and surveillance <b>mechanisms</b> exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.	A monitoring, control and surveillance <b>system</b> has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	A <b>comprehensive</b> monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

ICCAT strategies to improve compliance with their requisites and procedures revolve around the registry of vessels, catch monitoring, diplomatic pressure, as well as other types of pressure applied to countries. There is also a fishing vessel registry based on the data presented by the Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities. It is important to note that the non-registered vessels are not considered authorised to fish, retain on board, tranship, or unload tuna and tuna-like species. ICCAT has a set of measures, including the prohibition to tranship and land tuna and tuna-like species from large-scale fishing vessels that are not included in the registry. Moreover, the COC (Conservation and Management Measures Compliance Committee of ICCAT) reviews all aspects of compliance with regards ICCAT conservation and management measures in the ICCAT Convention Area, with particular reference to compliance with such measures by ICCAT Contracting Parties. The COC annual report is included in Volume I of the ICCAT Biennial Report, and includes: i) the degree of compliance of each CPC regarding catch data reporting (Task I and II) to the SCRS, and (if needed) the response/explanation and actions taken by the CPC; ii) quota overages and balance; iii) adjusted quotas and their temporary terms.

EU Member States are responsible for complying with the agreed regulations within the CFP framework at an EU level. The European Fisheries Control Agency (EFCA) was established in 2005 by Regulation Council Regulation (EC) 768/2005 (the current Regulation (EU) 2019/473 on the European Fisheries Control Agency is in force since 14 April 2019). Its goal is to coordinate the fisheries inspection and control operational activities of Member States and provide assistance to the Member States in their application of the Common Fisheries Policy. Their commitment was reinforced by the publication of the latest EU control regulation, which came into force on January 1, 2010, with the main objective of promoting compliance with the current regulations in accordance with the CFP rules (Council Regulation (EC) No 1224/2009 of 20 November 2009).

In Spain, the Subdirección General de Vigilancia Pesquera y Lucha contra la Pesca Ilegal (Subdirectorato General for Fisheries Surveillance and Fight against Illegal Fishing) is part of the Directorate General for Fisheries and Aquaculture Management (see **section 7.4.1.1** – Spanish central government), which is the competent authority for MCS activities both at sea and on land, for coordinating the different activities in this field, sometimes with the support from the Autonomous Regions.

A large number (the number is confidential) of state forces carry out the different control tasks, belonging to different security forces: SEPRONA, Guardia Civil, Navy and Customs. Each has its own area of competence. They mainly use airplanes and ships to carry out control measures both on land and at sea.

Also, since Regulation (EC) Nº 1077/2008 (now repealed by Regulation (EU) No 404/2011 of 8 April 2011) took effect in 2008, laying down detailed rules on electronic recording and reporting of fishing activities and on means of remote sensing, it has become compulsory to use an on-board Electronic Fishing Logbook (ELB) on most fishing boats (i.e., vessels above 12 m), through which the data on each boat's catch is reported to the control centres. In Spain, these data are sent to the Centro de Seguimiento de Pesca (CSP, Fisheries Monitoring Centre), located in the facilities of the Subdirección General de Vigilancia Pesquera y Lucha contra la Pesca Ilegal of the SGP. The national order transposing this regulation is Order ARM/3145/2009, of November 19, 2009.

ELB data are sent through a daily message, allowing an almost immediate control of catches. These data can be used to control the use of fishing quotas, among other issues.

In addition, vessels over 15 metres long are obliged to use the so-called “blue box” or VMS (Vessel Monitoring System), which allows the vessel to be monitored every two hours, indicating its precise position and the nature of the activity being undertaken at the time (fishing, sailing, etc.).

Moreover, there is a list of authorised ports to land catches, which are subject to the control measures specified in the management plans.

The Autonomous Regions' duties in the management involve coordination between Madrid and the Autonomous Region with respect to the fishery closure and sending the sales notes to the Secretaría General de Pesca for collation with the ELB data.

To conclude there is a comprehensive monitoring, control and surveillance system implemented in the fishery and is demonstrating a consistent ability to enforce relevant management measures, strategies and/or rules. Therefore, **meeting SG60, 80 and SG100.**

Sanctions				
<b>b</b>	Guide post	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Sanctions to deal with non-compliance exist, <b>are consistently applied</b> and thought to provide effective deterrence.	Sanctions to deal with non-compliance exist, <b>are consistently applied</b> and <b>demonstrably</b> provide effective deterrence.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

The **European Commission** has the authority to take Member States to court in the event of non-compliance, which can result in significant financial penalties.

The sanctioning regime in **Spain** is clearly developed in the Fisheries Law (Law 3/2001). The Government Delegate of the Autonomous Community in which the allegedly infringing conduct has taken place is responsible for deciding on the appropriateness of initiating a sanctioning procedure in view of the facts set forth in the corresponding infraction report prepared by the fisheries inspectors. In addition, the staff of the Agriculture and Fisheries Division of the Government Delegation must prepare the disciplinary proceedings and, once the prior hearing has been held (in accordance with Royal Decree 1398/1993), will submit the proposed resolution, which will be sent with the file to the



General Secretariat of Fisheries in the case of serious or very serious infringements. In the case of minor infringements, the Government Delegate will decide the corresponding fine/sanction.

Article 102 of the Spanish Maritime Fisheries Law (Law 3/2001) dictates the amounts applicable for each type of sanction, establishing a distinction between those classified as minor, serious and very serious. In the event of an infringement, the competent authorities of the Member State shall, without delay and in compliance with the national law procedure, notify the Member State of which the accused is a citizen of the criminal proceedings or any other measures taken, as well as any final judicial decision relating to the infringement.

Moreover, Regulation 404/2011, implements Council Regulation 1224/2009, to establish a Community control system for ensuring compliance with the rules of the common fisheries policy.

In addition, there is a tolerance in the landing of +/-10 % in weight (Council Regulation (EC) No 1224/2009), between the estimate that the skippers must indicate on paper and the actual weight of the catches. If this percentage is exceeded, the vessels are sanctioned according to the regulations. In fact, in the initial assessment PCR report, it was mentioned that the percentage of exceedance was very small in relation to the amount of landings (García et al., 2016).

In addition, during both, the first certification cycle and during the re-assessment site-visit, the Spanish Sub-directorate for Fisheries Control and Inspection (SGCI) considered that the fleet is complying with the management system. Below, there is a summary of the number of inspections and infringements to the UoCs' vessels during the Albacore fishing period (May-October) from 2015 to 2020.

Year	<i>N inspections</i>	<i>N infringements</i>
2015	90	9
2016	161	9
2017	86	0
2018	59	0
2019	145	2
2020	131	7

Regarding **ICCAT**, the EU has adopted a series of Regulations to effect compliance with the measures recommended by ICCAT. Spain, as a Member State of the EU, has the obligation to adopt and enforce these. Most Recommendations of ICCAT and EU Regulations have been transferred into Spanish legislation, with linked enforcement sanctions.

In practice, the most important sanctions that RFMOs can apply are the inclusion in the IUU vessel list, the adjustment of fishing quotas, the application of trade restrictive measures and the retention prohibition. ICCAT has adopted recommendations enabling these types of sanctions to be taken against individual States if necessary.

Mechanisms for adjusting quotas in case of overage (or underage) of an annual catch limit are defined in several fishery-specific Recommendations. In the case of Rec 16-01, there are mechanisms specified for bigeye tuna. Rec 01-12 determines that any temporary quota adjustments shall be done only under authorization by the Commission.

Rec 06-13 determines the procedures to impose trade restrictive measures by the Commission. This Recommendation also notes that this type of measures should be implemented only as a last resort, where other measures have proven unsuccessful. It also notes they should be adopted and implemented in accordance with international law, including principles, rights and obligations established in the World Trade Organization Agreements, and be implemented in a fair, transparent and non-discriminatory manner.

Rec 16-17 addresses the need to provide detailed guidelines for an ICCAT schedule of actions to be applied when determining non-compliance and appropriate actions to address non-compliance with ICCAT conservation and management measures. The guidelines are structured in 3 successive steps to be followed:

- Step 1: Determination of category of non-compliance(s)
- Step 2: Determination of the severity of non-compliance(s)
- Step 3: Application of actions to address compliance failures, where warranted

Recommendation 11-15 notes that CPCs that do not report Task I data, including zero catches, for one or more species for a given year, in accordance with SCRS data reporting requirements, shall be prohibited from retaining such species as of the year following the lack or incomplete reporting until such data have been received by the ICCAT Secretariat.

Regarding this Rec (11-15), according to the report prepared by ICCAT's Secretariat to the COC (ICCAT, 2019b), following the 2017 Commission meeting, prohibition was imposed on Angola, Cabo Verde and Guinea Bissau, and the prohibition was maintained for Sierra Leone, Philippines and Vanuatu (although confirmation of zero catch was later received from Vanuatu, after 12 October, and the prohibition was lifted on 22 October 2018), as no response from these parties had been received for the years for which Task I was missing. In 2018, the Secretariat was pleased to report that the prohibition had been lifted from Angola, Cabo Verde and Sierra Leone. It should be noted that this latter had admitted the possibility of minor artisanal catches of tuna and tuna-like species and had requested assistance from the Secretariat/ICCAT to develop a more effective data collection programme (ICCAT, 2019b). Currently, only Philippines remains with prohibition in force, but Task I data for 2017 is missing for several CPCs, including Grenada, Guinea Bissau, Guinea Equatorial, Republic of Guinea, Mauritania, Philippines. Neither catch data nor confirmation of zero catch in 2017 has been received for these CPCs, although Republic of Guinea has reported zero catches for commercial species on compliance tables (ICCAT, 2019b).

During the Tropical Tuna Species Group intersessional meeting held in September 2017 in Madrid (ICCAT, 2018b), the Committee was informed that in the latest years (2014-2016) catches from a major fishery for tropical tunas (Brazil) in the western Atlantic had not been provided. As a result, Recommendation 11-15 should have been triggered. However, Brazil requested the Committee to delay the application of the retention ban under Rec. 11-15 to enable Brazil to submit its Task I data to ICCAT, justifying the delay due to the economic and institutional instability experienced in the past year in this CPC. In its intervention, Brazil specifically committed to submit a comprehensive revision of its Task I data covering the last five years by March 31, 2018, after which point the retention prohibition would be activated if Brazil had not submitted its Task I data. The justification and commitment presented by Brazil were enough to receive the endorsement from the COC for this derogation (ICCAT, 2018c). This led Brazil to make a special effort collecting data on the new fishery and reviewing its historical catch trend in order to fulfil the commitment acquired with ICCAT. Finally, the comprehensive review was presented in time and accepted by the SCRS.

There are also examples of temporary adjustments of quotas which have been successfully applied, as is the case of cutting the 2006 quota of bigeye tuna for China-Taipei (a non-CPC), or the reduction in the catch limit of the EU for exceeding its catch limit for two consecutive management periods (Medley et al., 2020). Moreover, ICCAT has also recently implemented a ban on imports from Bolivia and Georgia (neither of which is a CPC). This means that ICCAT is the only RFMO to have used trade-restrictive measures against an individual State (Medley et al., 2020).

Therefore, for all the above-mentioned, sanctions to deal with non-compliance exist, are consistently applied and are thought to provide effective deterrence, thus, **meeting SG60 and SG80**.

There are cases showing that ICCAT sanctions do not provide effective deterrence, as is the case of several infractions related to Mediterranean Bluefin tuna (Medley et al., 2020). Furthermore, these authors also consider that sanctions applied to CPCs have generally been weak compared to those applied to countries and fishing entities which are not

members of ICCAT. However, there are several examples of recent sanctions applied to CPCs, such as quota reduction applied to the UE or the retention prohibitions applied to Angola, Cabo Verde, Guinea Bissau, Sierra Leone, Philippines and Vanuatu (although currently, only Philippines remains with the prohibition in force).

Medley et al (2020) also consider that the application of the blacklisting of non-member vessels (IUU list) by ICCAT has not been effective, in contrast to the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

Therefore, even though sanctions dealing with non-compliance at ICCAT level exist, they do not always provide effective deterrence. Hence, **SG100 is not met**.

