

# WESTERN ASTURIAS OCTOPUS TRAPS FISHERY OF ARTISANAL COFRADÍAS

MSC Certificate code: MSC-F-31230 (F-BV-1065)



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## Third Surveillance

OCTOBER 2019



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<b>Fishery client</b>	Asociación de armadores de la pesquería de pulpo con certificado de sostenibilidad (ARPESOS)
<b>Assessment Type</b>	Third Surveillance

# Contents

<b>GLOSSARY .....</b>	<b>3</b>
<b>1 EXECUTIVE SUMMARY.....</b>	<b>4</b>
<b>2 REPORT DETAILS.....</b>	<b>5</b>
2.1 SURVEILLANCE INFORMATION .....	5
2.2 BACKGROUND.....	7
2.2.1 PERSONNEL INVOLVED IN SCIENCE, MANAGEMENT OR INDUSTRY .....	7
2.2.2 CERTIFIED FLEET AND CLIENT GROUP .....	7
CERTIFIED FLEET .....	7
CLIENT GROUP.....	7
2.2.3 FISHERY MANAGEMENT AND REGULATORY FRAMEWORK .....	7
2.2.4 COMPLIANCE .....	9
2.2.5 TRACEABILITY ISSUES .....	10
2.2.6 SCIENTIFIC BASED INFORMATION RELATED TO P1 .....	10
2.2.7 SCIENTIFIC BASED INFORMATION RELATED TO P2 .....	13
2.3 VERSION DETAILS.....	15
<b>3 RESULTS.....</b>	<b>16</b>
3.1 SURVEILLANCE RESULTS OVERVIEW.....	16
3.1.1 SUMMARY OF CONDITIONS.....	16
3.1.2 TOTAL ALLOWABLE CATCH (TAC) AND CATCH DATA.....	16
3.1.3 RECOMMENDATIONS .....	17
3.2 CONDITIONS.....	17
3.2.1 TABLE 3.4. CONDITION 1 .....	18
3.2.2 TABLE 3.5. CONDITION 2 .....	24
3.2.3 TABLE 3.6. CONDITION 3 .....	28
3.2.4 TABLE 3.7. CONDITION 4A .....	32
3.2.5 TABLE 3.8. RECOMMENDATION 1 .....	38
3.3 CLIENT ACTION PLAN.....	39
3.3.1 MODIFIED ACTION PLAN ON CONDITION 1.....	39
3.3.2 MODIFIED ACTION PLAN ON CONDITION 4.....	40
3.4 RE-SCORING PERFORMANCE INDICATORS .....	41
PI 3.2.1 – FISHERY-SPECIFIC OBJECTIVES .....	41
<b>4 REFERENCES.....</b>	<b>43</b>
<b>5 APPENDICES.....</b>	<b>44</b>
5.1 EVALUATION PROCESSES AND TECHNIQUES.....	44
5.1.1 SITE VISIT .....	44
5.1.2 STAKEHOLDER PARTICIPATION.....	45
5.2 STAKEHOLDER INPUT .....	45
5.3 REVISED SURVEILLANCE PROGRAM – DELETE IF NOT APPLICABLE .....	45
5.4 HARMONISED FISHERY ASSESSMENTS.....	46