Compliance				
<b>C</b>	Guide post	Fishers are <b>generally thought</b> to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the fishery.	<b>Some evidence exists</b> to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.	There is a <b>high degree of confidence</b> that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

The control system is very effective and there have been hardly any cases of non-compliance, so it can be considered that fishers are complying with their obligations.

The data provided by the fishery activity can be considered essential for monitoring the albacore stock.

Fishers are required to fill out logbooks and catches are compared with port sales notes, as well as landing declaration and port entry notifications.

ICCAT prepares and distributes each year the "Compliance Annex", which includes:

- Catch limits and minimum sizes/tolerances.
- Each Party's catch statistics submitted to the SCRS for each year and any revisions to previous years' data.
- Overages and remaining quotas.
- The reductions in quota limits that each Party is required to adopt and the dates of such reductions.

ICCAT also provides a compliance table that includes a summary of the issues, the responses of non-CPCs and the actions taken by the Committee.

In general, ICCAT considers that fishers adequately comply with the rules in tuna fishing, thus, **SG60 and SG80 are met**.

However, as explained in SI(b), due to the incident during the 4<sup>th</sup> Surveillance Audit of the first certification cycle (see 4<sup>th</sup> Surveillance Audit report at the MSC website, available at: <https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments>) where the Fisheries Inspector from the SGP informed the assessment team that he was changing roles within the MAPA, BV was not able to gather any of the information requested during the site visit on this matter, therefore, a Recommendation was opened. Hence, **SG100 is not met**.

Systematic non-compliance			
<b>d</b>	Guide post	There is no evidence of systematic non-compliance.	
	Met?	<b>Yes</b>	
Rationale			

Despite the 4<sup>th</sup> Surveillance audit incident (see SIb), there is no evidence of systematic non-compliance. During the initial assessment and during the 1st to 3rd surveillance audits, no common non-compliances were reported. Only isolated cases and, for the most part, due to compliance with the +/-10% tolerance in the volume of discharges reported with respect to the logbook Therefore, **SG80 is met**.

#### References

- ◆ Commission Implementing Regulation (EU) No 404/2011 of 8 April 2011
- ◆ Commission Regulation (EC) No 1077/2008 of 3 November 2008
- ◆ Council Regulation (EC) No 768/2005 of 26 April 2005
- ◆ Council Regulation (EC) No 1224/2009 of 20 November 2009
- ◆ ICCAT, 2018b
- ◆ ICCAT, 2018c
- ◆ ICCAT, 2019b
- ◆ Law 3/2001, of 26 March
- ◆ Law 33/2014, of December 26
- ◆ Order ARM/3145/2009, of November 19, 2009
- ◆ Regulation (EU) 2019/473 of the European Parliament and of the Council of 19 March 2019
- ◆ Royal Decree 1398/1993, of August 4, 1993

Draft scoring range	<b>≥80</b>
Information gap indicator	<b>Information sufficient to score PI</b>

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	<b>85</b>
Condition number (if relevant)	<b>NA</b>

## PI 3.2.4 – Monitoring and management performance evaluation

PI 3.2.4		There is a system of monitoring and evaluating the performance of the fishery-specific management system against its objectives There is effective and timely review of the fishery-specific management system		
Scoring Issue		SG 60	SG 80	SG 100
<b>a</b>	Evaluation coverage			
	Guide post	There are mechanisms in place to evaluate <b>some</b> parts of the fishery-specific management system.	There are mechanisms in place to evaluate <b>key</b> parts of the fishery-specific management system.	There are mechanisms in place to evaluate <b>all</b> parts of the fishery-specific management system.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Rationale				

ICCAT has mechanisms in place to evaluate all aspects of the management system, by subjecting them to an internal review system. There are different committees and working groups that meet regularly and report their results to the Commission. Therefore, **SG60, SG80 and SG100 are met.**

Internal and/or external review				
<b>b</b>	Guide post	The fishery-specific management system is subject to <b>occasional internal</b> review.	The fishery-specific management system is subject to <b>regular internal and occasional external</b> review.	The fishery-specific management system is subject to <b>regular internal and external</b> review.
	Met?	<b>Yes</b>	<b>Yes</b>	<b>No</b>
Rationale				

ICCAT Resolution 11-17 (ICCAT, 2011c) on best available science states that CPCs undertake to “Strengthen peer review mechanisms within the SCRS by participation of outside experts (e.g., from other RFMOs or from academia) in the SCRS activities, particularly for stock assessments”. It also states that “The next independent performance review of ICCAT should include an assessment of the functioning of the SCRS and its working groups through a total quality management process, including an evaluation of the potential role of external reviews”.

Following what is stated in Resolution 11-17:

- 1) At the 2007 annual meeting, the Commission decided to proceed with the first external review of its performance, which was published in 2009 (ICCAT, 2009).

- 2) The SCRS in 2012 requested clarification of the external review process. A document was produced to clarify the terminology regarding the three separate forms of scientific peer review; to clarify and define the roles of invited experts and external reviewers; and to propose a transparent method for identifying and selecting external experts (de Bruyn et al., 2014).
- 3) At the 2015 annual meeting in Malta, ICCAT decided to address a new external review which was published in 2016 (ICCAT, 2016c). The team was coordinated by Mr. John Spencer (former head of delegation of the European Union in tuna RFMOs and other species) as an expert in fisheries management, and also included Mr. Jean-Jacques Maguire (an independent scientist with considerable experience in providing scientific advice and member of the 2008 Panel as a scientific expert) and Dr. Erik J. Molenaar (NILOS, University of Utrecht & JCLOS, UiT University of the Arctic of Norway) as a legal expert.

Therefore, the fishery-specific management system is subject to regular internal and occasional external review, hence, **meeting SG60 and SG80**.

However, despite recent efforts, it cannot be argued that external reviews of the fishery-specific management system are regular. Therefore, **SG100 is not met**.

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- ◆ de Bruyn *et al.*, 2014
- ◆ ICCAT, 2009
- ◆ ICCAT, 2011c
- ◆ ICCAT, 2016c

Draft scoring range	≥80
Information gap indicator	Information sufficient to score PI

Overall Performance Indicator scores added from Client and Peer Review Draft Report stage

Overall Performance Indicator score	90
Condition number (if relevant)	NA

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Commission Implementing Regulation (EU) No 404/2011 of 8 April 2011 laying down detailed rules for the implementation of Council Regulation (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the Common Fisheries Policy. Available at: <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32011R0404>

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## 9 Appendices

### 9.1 Assessment information

#### 9.1.1 Previous assessments – delete if not applicable

The fishery got the MSC certification on the 7th of June 2016. This fishery was assessed against version 1.3 of the MSC Certification Requirements and using version 1.3 of the MSC Full Assessment Reporting Template. However, following the MSC Notice, “Scoring of ‘available’ Harvest Control Rules (HCRs) in CRv1.3 fisheries” (issued on 24 November 2014), PI 1.2.2 SI (a) and (c) were scored using CR v2.0 provisions for SG60 scoring.

Initially, 3 conditions were raised to both UoCs on Performance Indicators (PI) 1.1.1 (Stock status), 1.2.2. (HCRs and tools), and 3.2.1 (Fishery specific objectives). While for the trolling (UoC1) another 2 conditions were raised on PI 2.3.1 (ETPs outcome) and 2.3.3 (ETPs information).

The two conditions on P1 (conditions 1 and 2) were closed during the first two surveillance audits, as a result of the latest stock assessment on the North Atlantic albacore (conducted in 2016) and the progress made by ICCAT on developing and adopting a Management Strategy Evaluation (MSE) and HCRs for this stock. As a result, PI 1.1.1 and PI 1.2.2 were re-scored. Also, based on more detailed information on species composition of the catches provided by the observer program on board the UoCs led the team to re-score tables on primary species (PI2.1.1, PI2.1.2 and PI2.1.3) for both UoCs during the first surveillance audit (Monteagudo and Rios, 2017). Besides, due to the harmonisation process with the US North Atlantic swordfish fishery, scores of PIs 1.1.1, 1.2.3 and 1.2.4 were modified during the 2 SA (Kirchner & Rios, 2018). As a result of the third surveillance audit, condition on PI 3.2.1 was closed and the PI re-scored to 80, but the other 2 conditions remained opened, being the PI2.3.1 on target and PI 2.3.3 behind target. No harmonisation activities were undertaken during the third surveillance audit.

In accordance with the combined tuna fishery variation request accepted by MSC on February 2019, Bureau Veritas undertook a Principle 1 v2.0 assessment upgrade (PCR published on February 2020). The process for the P1 assessment upgrade followed requirements set out in Appendix B of the MSC VR response. In this P1 upgrade process, harmonization meetings were held with MRAG (see **section 9.8** for further details) that led to the re-scoring of PI 1.2.4.

During the 4<sup>th</sup> Surveillance audit the two remaining opened conditions were closed. Consequently, the PI 2.3.1 and PI 2.3.3 were re-scored (see section 5.2 from Morant and Quílez, 2021).

**Table 9.1.1– Summary of previous assessment conditions**

Condition	PI(s)	Year closed	Justification
1.- Evidence must be presented that the stock is at or fluctuating around its target reference point <b>(Both UoCs)</b>	1.1.1	Closed in 1SV	The assessment team considers this condition to be ‘AHEAD TARGET’ as the stock is currently above its target reference point (BMSY) and likely to continue fluctuating above or around this level. See the 1SV report for further details ( <a href="https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments">https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments</a> )
2.- Well defined harvest control rules that are consistent with the harvest strategy and ensuring that the exploitation rates are reduced as limit reference points are approached shall be in place by year 4 <b>(Both UoCs)</b>	1.2.2	Closed in 2SA	The assessment team considers this condition to be ‘AHEAD TARGET’ as the harvest control rules went through the MSE process, were adopted at the end of 2017 and entered into force in June 2018. See the 2SV report for further details ( <a href="https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments">https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments</a> )

			atlantic-albacore-artisanal-fishery/@assessments)
3.- Evidence must be presented to ensure that sufficient and adequate information on direct effects from the fishery is available to ensure the impacts are highly unlikely to create unacceptable impacts to ETP species ( <b>UoC1</b> )	2.3.1	Closed in 4 SA	The client is effectively implementing the monitoring program to collect information on the impact of the UoC on ETP species. Furthermore, the client has also provided data of interactions with ETP species and it can now be said that direct effects are highly unlikely to create unacceptable impacts to ETP species. See the 4SV report for further details ( <a href="https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments">https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments</a> )
4.- Evidence must be presented to ensure that: (i) Sufficient information is available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for ETP species; (ii) Information is sufficient to determine whether the fishery may be a threat to protection and recovery of the ETP species ( <b>UoC1</b> )	2.3.3	Closed in 4 SA	The client is engaged in monitoring programs to collect information on the impact of the UoC on ETP species. Despite the impediments encountered (mostly due to premature start of the campaign in the waters of the Bay of Biscay and the COVID situation), the observer coverage percentage has been increasing since 2017, and even though is still low and not homogeneous among the different fleets (for which a Recommendation has been opened), there is now sufficient information available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for ETP species and to determine whether the fishery may be a threat to protection and recovery of the ETP species. See the 4SV report for further details ( <a href="https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments">https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments</a> )
5.- The client is required to work actively to achieve short and long-term objectives, consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, that direct policy together with a functioning operational framework (measures and strategies) that requires the use of the resource to be responsible and sustainable ( <b>Both UoCs</b> )	3.2.1	Closed in 3SA	Based on the information presented above the assessment team considers that there is evidence that short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery-specific management system (Recs 16-06,17-04, 11-13, 15-07 –together with Resolutions 15-11 and 15-12-, internal objectives adopted by the certified fleet). Therefore, the condition is considered to the 'AHEAD TARGET'. See the 3SV report for further details ( <a href="https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments">https://fisheries.msc.org/en/fisheries/north-atlantic-albacore-artisanal-fishery/@assessments</a> )

### 9.1.2 Small-scale fisheries

This is not applicable.



## 9.2 Evaluation processes and techniques

### 9.2.1 Site visits

The 2-day site visit was held in May 2021 and took place in San Sebastián with some of the meetings carried out remotely due to the Covid-19 situation at that moment. The 3 members of the assessment team took part in all meetings held during the site visit, but one of the members attended remotely from Namibia due also to the travel restrictions during the pandemic period.

BV identified and contacted the stakeholders in order to prepare a comprehensive agenda for the site visit. A specific email was sent to a list of stakeholders, informing them about the announcement of the fishery and encouraging participation. Those different stakeholders included: OPEGUI, OPESCAYA, OPACAN & Federación de Cofradías de Asturias (client group), MAGRAMA, the relevant Autonomous Regions (Asturias, Basque Country and Cantabria), AZTI, ICCAT, WWF-España, WWF-International, CITES, CRAM, The Ocean Foundation, PEW, International Seafood Sustainability Foundation – ISSF, Greenpeace, Seo-Birdlife, Birdlife International, OCEANA, Bloom, World Wise Foods, Animal Welfare Institute and MRAG among others.

Meetings were scheduled and carried out in San Sebastián between the 11th and the 12th of May 2021. Also, in those cases where face to face meetings were not possible, conference calls were organized during the site visit. The resulting agenda, including institutions visited and people met, is presented in **Table 9.2.2.1**.

### 9.2.2 Stakeholder participation

The announcement of the fishery entering the MSC assessment process published on the MSC website on March 4, 2021. At the same time of the announcement, the Announcement Comment Draft Report (ACDR) was also published and available for stakeholders input for a 30-day period. The announcement detailed the dates of the scheduled site visit to San Sebastián, and encouraged those stakeholders interested in scheduling a meeting to get in contact with the assessment team. Furthermore, BV also encouraged stakeholders to share any relevant information they might consider relevant for the assessment with the team through the “MSC Template for Stakeholders Input into Fisheries Assessment” provided.

The team contacted them in order to ensure their participation during the site visit and arrange the meetings. As a response, only one email from ISSF was received with their comments in the assessment before the site visit started. The list of institutions and people finally interviewed during the site visit is detailed in **Table 9.2.2.1**.

**Table 9.2.2.1.-** Table with the list of institutions interviewed during the site visit.

Date	Local time	Venue	Participants	Topics to be discussed
10 <sup>th</sup> May	10:00-11:00	Remotely	Assessment Team	
	Arrival to Bilbao between 18:10 and 18:50h			
	60' drive from Bilbao to San Sebastian Hotel in San Sebastian			

11 <sup>th</sup> May	10:30-12:30	OPEGUI headquarters	Opening meeting ( <b>partly remote</b> ) with representatives from OPEGUI, OPESCAYA and OPACAN: - Miren Garmendia (OPEGUI's director) - Aurelio Bilbao (Secretary of Federación de Cofradías de Bizkaia) - Adolfo García (FECOPPAS' president) - Enrique Paz (FECOPESCA's secretary)	- See topics in attached document
	12:30-13:30	OPEGUI headquarters	<b>Asturias Government:</b> - Francisco González (Director General de Pesca Marítima del Principado de Asturias)	- See topics in attached document
	13:30-15:00	Lunch		
	15:00-17:00	OPEGUI headquarters	<b>Remote meeting with AZTI:</b> - Jon Ruiz (Senior researcher) - Haritz Arrizabalaga (Principal researcher) - Iñigo Onandia (Researcher)	- See topics in attached document
	17:00-18:00	OPEGUI headquarters	<b>Assessment team</b>	- Team meeting
12 <sup>th</sup> May	09:30-11:30		<b>Remote meeting with MAPA:</b> - Gloria del Cerro (Jefe de Servidío – S.G. de Acuerdos y ORPs, SGP) - Lucía Sarricolea (S.G. de Acuerdos y ORPs, SGP) - Noemí Munguía (Jefa del Área de Control – SGP)	- See topics in attached document
	12:30-13:30	OPEGUI headquarters	<b>Remote meeting with PV Government:</b> - Leandro Azcue Mugica  (Director Pesca y Acuicultura Gobierno Vasco)	- See topics in attached document
	13:30-14:00		<b>Assessment team</b>	Team meeting
	16:30-17:30		Closing meeting ( <b>partly remote</b> ) with representatives from OPEGUI, OPESCAYA and OPACAN: - Miren Garmendia (OPEGUI's director) - Aurelio Bilbao (Secretary of Federación de Cofradías de Bizkaia) - Adolfo García (FECOPPAS' president) - Enrique Paz (FECOPESCA's secretary)	

The main topics discussed with the different stakeholders during the site visit are detailed below:



**1. - Basque Country Government:**

- Role of the Basque Administration in the management process and in the landings control.
- Inspection mechanisms, infringement and sanctioning process.
- Coordination with the central administration
- Participation of the Basque Administration in the decision-making process.

**2. – Asturias Government:**

- Role of the Basque Administration in the management process and in the landings control.
- Inspection mechanisms, infringement and sanctioning process.
- Coordination with the central administration
- Participation of the Basque Administration in the decision-making process.

**3. - SGP:**

- Final quota allocated to Spain in 2019 and 2020.
- Replacement of Guillermo Bravo.
- Number of inspections performed in 2019 and 2020 on the certified fleets. Number of non-compliances, severity and cause.
- Quota consumption in 2019 and 2020 and closing of campaign
- Fishing authorizations 2020 y 2021. Cantabrian census.
- Changes since last year in terms of MAPA's participation in ICCAT. Developments in the implementation of the multi-year management plan.
- ICCAT commission meeting in 2020.
- Significant changes in the Spanish fisheries administration (positions, structure, legislation) since November 2020 (in relation to this fishery). Modification of the Order of February 17, 1998.
- Last update of the AED.
- Evidence of the trial that according to the Client it was carried out in 2019 with the SGP which showed that the electronic logbook (DEA) could also be used to record, for instance, interactions with seabirds.
- The operational area of the fishery in the Atlantic Ocean and the Bay of Biscay in European Union-managed waters.

**4. - AZTI:**

- Updates on the observer data for the 2020 fishing season for both fleets.
- AZTI contracts with both fleets for the 2021 fishing season.
- Status of the publication with the data collected between 2017-2019 onboard the Basque and Asturian fleets.
- Distribution of Albacore fishing effort publication more recent than the "Ortiz de Zárate et al. (2013)".
- By-catch 0 in 2020 for both fleets as it is reflected in your 2021 report.
- Relevant publications/presentations related to this fishery in ICCAT during 2020 or 2021.
- ICCAT Commission meeting in 2020.
- Progress and update on the Rec 17-04 (HCRs, Catch limits, TACs).
- Stock assessment update of the North Atlantic Albacore.
- Biological parameters. Confidence with the biological parameters used in ICCAT's model.
- Conflicting results regarding the CPUE series used within ICCAT's models. Are these conflicting trends being tested within ICCAT's sensitivity framework?
- Are you using a production model framework? Has this stock being evaluated using more data intensive models for example Stock Synthesis 3?
- Is the production model framework able to test for some of the sensitivities that are normally tested in more complicated models?

- ICCAT's uncertainty in the results. Are most of the uncertainties included in the assessment providing fairly accurate confidence intervals?
- How frequently are the CPUE series used within the MSE framework updated?
- To which main assumptions in the model does the recovery of the stock remain sensitive? Is there a way to test some of these assumption with data?
- Elaborate on the extensive work plan that is planned to improve ICCAT's MSE framework.
- Main concerns that the reviewer (Sculley) found in his review. Peer review of the code and algorithms used within the management strategy evaluation framework for the north Atlantic albacore stock. SCRS/2018/142
- Information on confidence intervals?

## 5. - CLIENTS

- Updated information regarding traceability, auction points, and storages.
- Implementation of measures to minimize the impact with ETPs. Review of those measures. Code of Good Practices.
- Observers programs for 2021 on board the assessed fleets.
- Updated vessel list
- The operational area of the fishery is the Atlantic Ocean and the Bay of Biscay in European Union-managed waters.
- Explanation of the increase in SKJ in 2020 in the live bait fleet.

### 9.2.3 Evaluation techniques

The team published an ACDR on 4<sup>th</sup> March 2021 following the requirements set out in FCP 7.17.3. A draft scoring range together with a draft rationale was assigned to each Performance Indicator (PI). In addition, an indication of the availability of information used to score each PI and the information gaps were included in each PI table.

Scoring was performed according to the procedure established in Certification Requirement 7.17 (MSC FCP v2.1). The assessment team held preliminary scoring meetings during the site visit, where the Performance Indicators of the fishery were evaluated jointly by the team in order to assess whether there was still information needed to be communicated to the client. Once the site visit ended, and after receiving all the information from the stakeholders (see section 9.2.2), each expert finished their part of the report before proceeding to a joint evaluation of every PI and the final scoring, through scoring meetings, which took place via conference calls.

### 9.3 Peer Review reports

The following are the PR comments to the CPRDR

#### Report from Peer Review A

##### General comments

Question	Yes/No	Peer Reviewer Justification (as given at initial Peer Review stage). Peer Reviewers should provide brief explanations for their 'Yes' or 'No' answers in this table, summarising the detailed comments made in the PI and RBF tables.	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)
Is the scoring of the fishery consistent with the MSC standard, and clearly based on the evidence presented in the assessment report?	Yes	The assessment team of Bureau Veritas has thoroughly reviewed available information of the north Atlantic albacore artisanal (troll and pole and line) fishery. This has allowed me to easily follow the rationales for scoring and, therefore, I agree with the overall scoring. I suggest some non-material score changes, for the CABs consideration, within the client and peer review draft report. The scores are consistent with the MSC standard Version 2.01. P1 scores are also consistent (except for minor differences) with other certification scores through harmonisation. I also made some editorial comments, found below under General Comments, for use by the authors.	Thank you for your comment and suggestions. The team will review them thoroughly.
Are the condition(s) raised appropriately written to achieve the SG80 outcome within the specified timeframe? [Reference: FCP v2.2, 7.18.1 and sub-clauses]	NA		

Enhanced fisheries only: Does the report clearly evaluate any additional impacts that might arise from enhancement activities?	NA		
Optional: General Comments on the Peer Review Draft Report (including comments on the adequacy of the background information if necessary). Add extra rows if needed below, including the codes in Columns A-C.	NA	<p>This is a very good reassessment and report of the north Atlantic albacore artisanal (troll and pole and line) fishery. The authors of Bureau Veritas have done a thorough job of reviewing the original assessment and the new pertinent available information as well as incorporating and updating the new assessment using the most recent ICCAT analyses.</p> <p>Some editorial comments:</p> <p>page 22; par 1: ...system in place...</p> <p>page 24; bottom list: Cofradia Colindres; Rula de Avilas; Barquera</p> <p>page 68; par 3: ...that that...</p> <p>page 78; Table Error!</p> <p>page 114&amp;123; Table 7.3.1.7 Dead 4 not 14</p> <p>page 118; Slc: ... information directly collected about...</p>	<p>Page 78. It must have happened when converting it to pdf as it does not appear in the word version. In any case, we will make sure this does not happen in the PCDR. The rest of the typos have been amended in the report.</p>

## PI comments

PI	PI Information	PI Scoring	PI Condition	Peer Reviewer Justification (as given at initial Peer Review stage)	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)	CAB Res-ponse Code
Performance Indicator (PI)	Has all available relevant information been used to score this PI?	Does the information and/or rationale used to score this PI support the given score?	Will the condition(s) raised improve the fishery's performance to the SG80 level?	<p>Peer reviewers (PRs) should provide support for their answers in the left three columns by referring to specific scoring issues and/or scoring elements, and any relevant documentation as appropriate. Additional rows should be inserted for any PIs where two or more discrete comments are raised, e.g. for different scoring issues, allowing CABs to give a different answer in each case. Paragraph breaks may also be made within cells using the Alt-return key combination.</p> <p>Detailed justifications are only required where answers given are one of the 'No' options. In other (Yes) cases, either confirm 'scoring agreed' or identify any places where weak rationales could be strengthened (without any implications for the scores).</p>	<p>CABs should summarise their response to the Peer Reviewer comments in the CAB Response Code column and provide justification for their response in this column.</p> <p>Where multiple comments are raised by Peer Reviewers with more than one row for a single PI, the CAB response should relate to each of the specific issues raised in each row.</p> <p>CAB responses should include details of where different changes have been made in the report (which section #, table etc).</p>	See codes page for response options
1.1.1	Yes	Yes	NA	Scoring agreed		NA (No response needed)
1.1.2	NA (PI not scored)	NA (PI not scored)	NA	According to SA2.3.1 "Teams shall only score this PI when Stock Status PI 1.1.1 does not achieve an 80 score." Thus this PI has correctly not been scored.		NA (No response needed)
1.2.1	Yes	Yes	NA	Slr Scoring agreed		NA (No response needed)