## Glossary

<b>ARPESOS</b>	Certified octopus ship owners' association (Asociación de armadores de la pesquería de pulpo con certificado de sostenibilidad)
<b>B<sub>MSY</sub></b>	Biomass (population size) that enables a fish stock to deliver the maximum sustainable yield (MSY).
<b>BOPA</b>	Official Gazette of the Principality of Asturias
<b>BV</b>	Bureau Veritas
<b>CEDER</b>	Local Development Center (Centro de Desarrollo Navia-Porcía)
<b>CEP</b>	Fisheries Experimentation Centre (Centro Experimentación Pesquera)
<b>CFP</b>	Common Fisheries Policy
<b>CPUE</b>	Catch per unit effort
<b>DGPM</b>	General Directorate of Maritime Fisheries, Government of the Principality of Asturias (Dirección General de Pesca Marítima, Gobierno del Principado de Asturias)
<b>ETP</b>	Endangered, threatened and protected species
<b>EC</b>	European Commission
<b>EU</b>	European Union
<b>F</b>	Fishing mortality
<b>FCP</b>	Fisheries Certification Process
<b>FCR</b>	Fisheries Certification Requirements
<b>HCR</b>	Harvest Control Rules
<b>MCS</b>	Monitoring, Control and Surveillance system
<b>MSC</b>	Marine Stewardship Council
<b>MSY</b>	Maximum Sustainable Yield
<b>OFMC</b>	Octopus Fishery Monitoring Committee
<b>OFMP</b>	Octopus Fishery Management Plan
<b>OMA</b>	Asturian Marine Observatory (Observatorio Marino de Asturias)
<b>P1, P2, P3</b>	MSC Principles 1, 2, 3 respectively
<b>PCR</b>	MSC Public Certification Report
<b>SA</b>	Surveillance audit
<b>SGP</b>	General Secretariat for Fisheries, Spanish Government (Secretaría General de Pesca, Gobierno de España)
<b>TAC</b>	Total Allowable Catch
<b>UoA</b>	Unit of Assessment
<b>UoC</b>	Unit of Certification
<b>COFWG</b>	Certified Octopus Fishery Working Group

# 1 Executive summary

The fishery is certified (against FCR 2.0) since the February 10, 2016. The fishery was assessed against version 2.0 of the MSC Certification Requirements. Current surveillance audit was conducted against FCP2.1 and MSC Full Assessment Reporting Template v2.01 was used to elaborate current report.

As summarised in **table 3-1**, four conditions were raised on Performance Indicators (PI) 1.2.2 (HCRs & tools), 3.2.1 (Fishery specific objectives), 3.2.2 (Decision making processes), and 3.2.3 (Compliance & enforcement). However, during the 1SA, PI 3.2.3 was re-scored based on new findings and downgraded; condition 4 was therefore modified and a new condition was established (modified condition was called 4A).

Further, during the 1SA a recommendation related to both PI 2.1.2 and 2.1.3 was issued.

As a result of current surveillance audit, condition 3 was closed and PI 3.2.2 re-scored (see **section 3-4** for the re-scoring table), while remaining conditions remain open (two 'on target' and on 'behind target'). The CAB identified exceptional circumstances for two of the condition that merit a timeline extension beyond the certificate period, milestones and action plan were revised for these 2 conditions (**section 3.2** present the details on the progress for each of the conditions).

**Table 1-1** presents scores given to each MSC Principle as published at the PCR and after subsequent surveillance audits, while **table 1-2** presents scores for each Performance Indicator.

**Table 1-1.** Scores obtained by the fishery for each MSC Principle as published at the PCR and subsequent surveillance audits.

Final Principle Scores				
Principle	Score (PCR)	Score (1SA)	Score (2SA)	Score (3SA)
Principle 1 – Target Species	80.7	80.7	=	=
Principle 2 – Ecosystem	83.3	85.7	=	=
Principle 3 – Management System	85.4	84.2	=	86.7

**Table 1-2.** PIs scores of the certified fishery as published at the PCR and subsequent SAs (in orange scores below 80, meaning a condition was raised for that PI).