1.2.1	Yes	Yes	NA	Slb Scoring agreed		NA (No response needed)
1.2.1	Yes	Yes	NA	Slc Scoring agreed		NA (No response needed)
1.2.1	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Sld Scoring agreed Under Sld the CAB states:'the Commission shall review the interim HCR in 2020 with the view to adopting a long-term management procedure.'" There needs to be a clear statement (with reference) in the rationale indicating that ICCAT has adopted the interim HCR at a Commission meeting.	Thank you for the comment. The text has been added to the rationale.	Accepted (no score change, change to rationale)
1.2.2	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Sla Scoring not agreed Evidence is provided (through MSE completed in 2017) that the interim HCR will keep the North Atlantic alabcoer stock at or above the BMSY most of the time. However, no evidence is provided that the HCR takes into account the ecological role of the stock. SG 100 is not met. <b>Therefore overall PI score for 1.2.2 is only 80</b>	Thank you for your comment. However, the given score was based on the fact that by adopting the biomass at MSY as the Btresh the ecological role of this species is being considered as the HCR is designed to be at the MSY level or fluctuate around the MSY level.	Not accepted (no change)
1.2.2	Yes	Yes	NA	Slb Scoring agreed		NA (No response needed)
1.2.2	Yes	Yes	NA	Slc Scoring agreed		NA (No response needed)

1.2.3	Yes	Yes	NA	Sla Scoring agreed		NA (No response needed)
1.2.3	Yes	Yes	NA	Slb Scoring agreed		NA (No response needed)
1.2.3	Yes	Yes	NA	Slc Scoring agreed		NA (No response needed)
1.2.4	Yes	Yes	NA	Sla Scoring agreed		NA (No response needed)
1.2.4	Yes	Yes	NA	Slb Scoring agreed		NA (No response needed)
1.2.4	Yes	Yes	NA	Slc Scoring agreed		NA (No response needed)
1.2.4	Yes	Yes	NA	Sld Scoring agreed		NA (No response needed)
1.2.4	Yes	Yes	NA	Sle scoring agreed		NA (No response needed)
2.1.1	NA (PI not scored)	NA (PI not scored)	NA	Sla agreed that there re no main primary species in UoC1		NA (No response needed)
2.1.1	Yes	Yes	NA	Sla Scoring agreed		NA (No response needed)
2.1.1	Yes	Yes	NA	Slb Scoring agreed		NA (No response needed)



2.1.1	Yes	Yes	NA	Slb Scoring agreed		NA (No response needed)
2.1.2	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Under Sla the CAB concludes that SG 100 is not met. Meaning that there is no strategy in place for managing main and minor primary species. Clear evidence is not provided to justify a score of 100. Score of 80 is justified. <b>Overall score for PI 2.1.2 should only be 85.</b>	Thanks for your comment but the CAB does not agree with the overall score of 85 for this PI. In this PI, there are two SI (Slc and Sld) that reach SG100 and two SI (Sla and Slb) that does not reach SG100. Therefore, following table 4 in the FCP 2.2, the CAB believes that the overall score should be 90.	Not accepted (no change)
2.1.2	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Under Sla the CAB concludes that SG 100 is not met. Meaning that there is no strategy in place for managing main and minor primary species. Clear evidence is not provided to justify a score of 100. Score of 80 is justified. <b>Overall score for PI 2.1.2 should only be 85.</b>	Thanks for your comment but the CAB does not agree with the overall score of 85 for this PI. In this PI, there are two SI (Slc and Sld) that reach SG100 and two SI (Sla and Slb) that does not reach SG100. Therefore, following table 4 in the FCP 2.2, the CAB believes that the overall score should be 90.	Not accepted (no change)
2.1.3	Yes	Yes	NA	Scoring agreed		NA (No response needed)
2.2.1	No (scoring implications unknown)	No (scoring implications unknown)	NA	Need to explain how the final PI score was adjusted downward and how this relates to PI 2.1.1 or PI 2.2.1. All 8 species listed in table 7.3.1.10 indicate "No" for data deficient. Meaning they are not data deficient. So I don't understand why the CAP is stating: "...they were all classified as Data Deficient species...". It is not clear that conducting RBF can be avoided.	Thanks a lot for your comment and for pointing out the mistake made in <b>Table 7.3.1.10</b> . In the data deficient column for the Secondary species, it should have been a "YES" and now it has been ammended accordingly in the report. Therefore, we believe the justification to cap the PI scoring to not greater than 80 is relevant.	Accepted (no score change, change to rationale)
2.2.2	Yes	Yes	NA	Scoring agreed		NA (No response needed)

2.2.3	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Scoring agreed. The justification should be that because the fishery has a negligible catch of non-target species no strategy is needed and therefore no information is required to evaluate the effectiveness of the strategy.	The CAB does not agree with the PR change of justification for this SI. The rationale has been modified in the last version of the report, trying to clarify the team point of view in this matter.	Accepted (no score change, change to rationale)
2.3.1	Yes	Yes	NA	Scoring agreed Please note misprint in Table 7.3.1.7 for Alcatraz 14 should be 4.	Thank you for pointing this out. It has been amended now in the report.	Accepted (no score change, additional evidence presented)
2.3.2	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Scoring agreed SIc rationale would be stronger by stating: "...based on information directly collected by observers (Onandia <i>et al.</i> , 2020, 2021a and 2021b) about the fishery and or the species involved ..."	Thank you for the comment. It has been taken into consideration in the rationale.	Accepted (no score change, change to rationale)
2.3.3	Yes	Yes	NA	Scoring agreed Please note misprint in Table 7.3.1.7 for Alcatraz 14 should be 4.	It has been amended now.	Accepted (no score change, change to rationale)
2.4.1	Yes	Yes	NA	Scoring agreed		NA (No response needed)

2.4.2	No (score increase expected)	No (score increase expected)	NA	<p>Si a,b and c</p> <p>Because there is negligible impact of the troll and pole and line fishery on the habitat no strategy for managing the impact of the UoA is necessary and therefore the SG 100 is met. <b>Overall score should be 100.</b></p>	<p>Thank you for pointing this out. Even though the team agrees with the fact that there is negligible impact of the troll and pole and line fishery on the habitat, we still consider that Sib does not reach SG100 as there is no testing.</p> <p>For scoring issues (b) and (c), it is the MSC's intent that the 'if necessary' (in SG60 and SG80) also applies (even though this term is not included in those SIs). According to MSC interpretation on the Use of 'if necessary' in P2 management PIs (FCR v2.0 - Annex SA PI 2.1.2, 2.2.2, 2.4.2, 2.5.2) (<a href="https://mscportal.force.com/interpret/s/article/Use-of-if-necessary-in-P2-management-PIs-2-1-2-2-2-2-4-2-2-5-2-PI-2-1-2-1527262011402">https://mscportal.force.com/interpret/s/article/Use-of-if-necessary-in-P2-management-PIs-2-1-2-2-2-2-4-2-2-5-2-PI-2-1-2-1527262011402</a>), if the fishery does not need to have measures or partial strategy because there is no or negligible impact on Primary, Secondary, Habitats or Ecosystem components, it would meet at least the SG80 level in scoring issues a-c. But this also means that the SG100 level should be considered as it does not contain this 'if necessary' clause.</p>	Not accepted (no change)
2.4.3	Yes	Yes	NA	Scoring agreed		NA (No response needed)
2.5.1	Yes	Yes	NA	Scoring agreed		NA (No response needed)
2.5.2	Yes	Yes	NA	<p>Scoring agreed for SI a,b and c</p> <p>Noting that it could also be argued that because there is negligible impact of the troll and pole and line fishery on the habitat no strategy for managing the impact of the UoA is necessary and therefore score could be 100..</p>	<p>Thank you for pointing this out. Please, see our reply to PI 2.4.2 which also applies here.</p>	Not accepted (no change)

2.5.3	Yes	Yes	NA	Scoring agreed		NA (No response needed)
3.1.1	Yes	Yes	NA	Scoring agreed		NA (No response needed)
3.1.2	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	SlA: The roles and functions of the management process are defined at the national and international levels. Given the evidence provided in the rationale it cannot be concluded that functions, roles and responsibilities are explicitly defined and well understood for <b>all areas</b> of responsibility and interaction. SG 100 is not met. <b>Overall score for PI 3.1.2 is only 85.</b>	Thank you for your comment. However, the team is not sure where in the rationale is the evidence indicating that functions, roles and responsibilities are <b>NOT</b> explicitly defined and well understood for <b>all areas</b> of responsibility and interaction. We would appreciate if the evidence the PR refers to could be specifically indicated in order for the team to evaluate the change in score.	Not accepted (no change)
3.1.3	Yes	Yes	NA	Scoring agreed		NA (No response needed)
3.2.1	Yes	Yes	NA	Scoring agreed		NA (No response needed)
3.2.2	Yes	Yes	NA	Scoring agreed		NA (No response needed)

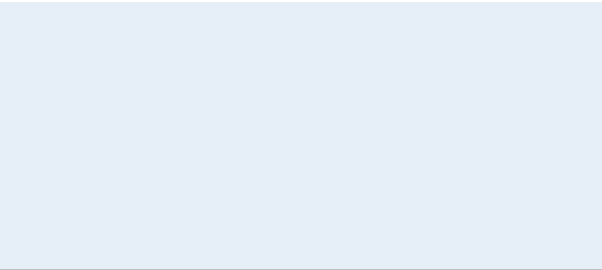
3.2.3	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Scoring agreed Sla: The rationale for the ICCAT component would be strengthened if it included reference to the ICCAT Conservation and Management Measures Compliance Committee (COC). The COC reviews all aspects of compliance with regards ICCAT conservation and management measures in the ICCAT Convention Area, with particular reference to compliance with such measures by ICCAT Contracting Parties. The COC annual report is included in Volume I of the ICCAT Biennial Report, and includes: i) the degree of compliance of each CPC regarding catch data reporting (Task I and II) to the SCRS, and (if needed) the response/explanation and actions taken by the CPC; ii) quota overages and balance; iii) adjusted quotas and their temporary terms.	Thank you for your comment. Sla rationale has now been amended.	Accepted (no score change, change to rationale)
3.2.4	Yes	Yes	NA	Scoring agreed		NA (No response needed)

## Report from Peer Review B

## General comments

Question	Yes/No	Peer Reviewer Justification (as given at initial Peer Review stage). Peer Reviewers should provide brief explanations for their 'Yes' or 'No' answers in this table, summarising the detailed comments made in the PI and RBF tables.	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)
Is the scoring of the fishery consistent with the MSC standard, and clearly based on the evidence presented in the assessment report?	Yes	The report is generally well informed, clear and interprets the MSC standard in a reasonable manner. No major disagreements on the scoring.	Thank you for your comment.
Are the condition(s) raised appropriately written to achieve the SG80 outcome within the specified timeframe? [Reference: FCP v2.2, 7.18.1 and sub-clauses]	NA		
Enhanced fisheries only: Does the report clearly evaluate any additional impacts that might arise from enhancement activities?			
Optional: General Comments on the Peer Review Draft Report (including comments on the adequacy of the background information if necessary). Add extra rows if needed below,	NA	Overall this is a clear and comprehensive report. There are a few places it needs disambiguation and places where more should be said about sources of uncertainty. Peer-reviewed literature could strengthen further and contextualise justifications for Principle 3 scoring. Minor editing issues: there is a missing table reference on p78 and a couple of other places, there is duplicated text on p.83.	Thank you for your comment. P3 comments have been dealt with in the PI comments tab, and the minor editing issues have been amended now.

including the codes in  
Columns A-C.