Principle	Component	Performance Indicator (PI)	Score	1SA	2SA	3SA
One	Outcome	1.1.1 Stock status	82	=	=	=
		1.1.2 Stock rebuilding	-	-	-	-
	Management	1.2.1 Harvest strategy	85	=	=	=
		1.2.2 Harvest control rules & tools	75	=	=	=
		1.2.3 Information & monitoring	80	=	=	=
		1.2.4 Assessment of stock status	80	=	=	=
Two	Primary species	2.1.1 Outcome	100	=	=	=
		2.1.2 Management strategy	80	85	=	=
		2.1.3 Information/Monitoring	85	90	=	=
	Secondary species	2.2.1 Outcome	80	=	=	=
		2.2.2 Management strategy	80	100	=	=
		2.2.3 Information/Monitoring	85	90	=	=
	ETP species	2.3.1 Outcome	85	=	=	=
		2.3.2 Management strategy	80	=	=	=
		2.3.3 Information strategy	80	=	=	=

	Habitats	2.4.1	Outcome	95	=	=	=
		2.4.2	Management strategy	80	=	=	=
		2.4.3	Information	80	=	=	=
	Ecosystem	2.5.1	Outcome	80	=	=	=
		2.5.2	Management	80	=	=	=
		2.5.3	Information	80	=	=	=
Three	Governance and policy	3.1.1	Legal &/or customary framework	100	=	=	=
		3.1.2	Consultation, roles & responsibilities	95	=	=	=
		3.1.3	Long term objectives	100	=	=	=
	Fishery specific management system	3.2.1	Fishery specific objectives	60	=	=	80
		3.2.2	Decision making processes	75	=	=	=
		3.2.3	Compliance & enforcement	75	65	=	=
		3.2.4	Monitoring & management performance evaluation	80	=	=	=

The main findings of current surveillance audit are listed below:

- A collaborative atmosphere between different stakeholders (ARPESOS, CEP, DGPM, SIGMA and Univ. Oviedo) is still existing and works towards closing conditions.
- A completely new HCR is now the main option under discussion, which it is expected to delay closing Condition 1 towards the next certification cycle. New milestones and CAP have been set.
- Short and long term objectives are now already explicit in the OFMP consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, (Sla SG80 on PI 3.2.1) and therefore Condition 2 has been closed.
- Condition 4A (PI 3.2.3 - Compliance and enforcement) is target due to, among other issues, a material reduction in the surveillance capacity in the octopus' fishery in the last fishing season. The condition has been extended to the next certification cycle and new milestones and CAP have been set.
- The bad environment between the UoC and the rest of the vessels included in the OFMP may deter the introduction of changes in the management system posing a future risk to ensure the certification.
- Data collected by observers on board the vessels working under the OFMP during the last fishing season (2018/19) aligned with the information already assessed (in terms of catch composition, discarding and bait use).
- No progress has been observed in the Recommendation regarding bait species.

The assessment team concludes that **the MSC Certificate for this fishery shall remain active**, subject to the agreed annual surveillance schedule and progress on the 3 remaining conditions.

## 2 Report details

### 2.1 Surveillance information

According to the 'MSC Surveillance Reporting Template v2.01' the following table shall be included.

**Table 2-1. Surveillance information**

1Fishery name			
Western Asturias Octopus Traps fishery of Artisanal Cofradías			
2Unit/s of Assessment/s			
UoA	<u>Stock</u> : Octopus vulgaris stock from Asturian waters (metapopulation description).		
	<u>Fishing area</u> : The fishing grounds where the UoA operates stretch along the Asturian coastline between 7° 01 'W and 6º 04´ W, always within internal Spanish waters (<12nm) and within a depth range of 0-100m.		
	<u>Fishing method/gear</u> : Artisanal traps		
	<u>Fishing management</u> : Asturias Government mainly and also the Spanish Government, General Secretariat for Fishing (SGP)		
	<u>Fleet</u> : 27 vessels from Comarca del Comarca del Navia-Porcía (Tapia de Casariego, Viavélez, Ortiguera, Puerto de Vega) <sup>1</sup> .		
	<u>Other Eligible fishers</u> : vessels that are members of a fishing guild within the management plan (MP). Therefore, the guilds Cofradías de Cudillero, Oviñana, Luarca and Figueras may become eligible to join the UoC under the Certificate Sharing.		
3Certificate details			
Certificate code		MSC-F-31230 (F-BV-1065)	
Date certified		10 Feb 2016	Date of expiry15 Feb 2021
4Surveillance level and type			
Level	Surveillance level as determined in the PCR is 4, meaning a surveillance program including 2 on-site and 2 off-site audits.		
Type	A remote (off-site) audit was performed for this second surveillance, as programmed in the PCR. See <b>Appendix 5.3</b> for modified fishery surveillance program		
5Surveillance number			
1st Surveillance			
2nd Surveillance			
3rd Surveillance		√	
4th Surveillance			
Other (expedited etc)			
6Assessment team <sup>2</sup>			
Team leader		José Ríos	
Team member 1		Gonzalo Macho	
7Audit/review time and location			
Off-site visit. Meetings held between the July 17 and 18, 2019			
8Assessment and review activities			
During the site visit, the team conducted assessment activities in accordance with FCP 7.28.15-18. In the case of the octopus fishery, the team concentrated in: (i) checking for any relevant modification affecting the fishery; (ii) assess progress against conditions set to the fishery. See <b>Appendix 5.1</b> for details on the people interviewed, topics discussed, locations inspected, and <b>Appendix 5.2</b> for details on the stakeholder engagement strategy. There are no overlapping fisheries exist, so no harmonization activities were needed.			
9Conformity Assessment Body (CAB)			

<sup>1</sup> The latest vessel list includes 31 fishing vessels, including some vessels from Luarca, Oviñana and Figueras.

<sup>2</sup> See the Surveillance announcement at the MSC website for more details on how the team meets the competency criteria and the areas that they are responsible for.

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<b>10</b>	<b>Client</b>
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## 2.2 Background

Major changes to the fishery since the last surveillance are outlined below:

### 2.2.1 Personnel involved in science, management or industry

No major changes were identified by the team in relation to personnel involved in management and the fishing sector involved in the artisanal octopus fishery in Asturias. However, the team wants to note that the Director of the Control Unit confirmed that they've had personnel issues due to numerous retirement and temporary leaves. 5 of the 15 full-time fixed inspectors retired in the last 6 months, and 3 of the 4 discontinuous fixed inspectors were on leave at the time of preparing this report.

In relation to research, the OMA confirmed that they kept collaborating with the independent consultant Rubén Roa-Ureta on depletion models for this fishery. In June they held meetings at the OMA to present this data. Acuña confirmed that the OMA is applying for a national research project which includes the evaluation of candidate HCRs based on depletion models for the octopus fishery.

On the other hand, the CEP confirmed that they are interested on this model, and they signed a contract to hire Ruben's services to hand them the model and provide the necessary training to the CEP staff.

### 2.2.2 Certified fleet and client group

#### Certified fleet

The certified fleet remains unchanged since the previous SA. The latest list of certified vessels was published at the MSC website on February 13, 2019.

#### Client group

The client group remains unchanged since the previous SA. The latest version of the certificate published at the MSC website on July 5, 2017 states that ARPESOS holds the ownership of the certificate.

MSC has modify the coding system for the MSC-Fishery certificates, resulting in different certificate codes. The original certificate code for this fishery was: F-BV-1065, while the new code is: MSC-F-31230. So far, both are displayed at the MSC website.

### 2.2.3 Fishery management and regulatory framework

The OFMP for the fishing season 2018-19 (Resolución de 4 de diciembre de 2018), currently in place, has kept the new changes introduced in the 2017-18 OFMP and has introduced specific and explicit objectives and also new management measures related to three topics: weight limit, discards and roles of the OFMC:



1) OFMP Objectives: new specific and explicit objectives have been incorporated to the OFMP related to the sustainability of the stock and the impact on other species.