## PI comments

PI	PI Information	PI Scoring	PI Condition	Peer Reviewer Justification (as given at initial Peer Review stage)	CAB Response to Peer Reviewer's comments (as included in the Public Comment Draft Report - PCDR)	CAB Res-ponse Code
Performance Indicator (PI)	Has all available relevant information been used to score this PI?	Does the information and/or rationale used to score this PI support the given score?	Will the condition(s) raised improve the fishery's performance to the SG80 level?	<p>Peer reviewers (PRs) should provide support for their answers in the left three columns by referring to specific scoring issues and/or scoring elements, and any relevant documentation as appropriate. Additional rows should be inserted for any PIs where two or more discrete comments are raised, e.g. for different scoring issues, allowing CABs to give a different answer in each case. Paragraph breaks may also be made within cells using the Alt-return key combination.</p> <p>Detailed justifications are only required where answers given are one of the 'No' options. In other (Yes) cases, either confirm 'scoring agreed' or identify any places where weak rationales could be strengthened (without any implications for the scores).</p>	<p>CABs should summarise their response to the Peer Reviewer comments in the CAB Response Code column and provide justification for their response in this column.</p> <p>Where multiple comments are raised by Peer Reviewers with more than one row for a single PI, the CAB response should relate to each of the specific issues raised in each row.</p> <p>CAB responses should include details of where different changes have been made in the report (which section #, table etc).</p>	See codes page for response options
1.1.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
1.1.2	NA (PI not scored)	NA (PI not scored)	NA	NA		NA (No response needed)
1.2.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)

1.2.2	Yes	Yes	NA	Scoring agreed. Scoring issue a SG100: for clarity, please refer to the ecology aspect explicitly in justification, e.g. "MSY is considered to be an ecologically appropriate target" p50	Thank you for your comment. The rationale has now been amended.	Accepted (no score change, change to rationale)
1.2.2	Yes	No (change to rationale expected, not to scoring)	NA	Issue b. Please present/discuss <b>more evidence</b> about robustness to uncertainties (refer to specific key sources of uncertainty) and <b>iron out the slight inconsistency</b> of pointing out in the scoring of issue b that there should be an investigation of the stock's ecological role in connection to HCRs while dismissing the need to account for the ecological role in scoring issue a.	<p>Thank you for your comment, the uncertainties that were tested, were named and discussed in text that has been added.</p> <p>The robustness of the uncertainties is now explained in the following added text: "<i>In 2017, MSE results highlighted that the implementation of any of the tested HCRs would meet the objective to be in the green quadrant of the Kobe plot (with a probability higher than 60%) (Table 7.2.1.5). In HCRs where maximum change in TAC of 20% is always applied (SC1), higher stability and higher long term yields were achieved, compared to HCRs where the 20% restriction for decrease is not used when <math>B &lt; B_{THRESHOLD}</math> (SC2). Not restricting TAC reductions improves safety and might allow quicker recoveries if the stock is really overexploited, but can also cause large unnecessary TAC reductions, or even fishery closures, when the stock is healthy but it is wrongly perceived to be overexploited.</i>"</p> <p>Regarding the ecological role sentence, as it was incorrect it has now been removed. In its place we now mention the fact that some uncertainties remain and therefore SG100 is not reached.</p>	Accepted (no score change, change to rationale)

1.2.2	Yes	No (change to rationale expected, not to scoring)	NA	'it is too early to tell' is relevant for scoring issue a SG100 as issue c - the modelling process, like the HCR, is too new and have not been shown to be robust to new data, new stock assessments (informing OMs) or new uncertainties/assumption. So perhaps it is worth adding for consistency that even if meeting SDG 100 for issue a is "expected" it is not expected with (time-tested) confidence.	Thank you for your comment. The rationale has now been amended.	Accepted (no score change, change to rationale)
1.2.3	Yes	No (change to rationale expected, not to scoring)	NA	Scoring agreed. Issue a: Please mention reliability/availability of information on stock recruitment relationship, selectivity and availability of fishery independent data in justification for scoring.	Thank you for your comment. Changes have now been made to the rationale: <i>"No fisheries independent data is available, but sufficient relevant information related to stock structure, stock productivity, fleet composition (selectivity) and other data are available to support the harvest strategy, therefore SG80 is met."</i> Unfortunately, information about the reliability of the information is not freely available.	Accepted (no score change, change to rationale)
1.2.4	No (change to rationale expected, not to scoring)	No (change to rationale expected, not to scoring)	NA	Scoring agreed. Issue c: in justification please explain how the major sources of uncertainties were identified and whether stakeholders were involved, what these uncertainties were and how the assessment takes it into account. Were interactions between uncertainties considered? Which uncertainties were left out? Please add more detail, such as a table of sources of uncertainties (combinations) as rows and relevant evaluations as columns. Please try to reduce linguistic ambiguity by clarifying what you mean by 'more sensitive' or 'reduced' for examples by using CVs.	Thank you for your comment. The major sources of uncertainties were identified by the ICCAT scientific group and this info was added to the rationale. Regarding the uncertainties, they were already mentioned in the rationale: <i>"Several sensitivity analyses, namely considering a logistic production function, the information content of the data, i.e., length of the catch time series (truncated at 1975), and the impact of dropping one of the five CPUE indices at a time. Historical absolute biomass estimates were not very sensitive to the effect of truncating the time series in 1975 and the production functions estimated in both scenarios resulted in a similar increase in biomass in the recent years. However, other scenarios demonstrated higher sensitivity of historical absolute biomass trends (in the period prior to 1975 for which only catch information</i>	Accepted (no score change, change to rationale)

				<p>was considered) as well as <math>K</math> and <math>r</math>, to the data used. Relative to <math>MSY</math> benchmarks, the historic sensitivities were reduced, but recent status indicators were more sensitive. When a logistic function was assumed in the biomass dynamic assessment model lower values of <math>B/BMSY</math> were predicted for the trajectory over the whole time series, while excluding the Chinese Taipei longline resulted in much larger values of <math>B/BMSY</math> in the recent period. The sensitivity analyses with respect to the other indices did not show strong deviations from the Base Case and all predicted the stock to be in the green quadrant, although the recent status varied across scenarios."</p> <p>Two figures have now been included which illustrate the interaction of different sensitivities to the rationale.</p> <p>Unfortunately, some of the information that the PR is requesting regarding these uncertainties is not available in the ICCAT reports. Information on CVs used and tables of the interaction between uncertainties are not freely available.</p>		
1.2.4	Yes	Yes	NA	<p>Scoring agreed. Issue d: Please illustrate the extent of model disagreement to avoid linguistic ambiguity of what e.g. 'relatively wide' means. In discussing model validation can you please refer to best practice (see <a href="https://doi.org/10.1016/j.fishres.2021.105959">https://doi.org/10.1016/j.fishres.2021.105959</a>), especially with respect to prediction skill, or against data not used in the model (that it agrees with one of the other assessment methods is not on its own terribly reassuring). If such model validation tests as hindcasting or prediction skill with outside data were not</p>	<p>Thank you for your comment. A range of estimated value has now been added to the "wide range" in the rationale. The information provided by ICCAT for these assessments is on individual basis. They only have been broadly compared and the production model was chosen to be the operational model for the MSE. No information on hindcasting or prediction skill were provided. This has been included it in the rationale as caveat.</p>	Accepted (no score change, change to rationale)

				conducted, please mention this as a caveat.		
2.1.1	No (scoring implications unknown)	No (scoring implications unknown)	NA	<p>Not sure that Issue a meets SG 80 for UoC2 live bait. The CAB uses outdated information, all of the Bluefin ref are at least 3 years old. The CAB is basing their conclusion of 'highly likely' on the VPA model results which ICCAT scientists concluded should not be considered reliable. Quote: 'The Group concluded that none of the VPA model formulations tested in 2020 provided results which were sufficiently reliable to be used as the basis for projection for management advice.' CAB cites recruitment estimates in particular but these are not estimated independently and so are not any more reliable than biomass estimates. ( ref. <a href="https://www.iccat.int/Documents/Meetings/Docs/2020/REPORTS/2020_2_BFT_ENG.pdf">https://www.iccat.int/Documents/Meetings/Docs/2020/REPORTS/2020_2_BFT_ENG.pdf</a>) Same point with issue B, on minor species, Table 2.1.1 last row, Bluefin cannot be classified as 'Highly likely' if the latest information is taken into account.</p>	<p>Thank you for your comment. When we talked about the Eastern Atlantic bluefin tuna assessment, we were referring to the latest full assessment. This was carried out in 2017. As it is indicated on ICCAT's website, the next full assessment for the Eastern Atlantic and Mediterranean bluefin tuna is scheduled for 2022 (<a href="https://www.iccat.int/en/assess.html">https://www.iccat.int/en/assess.html</a>). What happened in 2020 was just an update (as the SCRS states in the document provided by the PR), adding data for the additional years, while using the same parameter settings as in the 2017 assessment. In any case, we have now included in our background section (7.3.1.5) and in the rationale for this PI, the results from the 2020 update and based on the fact that the biomass reaches 873,000 t in 2018, which is the highest estimate ever and 30% above the maximum in the 1970s, and that there are no concerns that overfishing may be occurring under the current TAC (36,000 t in 2020) the team still believes that "highly likely" is met .</p>	NA (No response needed)

2.1.2	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.1.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.2.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.2.2	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.2.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.3.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.3.2	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.3.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.4.1	Yes	Yes	NA	Scoring agreed. Issue a: could you provide a reference for the checking of VMS data and compliance with protected areas? 'Spanish authorities' is a bit vague, was it 'Dirección General de Ordenación Pesquera y Acuicultura' p 146 mentions they check VMS data, maybe mention it here too?	It has been clarified now in the text.	Accepted (no score change, change to rationale)

2.4.2	Yes	Yes	NA	Scoring agreed. Is there also evidence from observers and studies about the prevalence of lost gear in the area regarding gear loss. Is there reason that gear loss is uncommon in these fisheries but more common in similar fisheries? Since lost gear can remain in the environment for long time, even low incidence can have impacts – some references would be helpful.	Thanks for your comment. AZTI, the research institute in charge of the observer program onboard and he ones analysing all the data, is our reference for the gear loss in this fishery. This information was provided during the site visit, although it is not included in their reports. In previous audits, this gear loss issue was also consulted with several fishermen and the information given by them was the same as AZTI's.	Accepted (no score change, additional evidence presented)
2.4.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.5.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.5.2	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
2.5.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
3.1.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)



3.1.2	No (scoring implications unknown)	No (scoring implications unknown)	NA	<p>Some of the language in justifying scoring (issue a) needs to be more mindful of structural inequalities, lack of representation of (marginalised) stakeholders and power imbalances that persist along the economic lines of the (non) contracting parties. There are many barriers to stakeholders/parties to be 'fully and effectively' involved or to participate meaningfully and there are many ways in which stakeholders are institutionally disempowered if/when they try to participate, starting with the technical language of the reports or demographic lack of representations in the science/modelling/contractors teams or the lack of investment in visual communication that is user friendly and accessible to non-technical audiences, etc. Some suggested edits: "ICCAT has made it possible for interested parties to participate" rather than "easy"; delete "which helps them to be fully and effectively involved in their activities."</p>	<p>Thank you for your comment. Even though it is not specified in the PR comment, we believe that it is specifically addressed at ICCAT's level (and not at EU or Spain's level). If so, we agree that maybe the language should be slightly modified and the team has accepted the first suggested edit (i.e., "ICCAT has made it possible for interested parties to participate"). However, even though we have also amended the second sentence, we do not think it has to be deleted. We have, therefore, amended to: "which helps them to be more effectively involved in their activities".</p>	Accepted (no score change, change to rationale)
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3.1.2	No (scoring implications unknown)	No (scoring implications unknown)	NA	<p>Issue b. In justification please clarify that although the consultation system exists, there is evidence that it does not function especially well. There are few examples where local knowledge, or civil society's views were effectively and fully elicited, let alone taken into account (e.g. within an MSE). Making it possible for stakeholders to respond does not create an effective consultation process that ensures that diverse views are represented and addressed (e.g. gender imbalances, even when stakeholders are meant to represent 'civil society') . More proactive procedures for insuring diversity and inclusion (of ideas, interests, uncertainties) are clearly called for at all the various institutions involved in the management of this (and other fisheries).</p>	<p>Thank you for your comment. Even though it is not specified in the PR comment, we believe that it is specifically addressed at ICCAT's level (and not at EU or national level). If so, the team agrees with the PR comment, and that is why SG100 is not met. However, we also believe that the rationale could be improved, so it has now been amended.</p>	Accepted (no score change, change to rationale)
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3.1.2	No (non-material score reduction expected)	No (non-material score reduction expected)	NA	Issue c SG 100 is likely not met, because there are in fact low participation rates from a <b>variety</b> of stakeholders at all the relevant institutions - either 'all interested and affected parties' are reluctant to comment on reports, come to meetings or provide input in some other way, or something is not working on the 'encouragement' and 'facilitation' side. Speaking from lived experience, but there are studies that confirm it (many ref are found in this book Collaborative Research in Fisheries, 2020). In asserting that "all stakeholders are involved in the regulation of the fishery in the SWWAC" can you please refer to a stakeholder mapping where "all" was defined (and by whom)?	Thank you for your comment. Unfortunately, the team has no access to the book Collaborative Research in Fisheries, 2020. We would appreciate if the PR could give us the evidence for his/her statement on the fact that there is low participation rates from a <b>variety</b> of stakeholders at <b>all the relevant institutions</b> , as this is not the information we have. Regarding the sentence on the SWWAC, we agree with the PR that it was not clear what we meant by that. The sentence has now been amended.	Not accepted (no change)
3.1.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
3.2.1	Yes	Yes	NA	Scoring agreed.		NA (No response needed)