## **II. MANAGEMENT PLAN**

### *First. — Objectives.*

1- *The main objective of the management plan for the 2018/2019 fishing campaign is to maintain the balance between the fishing effort and the abundance of the resource, which until now has guaranteed the sustainability of the fishery. For this, and given the risk that changes in socioeconomic conditions may alter the described equilibrium situation, it is considered appropriate to maintain the general rules of previous fishing campaigns and also establish the following specific objective:*

- *Determine if there is a risk of overfishing based on early indicators of the state of the stock and limit the fishing effort in the event that such risk is detected.*

2- *Although the data from the monitoring of the octopus fishery with traps in previous fishing campaigns demonstrates its low impact on the ecosystem, it is intended to ensure that this situation is maintained during this fishing campaign, or even it is improved as far as possible, by establishing the following specific objectives:*

- *Conduct at least two samplings per month with observers on board to assess the impact of the fishery on the accessory species.*
- *Maintain the mortality of discarded specimens below 5%.*

2) Weight limit: it is now allowed one octopus individual between 1000-900 g on every 25 kg of octopus landed.

## **II. MANAGEMENT PLAN**

### *Sixth.—Landings and Discards.*

1- *The landing of one octopus individual, weighing less than 1 kg but exceeding 900 grams, shall be allowed for every 25 kg of octopus captured, maintaining the prohibition of the commercialization of these specimens which must be returned to the seawater if possible or donated to a charity centre. The guardapesca must record the number, weight and destination of these individuals. In no case it is allowed to land individuals of less than 900 gr.*

3) Alive discard release: it is mandatory to release all alive discards to seawater.

## **II. MANAGEMENT PLAN**

### *Sixth.—Landings and Discards.*

2- *Any individuals of any species that are caught alive and discarded should be released immediately and without causing damage.*

4) OFMC roles: a new role for the Management Committee has been approved regarding the OFMP objectives.

## **III. ADDITIONAL RULES**

### *Third.—Octopus Fishery Management Committee.*

*The roles of the Octopus Fishery Management Committee are: ... and to follow up the degree of implementation of the objectives of the [octopus' fishery management] plan.*

Besides the new management measures in the OFMC two other topics deserves attention:

1) Implementation of the traps marking procedure: although a new regulation was approved in the 2017-18 OFMP regarding the marking of the line of traps, this regulation was not implement by the Fisheries Inspection and Surveillance Unit due to a reduction in the number of enforcement officers (5 officers got retired in 2018-19 within 6 months). It is the intention of the head of the surveillance unit to implement this management measure in the next fishing campaign 2019-20. As it is written in the OFMP the DGPM will indicate directions with respect to this regulation, although these directions have not been delivered yet to fishers and stakeholders.



2) Harvest Control Rules (HCRs): two possible HCRs were discussed within the OFMC. After some discussion the HCR proposed by the CEP (daily quota limits by boat and early daily closure of the fishing time after 1<sup>st</sup> April based on CPUE in the first half of the season) had the initial agreement of all the *cofradías* (pending consultation in their fishing ports) but not from Luarca. After the OFMC the CEP formally recommended to include this HCR in the OFMP. Nevertheless, the approved and published OFMP did not include any HCR so far.

#### 2.2.4 Compliance

The main relevant issue concerning the MCS is the weakening of the surveillance capacity in the octopus fishery in the last year due to a reduction in the number of enforcement officers. From a total of 16 enforcement officers (12 full time and 4 part time) working in the 2017-18 fishing season, 5 of them got retired within 6 months. Currently a total of 11 enforcement officers are in place (10 full time and 1 part time). The staff retired could not be replaced in time due to the long administrative process.

This circumstance has brought major consequences. According to the data provided by the Surveillance and Control Unit (Valentín García, Head of the Surveillance and Control Unit, personal communication), in 2018, from January to July, a total of 119 actions were done (59 on land and 60 on sea), resulting in a total of 6 sanctions applied (4 due to excess of traps and 2 due to individuals smaller than the minimum weight). One of the sanctions due to minimum weight was issued to a MSC vessel, although the procedure is still ongoing and no final resolution is available. Due to the reduction in the control and enforcement capacity, in 2019, from January to June, only a total of 44 actions were done (12 on land and 32 on sea) and no sanctions were applied.