3.2.2	Yes	Yes	NA	Scoring agreed. Issue d: Delete 'can hardly be improved' in 'This formal publication can be considered adequate and can hardly be improved.' Communication of the scientific basis for decision making can be improved in a myriad of ways: by being more transparent about scientific uncertainty, validation efforts, by conveying relative reliability of results in standardised ways, as well as by making language more accessible to non-technical audiences and improving graphics/visual communication, making better use of interactive web-based tools alongside print/digital publications and so on.	Thank you for your comment. The rationale has been amended.	Accepted (no score change, change to rationale)
3.2.3	Yes	Yes	NA	Scoring agreed.		NA (No response needed)
3.2.4	Yes	Yes	NA	Scoring agreed.		NA (No response needed)

## 9.4 Stakeholder input

### ISSF input into ACDR stage

## General comments

General comments	Evidence or references	CAB response to stakeholder input	CAB Code	Response
<p><b><u>Joint assessment of cumulative impacts on ETP species and Habitat management with MSC-certified, MSC prospective and FIP fisheries.</u></b></p> <p>Although some fisheries do not meet the MSC guidance requirements that trigger the evaluation of cumulative impacts, this does not mean that existing cumulative impacts are not significant. This is especially evident in terms of ETP species, as current guidance considers that the combined impact needs to be evaluated "only in cases where either national and/or international requirements set catch limits for ETP species". However, we consider that cumulative impacts to ETP species mortality should be assessed in reference to the species' biological limits, stock assessment results, and management advice, regardless of whether catch limits are in place or not (e.g. when management advice requests to reduce catches but catch limits are not agreed).</p> <p>Additionally, there are currently a number of Atlantic Ocean purse seine and longline tuna fisheries involved in Fishery Improvement Projects (FIPs), some of them with prospects to proceed to a full MSC assessment in the near future. Although the MSC standard only requires cumulative effects to be evaluated and managed for MSC-certified fisheries (including those in evaluation) under overlapping UoAs, we believe these should be carefully assessed (for ETP species, as well as other P2 components such as habitats) and managed for all tuna fisheries with MSC aspirations. All currently certified and prospective MSC tuna fisheries should conduct a joint assessment for cumulative impacts on ETP species in the Atlantic Ocean and prepare a joint management strategy. The fishery client could coordinate with already certified fisheries, fisheries under assessment, and also seek support on this task from Atlantic Ocean FIPs.</p>	<p>- <a href="https://fisheryprogress.org/directory">https://fisheryprogress.org/directory</a></p>	<p>It is a very interesting comment. However, the CAB uses the decision tree because it is the standard against which the fishery is assessed. In it, ETP's biological limits, stock assessment results, and management advice (regardless of whether catch limits are in place or not) are taken into account when assessing the fishery's impact on ETPs. But without a quantitative value such as a catch limit, it would be really difficult to assess and score the cumulative impact.</p> <p>Regarding the second part of the comment, the CAB believes that it would be unfeasible to include the effect of fisheries involved in FIPs as at the FIP stage they are still in the process of being improved, and as such they are still making changes and working towards sustainability. Thus, it would be really difficult to take their effect into account.</p> <p>MSC has extensive and complex requirements on the harmonization process (Annex PB) that include coordination between different CABs for possible conditions (e.g., in case cumulative effects had to be taken into account). Hence, even though each fishery has its own evaluation process, all CABs follow these requirements and that is why harmonization between the different CABs are continuously being carried out, not just for cumulative impacts on ETPs but in general.</p>	Not accepted	(no change)

## Performance Indicator (PI) input at ACDR or Site Visit

Performance Indicator (PI)	Input summary	Input detail	Stakeholder input code	CAB response to stakeholder input	CAB response code
Principle 1 - Sustainable fish stocks					
1.1.1 - Stock status					
1.1.2 - Stock rebuilding					

<p><b>1.2.1</b> Harvest strategy</p>	<p>- The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.1.a and 1.2.1.b.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.1.a and 1.2.1.b.</p> <p><b>1.2.1.a:</b> "(...) fishing mortality rates have been reduced over the last decade, responding to the perceived status of the stock. There are clear objectives to maintain the stock around the MSY biomass and the harvest strategy elements are working together to achieve this. Thus, the strategy meets SG80.</p> <p>However, the strategy has been relatively imprecise and lacks a range of components including defining an appropriate mix of capacity by gear types, and the final HCR incorporating a wider range of elements has not yet been agreed. So, the harvest strategy cannot be considered designed and therefore does not yet meet SG100."</p> <p><b>1.2.1.b:</b> "(...) The available evidence indicates that the harvest strategy is achieving its objectives, meeting SG80. However, there need to be further evaluations of the stock status to confirm these expectations, and more broadly, the harvest strategy has only been considered in fairly narrow terms (total catch) and has not yet considered wider context of the fishery (for example, considering selectivity), so SG100 is not met yet. Continued successful implementation of a system with a long-term harvest control rule could lead to the higher score."</p>	<p>Minor score reduction expected</p>	<p>Medley et al. (2021) is not an independent report as this is an ISSF funded publication. We have consulted and considered this publication while assessing this fishery, but it should be noted that the scores might differ between assessors, depending on their interpretation.</p> <p>The emphasis for <b>1.2.1a</b> is mostly on whether the harvest strategy ensures that the stock management objectives in P1 1.1.1.SG80 are achieved, which is the case. In 2017, MSE results highlighted that the implementation of any of the tested HCRs would meet the objective to be in the green quadrant of the Kobe plot (with a probability higher than 60%). In the 2020 stock assessment, B2019/BMSY was estimated as 1.32 (1.13-1.51) and F2018/FMSY as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b). This indicates that the harvest strategy has indeed been designed to achieve management objectives, SG100 is achieved. Any assessment or strategy can be improved, but the elements in this case are sufficient to reach SG100.</p> <p>For <b>1.2.1b</b>, we feel that considering the above evaluation of the harvest control rules it can be deduced that the performance of the harvest strategy has been fully evaluated and considering that the stock in the 2020 stock assessment was estimated as B2019/BMSY = 1.32 (1.13-1.51) and F2018/FMSY = 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b) shows that the stock is well above the BTHRESH, implicating that the harvest strategy is achieving its objectives including being clearly able to maintain stocks at target levels, therefore justifying the SG100 score.</p>	<p>Not accepted (no change)</p>
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<p><b>1.2.2</b> Harvest control rules and tools</p>	<p>- The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.2.a.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.2.a.</p> <p><b>1.2.2.a:</b> "(...) At this point, it is not clear that the HCR will take account of the ecological role of the stock. While the available evidence suggests the HCR will keep the stock at or above MSY most of the time, it has not been in place long, it is not necessarily the long-term plan and the work programme reviewing its performance is incomplete, so SG100 is not met."</p>	<p>Minor score reduction expected</p>	<p>Medley et al. (2021) is not an independent report as this is an ISSF funded publication. We have consulted and considered this publication while assessing this fishery, but it should be noted that the scores might differ between assessors, depending on their interpretation.</p> <p>Considering the rationale under P1.1.1a, the available information indicates that the stock is in the green area of the Kobe plot (98,4%). The threshold point is set equal to the BMSY. B2019/BMSY was estimated as 1.32 (1.13-1.51) and F2018/FMSY as 0.62 (0.52-0.74) (80% confidence intervals) (ICCAT, 2020b). This means that at 30% above the threshold, the stock is way above the Biomass at MSY. Furthermore, relative to MSY benchmarks, the Reference Case scenario (2020 assessment) estimates that the stock has been above BMSY continuously in the last decade and fishing mortality below FMSY for a slightly longer period of years. We argue that the available evidence indicates that the harvest strategy is fulfilling its objective because it is fluctuating more above than around the BMSY (GSA2.5 MSC guidelines), therefore, justifying a score of SG100.</p>	<p>Not accepted (no change)</p>
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<p><b>1.2.3</b> Information and monitoring</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.3.a and 1.2.3.b.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.3.a and 1.2.3.b.</p> <p><b>1.2.3.a:</b> " (...) While information is sufficient, meeting the SG80, it is not comprehensive. There is considerable environmental data not directly used in the current harvest strategy, but various data on age and abundance are limited and understanding of the population dynamics is incomplete. These gaps are recognized and, although there have been improvements, the Working Group made several recommendations with respect to information which would improve the assessment. With significant gaps, the fisheries cannot meet SG100."</p> <p><b>1.2.3.b:</b> " (...) Monitoring indices are adequate for the current harvest control rule. Indicators of stock abundance consist of standardized catch-per-unit-effort indices. Given the large areas of ocean and dispersal of the species, dedicated surveys are not an option for this type of fishery. A single consistent index was not available for the entire time series. The combined indices appear to provide a consistent picture of the changes in abundance that have occurred, although there are some significant differences among indices. Recommendations have included improved understanding of CPUE and population biology for this species. Information is sufficient to support a reliable stock assessment. The accuracy and coverage of the monitoring program is adequate for a harvest control rule, and available indicators would also support better defined rules based on fishing mortality and biomass estimates. Therefore, the fisheries meet SG80. The monitoring does not cover all information, and not all information from all fleets is recorded with a high degree of certainty. Therefore, the fisheries do not meet SG100."</p>	<p>Minor score reduction expected</p>	<p>Agreed</p>	<p>Accepted (minor score reduction)</p>
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<p><b>1.2.4</b> - Assessment of stock status</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.4.a.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 1.2.4.a.</p> <p><b>1.2.4.a:</b> "(...) Life history model parameters are specific to the stock and/or species and have been derived from fitting stock assessment models or other independent research. However, these are not used in biomass dynamics models, which rely on a statistical fit of catch and one or more abundance indices. Because the current stock assessment has been tested in the MSE, it is clearly appropriate for the stock and harvest control rule, and as a result meets SG80. In the past the assessment has attempted to account for some features of the species biology and the fishery, albeit the current assessment approach has rejected such models based on life history. Because the current simplified approach does not use all data or what is known about the biology of the species, SG100 is not met."</p>	<p>Minor score reduction expected</p>	<p>Agreed</p>	<p>Accepted (minor score reduction)</p>
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**Principle 2 - Minimising environmental impacts**

<p><b>2.1.1</b> Primary species outcome</p>	<p>-</p> <p>AO bigeye not likely above PRI</p>	<p>PI 2.1.1 b lists Atlantic bigeye as one of the stocks likely above the PRI (Table 2.1.1.), but according to the description of stock status for PI 1.1.1.a by Medley et al (2021):</p> <p>"The 2018 assessment indicated that the stock was approximately 59%BMSY in 2017. This level is below the point where recruitment would be impaired. Because there is no analytical estimate, the default value for the PRI is approximately 66%BMSY based on <math>BMSY=30\%B_0</math>, so <math>PRI=20\%B_0</math> (see GSA2.2.3.1). The age structured model (SS3) was the primary source of information used to evaluate this stock, although two other production models were applied and were more optimistic, it was appropriate to use the most pessimistic evaluation for stock status (GSA1.1 Box GSA1). The scoring here reflects uncertainty in the PRI used to evaluate status. Because the stock is not likely to be above the PRI, SG60 is not met."</p> <p>Table 2.1.1 and the rationale of this SI as it refers to bigeye tuna needs to be amended to reflect this stock is not highly likely above the PRI.</p>	<p>Scoring implications unknown</p>	<p>We agree with the PR with the fact that table 2.1.1 and the rationale for this SI related to the BET has to be amended. There was a mistake in Table 2.1.1 as the Atlantic bigeye tuna stock is not highly likely to be above the PRI. Table and rationale of this SI regarding the BET has been amended accordingly. Minor score reduction as a consequence of this change.</p>	<p>Accepted (minor score reduction)</p>
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<b>2.1.2</b> - Primary species management		
<b>2.1.3</b> - Primary species information		
<b>2.2.1</b> - Secondary species outcome		
<b>2.2.2</b> - Secondary species management		
<b>2.2.3</b> - Secondary species information		
<b>2.3.1</b> - ETP species outcome		
<b>2.3.2</b> - ETP species management		


<b>2.3.3</b> - ETP species information		
<b>2.4.1</b> - Habitats outcome		
<b>2.4.2</b> - Habitats management strategy		
<b>2.4.3</b> - Habitats information		
<b>2.5.1</b> - Ecosystem outcome		
<b>2.5.2</b> - Ecosystem management strategy		
<b>2.5.3</b> - Ecosystem information		


## Principle 3 - Effective management

<p><b>3.1.1 - Legal and/or customary framework</b></p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 3.1.1.a, nor SG80 for 3.1.1.b at the RFMO level and that, as a result, the overall PI score would be less than 80.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG100 for SI 3.1.1.a, nor SG80 for 3.1.1.b at the RFMO level and that, as a result, the overall PI score would be less than 80.</p> <p><b>3.1.1.a:</b> "(...) A large proportion of CPCs (Contracting Parties to the Convention) to ICCAT have not ratified the UNFSA. These articles underpin the MSC P&amp;C, and therefore failure to ratify the UNFSA does suggest that the state may not have acceded to these principles, and other evidence in each case should be sought. Any fishery operating within the jurisdiction of a state which has not ratified the UNFSA will need to demonstrate through other means that the laws it is applying are entirely consistent with the MSC P&amp;C. Otherwise ICCAT sanctioned fisheries should meet the SG80, but the lack of binding procedures prevent the fisheries meeting SG100."</p> <p><b>3.1.1.b:</b> "(...) There are explicit and transparent decision-making and dispute resolution mechanisms defined and in place, meeting SG60. However, the system cannot be considered fully effective with the current objections procedure, which does not represent "best practice". The objectives can and have affected fisheries attempting to implement conservation measures, which prevents the fishery meeting SG80. Neither have the other dispute resolution procedures in existence been tested or proven to be effective. There are no outstanding disputes among members for the fisheries considered here, but no disputes have been referred to ICJ/ITLOS (checked 22 Nov 2017). The effectiveness of the other informal ICCAT mechanisms is unclear, and it seems likely many disputes are in abeyance rather than resolved. This may prevent these fisheries meeting SG100 even if the objections mechanism was improved."</p>	<p>Score reduction expected to 60-80, condition raised</p>	<p>Medley et al. (2021) is not an independent report as this is an ISSF funded publication. We have consulted and considered this publication while writing the ACDR, but it should be noted that the scores might differ between assessors, depending on their interpretation.</p> <p>In particular, in terms of <b>PI 3.1.1a</b>, the difference between scoring 80 or 100 falls on whether there is an "(...) organised and effective cooperation (...)" or there are also "(...) binding procedures governing (...)" that cooperation.</p> <p>In order to capture this difference better, the assessment team has amended the rationale and believes that now provides a thoughtful account that other evidences of binding procedures governing cooperation between parties are sought in ICCAT Basic Text and also in different ICCAT Recommendations which are capable of delivering outcomes consistent not only with MSC P1 but also with MSC P2 (e.g., Subcommittee on ecosystems). Therefore, the team considers that SG100 is met.</p> <p>Regarding <b>PI 3.1.1(b)</b>, the absence of a formal dispute resolution procedure within the Convention is acknowledged in the rationale and considered for not achieving SG100. However, the rationale details other mechanisms which are considered transparent and effective taking into consideration that there are no outstanding disputes among members as recognize in Medley et al., 2020. The team firmly believes that SG80 is achieved taking into consideration the existing mechanisms in ICCAT (the active mechanisms of regular consultations and meetings of different WGs, Subcommittees, and Panels, in particular with the recent creation of the SWGSM, the ultimate option of appealing to the ICJ or the International Tribunal for the</p>	<p>Not accepted (no change)</p>
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Law of the Sea) and also those established at national and EU level.	
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<b>3.1.2</b> - Consultation, roles and responsibilities	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG80 for SI 3.1.2.a at the RFMO level and that, as a result, the overall PI score would be less than 80.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG80 for SI 3.1.2.a at the RFMO level and that, as a result, the overall PI score would be less than 80.</p> <p><b>3.1.2.a:</b> "(...) Roles and responsibilities are not well defined or well understood in many areas, however. ICCAT has had a number of problems with flag states that have not applied appropriate controls to their vessels, CPCs not submitting timely data and not in the correct form, and so on. Some problems in providing basic data on vessels and catches are likely due to a lack of understanding of requirements which appear to be complex. While these problems are not all in key areas in the sense that they do effectiveness and increase risks for fishery sustainability. The establishing of a capacity building fund (Rec. 13-19), a meeting participation fund (Rec. 14-14) and other programs could help. For example, ICCAT has recently released video tutorials for the completion of some of its data submission forms, and is working on similar videos for the remaining forms. These could help address this problem. Hence the fisheries do not meet SG80 and SG100."</p>
<b>3.1.3</b> - Long term objectives	<p>Typo in scoring table</p>	<p>According to the text, "SG100 is not met" for SI a. Table score (p.156) should be amended to reflect that SG100 is not met.</p>
<b>3.2.1</b> - Fishery-specific objectives		
<b>3.2.2</b> - Decision-making processes		

Score reduction expected to 60-80, condition raised

<p>The team believes that the rationale provided in the ACDR supports that functions, roles and responsibilities for key areas are explicitly defined and well understood. As pointed out in the comment by Medley et al (2020), the recently re-structured ICCAT website improved the transparency, accessibility to reports and data bases, and even providing tutorials on data reporting, contributing to improve participation. The degree of participation and reporting on key issues can be easily consulted and, in general terms, it is considered to be satisfactory as explained in several parts of the report. SG80 is, therefore, met.</p>	<p>Not accepted (no change)</p>
<p>Thank you for spotting this. Table score has now been amended.</p>	<p>Accepted (no score change - change to rationale)</p>

<p><b>3.2.3</b> Compliance and enforcement</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG80 for SI 3.2.3.b (Sanctions) at the RFMO level and that, as a result, the overall PI score would be less than 80.</p>	<p>The independent report by Medley et al. (2021) indicates that the fishery would not meet SG80 for SI 3.2.3.b at the RFMO level (ICCAT) and that, as a result, the overall PI score would be less than 80.</p> <p><b>3.2.3.b:</b> "Conservation measures, including annual landings quotas are set by ICCAT, but enforcement is carried out by the national authorities. Although flag states are supposed to control the activities of their vessels, it is recognized that there are weaknesses and CPCs are given authority to check and apply controls to such vessels. A register of vessels that flout ICCAT conservation measures is maintained and shared with other RFMOs. These vessels should be restricted in their fishing opportunities once they are recognized in this way. The most serious sanctions that can be applied collectively by the members of an RFMO are blacklisting of member vessels and quota reductions. These have been applied to a limited extent in ICCAT. The blacklisting of non-member vessels (IUU lists) has become a widespread practice among all RFMOs including ICCAT. ICCAT has also introduced a system for blacklisting vessels flying the flags of members that have been engaged in IUU fishing, although this has not been effective. Only CCAMLR has used this system to any extent and therefore represents best practice in this regard. An example of a sanction on a non-Contracting Party is the quota limit applied to Chinese Taipei for activities in the bigeye tuna fishery. The sanction consisted in cutting the 2006 quota of bigeye tuna from what could have been 16 500t to 4 600t. In addition, ICCAT stipulated Chinese Taipei vessels must have a maximum of 15 vessels targeting bigeye reduced from approximately 100 vessels in 2005. Punitive measures are also applied to discourage flouting agreements. If an ICCAT member nation exceeds its catch limit for two consecutive management periods, ICCAT will recommend appropriate measures including, but not limited to, reduction in the catch limit equal to 125% of the overage, and if necessary, trade measures. Such measures have been applied to the EU for example. Also, ICCAT has adopted framework provisions enabling trade</p>	<p>Score reduction expected to 60-80, condition raised</p>	<p>We believe that Medley et al. (2021) cannot be considered independent reports as these are ISSF funded publications. However, we have consulted and considered these publications while writing the ACDR, but it should be noted that the scores might differ between assessors, depending on their interpretation.</p> <p>The rationale has been amended to provide some more evidences on ICCAT's procedure to deal with non-compliance. However, as it is indicated in Medley et al. (2021), PI 3.2.X is related to the Fishery-Specific Management System, therefore, if we were to assess only ICCAT's Compliance and enforcement, we agree that PI3.2.3b would not meet SG80, but this is not the case.</p> <p>The team believes that taking into account the EU and the Spanish national authority as well as ICCAT's non-compliance sanctioning, there is enough evidence that sanctions are consistently applied and thought to provide effective deterrence in the currently assessed fishery. Thus, meeting SG80.</p>	<p>Not accepted (no change)</p>
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restrictive measures to be taken against individual States if necessary, but only when other actions either have proved to be unsuccessful or would not be effective, and after due process. Although also available to other RFMOs, ICCAT is the only RFMO to have used trade-restrictive measures against an individual State. It currently has import bans in place against Bolivia and Georgia, neither of which is a member of ICCAT. Sanctions consistently applied by EU member states in recent years seem to have provided effective deterrence in the EU capture fisheries. However, they do not appear to have had a lasting deterrent effect on the tuna-farming operations and their associated vessels as demonstrated by the ongoing EUROPOL investigation (<https://www.europol.europa.eu/newsroom/news/how-illegal-bluefin-tuna-market-made-over-eur-12-million-year-selling-fish-in-spain>).

On the whole, sanctions appear to be applied among countries consistent with their involvement in ICCAT. The most serious sanctions have been applied to countries and fishing entities which are not members of ICCAT. Sanctions applied to CPCs have generally been weak. Sanctions are not fully effective as a deterrent. At the extreme end, Mediterranean bluefin tuna conservation agreements appear constantly to be in difficulty, and (...), some vessels appear to believe that they can flout the same basic management system which is applied to all fisheries. There are constant problems with other fisheries (see ICCAT Compliance Tables), presumably because the perpetrators feel they have a reasonable chance of not suffering sanctions or that sanctions are too weak. However, many issues of non-compliance in relation to providing data and information may also be due to limits on technical capacity in the responsible management authorities, particularly developing countries. It is noticeable that in responding to each State's compliance issues, the Compliance Committee intends to write to each State requesting improvements in data provided. Sanctions to deal with non-compliance certainly exist and there is evidence that they are applied, meeting SG60. However, evidence suggests that they are not an effective deterrent, which does not meet SG80."

3.2.4 Monitoring and management performance evaluation	-  Type in scoring table	According to the text, "SG100 is not met" for SI b. Table score (p.171) should be amended to reflect that SG100 is not met.

Thank you for spotting this. Table score has now been amended.	Accepted (no score change - change to rationale)

## 9.5 Conditions – delete if not applicable

### 9.5.1 Summary of conditions closed under previous certificate

Condition number	Scope	Condition	PI	Status	PI score	original PI revised score
1	Both UoCs	Evidence must be presented that the stock is at or fluctuating around its target reference point.	1.1.1	<b>Closed in 1SA</b>	<b>70</b>	<b>90 (1SA)</b>
2	Both UoCs	Well defined harvest control rules that are consistent with the harvest strategy and ensuring that the exploitation rates are reduced as limit reference points are approached shall be in place by year 4	1.2.2	<b>Closed in 2SA</b>	<b>75</b>	<b>80 (2SA)</b>
3	UoC1 (troll)	Evidence must be presented to ensure that sufficient and adequate information on direct effects from the fishery is available to ensure the impacts are highly unlikely to create unacceptable impacts to ETP species	2.3.1	<b>Closed in 4 SA</b>	<b>75</b>	<b>80 (4SV)</b>
4	UoC1 (troll)	Evidence must be presented to ensure that: (i) Sufficient information is available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for ETP species; (ii) Information is sufficient to determine whether the fishery may be a threat to protection and recovery of the ETP species.	2.3.3	<b>Closed in 4SA</b>	<b>65</b>	<b>80 (4SV)</b>
5	Both UoCs	The client is required to work actively to achieve short and long-term objectives, consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, that direct policy together with a functioning operational framework (measures and strategies) that requires the use of the resource to be responsible and sustainable.	3.2.1	<b>Closed in 3SA</b>	<b>70</b>	<b>80 (3SA)</b>

## **9.6 Client Action Plan**

To be drafted at Public Comment Draft Report stage

## 9.7 Surveillance

In accordance with FCR 7.23.4, since the fishery is facing its second certification period without any conditions it is eligible for a reduction of surveillance level and the number of team members.

Reduction of surveillance level: The CAB, with input from the client, determined that surveillance audits shall take place according to level 4 indicated in Table 5 MSC FCP 2.2. The CAB can reconsider the surveillance level before each surveillance audit.

Reduction of the number of team members: In accordance with FCP2.2 7.28.6.2 the CAB proposes that a reduced team of 1 auditor can be used during the first three surveillance audits.

**Table 9.7.1 – Fishery surveillance program**

Surveillance level	Year 1	Year 2	Year 3	Year 4
<b>Level 4</b>	<b>Off-site surveillance audit</b>	<b>On-site surveillance audit</b>	<b>Off-site surveillance audit</b>	<b>On-site surveillance audit</b>

**Table 9.7.2 – Timing of surveillance audit**

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
1	Expiry date of the certificate	Within 30 days of the anniversary date	
2	Expiry date of the certificate	Within 30 days of the anniversary date	
3	Expiry date of the certificate	Within 30 days of the anniversary date	
4	Expiry date of the certificate	Within 30 days of the anniversary date	

**Table 9.7.3 – Surveillance level justification**

Year	Surveillance activity	Number of auditors	Rationale
1	Off-site	2	This is the second certification cycle of the North Atlantic Albacore fishery. No conditions are opened at this stage. The CAB can verify the necessary information remotely since the client sends to the CAB all relevant information on catches (including incidental catches and other interactions), and also AZTI gathers and analyses all the data from the observers on-board the assessed fleet. Information on compliance can also be provided remotely by the Spanish Fisheries Secretariat (SGP). Stock assessments and

			other relevant ICCAT reports are available for consultation through the ICCAT website.
2	On-site	2	This is the second certification cycle of the North Atlantic Albacore fishery. No conditions are opened at this stage. The CAB can verify the necessary information remotely since the client sends to the CAB all relevant information on catches (including incidental catches and other interactions), and also AZTI gathers and analyses all the data from the observers on-board the assessed fleet. Information on compliance can also be provided remotely by the Spanish Fisheries Secretariat (SGP). Stock assessments and other relevant ICCAT reports are available for consultation through the ICCAT website.
3	Off-site	2	This is the second certification cycle of the North Atlantic Albacore fishery. No conditions are opened at this stage. The CAB can verify the necessary information remotely since the client sends to the CAB all relevant information on catches (including incidental catches and other interactions), and also AZTI gathers and analyses all the data from the observers on-board the assessed fleet. Information on compliance can also be provided remotely by the Spanish Fisheries Secretariat (SGP). Stock assessments and other relevant ICCAT reports are available for consultation through the ICCAT website.
4	On-site	2	This is the second certification cycle of the North Atlantic Albacore fishery. No conditions are opened at this stage. The CAB can verify the necessary information remotely since the client sends to the CAB all relevant information on catches (including incidental catches and other interactions), and also AZTI gathers and analyses all the data from the observers on-board the assessed fleet. Information on compliance can also be provided remotely by the Spanish Fisheries Secretariat (SGP). Stock assessments and other relevant ICCAT reports are available for consultation through the ICCAT website.



## 9.8 Harmonised fishery assessments – delete if not applicable

Harmonisation is necessary when overlapping fisheries score the same stock(s) under **Principle 1**. This is because Principle 1 considers the full impacts of all fishing on the stock(s). This is the case of the North Atlantic Albacore, the US North Atlantic swordfish, yellowfin, and albacore tuna fishery and the Tri Marine Atlantic Albacore longline fishery. Harmonisation may also be required in **Principle 2** and in Principle 3. Table GPB1 of the Fisheries Certification Process v2.2 outlines the harmonisation requirements for overlapping fisheries by PI.

### Primary Species

For P2 primary species, teams need to evaluate whether the cumulative impact of overlapping MSC UoAs hinders the recovery of 'main' primary species. According to FCP v2.2 Table GPB1, PI 2.1.1a) should be harmonized for 'stocks that are 'main' in both UoAs, harmonise status relative to PRI (at SG60, 80 and 100), and if below PRI, harmonise cumulative impacts at SG80 (not at SG60).' Bluefin tuna is the only main primary species in this fishery for which consideration of the cumulative impacts of all version 2.01 fisheries would apply. The overall status of the Bluefin tuna stock is discussed in PI 2.1.1. None of the other 2 MSC overlapping fisheries have Bluefin tuna as main primary, therefore no need to assess the cumulative impacts for primary species.

### Secondary species

For secondary species, cumulative impacts only need to be considered in cases where two or more UoAs have 'main' catches that are 'considerable', defined as a species being 10% or more of the total catch. The MSC requires that 2.2.1 a) is harmonized for stocks that are 'main' in both UoAs, harmonise status relative to Biologically Based Limits (at SG60, 80, and 100), and if below Biologically Based Limits, harmonise cumulative impacts at SG80 (not at SG60) (FCP v2.1, Table GPB1). There are no main secondary species in the North Atlantic Albacore fishery.

### ETP Species

For ETP species, the combined impacts of MSC UoAs needs to be evaluated at 2.3.1 a) only in cases where there are any national and/or international requirements that set catch limits for ETP species applicable to both UoAs (at SG60, 80 and 100), and cumulative effects of the UoAs at SG80 and SG100 (not at SG60) (Table GPB1). As there are no catch limits for ETP species in this fishery, consideration of cumulative impacts is not required.

### Habitat

For habitats, fisheries are required to harmonize for 2.4.1 b regarding recognition of VMEs where both UoAs operate in the same 'managed area/s' (see Guidance to the MSC Fisheries Standard) and for 2.4.2 a) c) at SG100 since all fishery impacts are considered (not at SG60 or 80) (Table GPB1). The requirements here aim to ensure that vulnerable marine ecosystems (VMEs) are managed such that the impact of all MSC UoAs does not cause serious and irreversible harm to VMEs. The North Atlantic Albacore fishery does not interact with any VME habitat. Harmonization is not required for Principal 2 at this stage.

Regarding **Principle 3**, PIs 3.1.1 – 3.1.3, harmonization is needed when both UoAs are part of the same larger fishery or fleet or have stocks in either P1 or P2 that are at least partially managed by the same jurisdiction(s) (nation states, RFMOs, or others) or under the same agreements. Harmonisation may sometimes be possible for those management arrangements that apply to both UoAs (noting the limitations accepted in GPB1.3). The MSC accepts that it may be

impractical to attempt full harmonisation, due to the large number of fisheries that may be managed under the relevant policy framework, and the differences in application between them.

For PIs 3.2.1 – 3.2.4 harmonization depends whether both UoAs have stocks within either P1 or P2 that are at least partially managed by the same jurisdiction(s) (nation states, RFMOs, or others) or under the same agreements. Harmonisation is needed for those management arrangements that apply to both UoAs, e.g. at the RFMO level but not the national level in the case of 2 separate national fleets both fishing the same regional stock.

**Table 9.8.1 – Overlapping fisheries**

Fishery name	Certification status and date	Performance Indicators to harmonise
US North Atlantic swordfish, yellowfin, and albacore tuna fishery	Certified since 2013, scope extension to move NA albacore to P1 since 2018	All
Tri Marine Atlantic Albacore longline fishery	In assessment	All

**Table 9.8.2 – Overlapping fisheries**

Supporting information	
<p>The only overlapping fishery subject to harmonization with the assessed fishery is the US North Atlantic swordfish (click <a href="#">here</a> to access the fishery assessments at the MSC website), since this fishery extended the scope of the certificate to include North Atlantic albacore. This process was completed in 2018. As a result of the harmonization process, consensus was reached on scores for PI 1.1.1, 1.2.2, 1.2.3 and 1.2.4 (see Kirchner &amp; Rios (2019) for more details of the harmonization activities and outcomes). This harmonization was performed using MSC V1.3.</p> <p>At the time of writing the ACDR, MRAG was performing a P1 upgrade for YFT and ALB, whose site visit took place on the week of January 25-29. Harmonization emails were exchanged on 8 February. MRAG contacted BV on the 01/04/2021 after the publication of their 2SV report. Harmonization meeting between the 2 CABs took place on the 04/05/2021. Both CABs agreed on the PI 1.2.3 and PI 1.2.4 scores that have been included in the CPRDR. All other scores for North Atlantic albacore were already harmonized as reported in the relevant reports. After the publication of the ACDR and while BV was drafting its CPRDR, SCS entered also into the harmonization discussions. The 3 CABs agreed on all the scores except for the PI1.2.4e). Several emails were exchanged between the 3 CABs between the 8<sup>th</sup> of June and the 8<sup>th</sup> of July, and an agreement was finally reached towards scoring SG80 for PI1.2.4e) MRAG will proceed to incorporate the harmonization outcomes in their third Surveillance report planned for 2022.SCS will also amend the necessary scores in its next report. .</p>	
Was either FCP v2.2 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?	Yes / No
Date of harmonisation meeting	04/05/2021 (meeting) 08/06/2021-08/07/2021 (emails)
If applicable, describe the meeting outcome	

- e.g. Agreement found among teams or lowest score adopted.

Harmonization agreement was reached among the 3 different CABs via emails.

**Table 9.8.3 – Scoring differences**

Performance Indicators (PIs)	North Atlantic Artisanal Fishery MSC v2.1	Albacore	US North Atlantic swordfish MSC v1.3	Tri Marine Atlantic Albacore longline fishery v2.1 (in assessment)
<b>PI 1.1.1</b>	<b>100</b>		<b>100</b>	<b>≥ 80</b>
<b>PI 1.1.2</b>	<b>NA</b>		<b>NA</b>	<b>NA</b>
<b>PI 1.2.1</b>	<b>90</b>		<b>90</b>	<b>≥ 80</b>
<b>PI 1.2.2</b>	<b>85</b>		<b>85</b>	<b>≥ 80</b>
<b>PI 1.2.3</b>	<b>80</b>		<b>80</b>	<b>≥ 80</b>
<b>PI 1.2.4</b>	<b>85</b>		<b>95</b>	<b>≥ 80</b>

**Table 9.8.4 – Rationale for scoring differences**

If applicable, explain and justify any difference in scoring and rationale for the relevant Performance Indicators (FCP v2.2 Annex PB1.3.6).

Not applicable

If exceptional circumstances apply, outline the situation and whether there is agreement between or among teams on this determination.

Not applicable

## **9.9      Objection Procedure – delete if not applicable**

To be added at Public Certification Report stage