Another source of information regarding the fishers comply with the minimum weight is from the CEP monitoring at port. The percentage of individuals below the weight limit of 1 kg was kept all the season below 5% of the landings (Fernández, 2018a), showing a slight decrease from last season (4-8%) (see 2SA report). Nevertheless, during June and July, when percentages up to 15% were found in past years, the number of octopus sampled was only of 50 individuals (Fernández, 2018a), which does not allow to rely on data from those two last months of the fishing season.

Another consequence of the enforcement capacity reduction in the 2018-19 fishing season, was that the implementation of a protocol for marking the line of traps (buoys at the beginning and ending of the line of traps) has been postponed. It is expected that for the next fishing season (2019-2020) this marking regulation will be implemented using labels provided by the DGPM with a bar code (Valentín García, Head of the Surveillance and Control Unit, personal communication).

One of the pending issues in the fishery is the compliance with the maximum number of traps. A work done during the fishing season 2014-2015 in the four fishers' guilds of the UoC revealed a "high degree of non-compliance in the number of traps used" (CEP-SIGMA, 2016). This study was done by on-board biologists from the CEP and SIGMA SL for characterizing the octopus' fishery and it just had a descriptive intention, without any surveillance purposes. The OFMP establishes a maximum number of traps allowed in each boat based on the number of crew members on board. This measure has not changed since the 2010 OFMP, and it establishes a maximum of 125, 250 and 350 traps for vessels with 1, 2 and 3 or more crew members respectively. Since then, the fishery has done a strong progress and just a single excess in the number of traps was observed during the on-board observers' program in the 2017-18 fishing season (Fernández, 2018c). The report for the on-board observers' program for the 2018-19 fishing season is already available (Fernández, 2019b), but this time no information on the number of traps is shown. Nevertheless, stakeholders consulted during the site visit considers that fishers' compliance regarding this measure is very high, and only in the fishing port of Luarca (part of the UoA but outside the UoC) the problem still persists. Actually, based on information from the Surveillance and Control Unit, in 2018 five sanctions (between 400-1250 eur) were issued (all in Luarca) due to an excess of traps. Although no sanctions have been issued in 2019, the problem apparently still persists due to a low capacity of enforcement (Valentín García, Head of the Surveillance and Control Unit, personal communication).

This low enforcement capacity is also linked with the fact that the Surveillance Unit still has no ability so far to seize and remove lines of traps on the sea. During the site visit the CAB was told that it is expected that a vessel with this capacity will be operational by 2021, but no documents were provided showing the progress on this. Funds from the EU will be used for constructing this vessel.

The octopus fishery does not have yet a protocol that clearly details the roles and responsibilities of the *guardapescas*. The 2017-18 OFMP (Resolución de 1 de diciembre de 2017) introduced for the first time the specific duties of the *guardapescas* figure related to the octopus' fishery. Those duties are: 1. Check the weighing of landings, 2. Check the quotas and admissible catch, when applicable, and 3. Check the compliance with the minimum weight. Nevertheless, the *guardapescas* has no power to impose a sanction; rather, should he believe that a violation is taking place he must inform the competent authority (Civil Guard or the Office of Fisheries Inspection and Surveillance of the DGPM). Working on the direction for developing this protocol, in May 2019 a meeting was held by the DGPM with the CEP and all the *guardapescas* in Asturias, to check their roles and difficulties for developing those tasks and to clarify doubts (DGPM, 2019d). In this last document a new role for the *guardapescas*, not included in the OFMP, is included related the future implementation of a marking system for the line of traps; the *guardapescas* will be responsible for providing the marks to the fishers taking notes on the numbers delivered to each boat.

Regarding the compliance with other measures like the fishing time (vessels must be at port before 17:00 h), and based on information from the GPS tracking system (see *Section 2.2.6*), it is clear that the great majority of the fishing days the vessels comply with this measure, only in 0,5% of the cases the vessel did not comply (Fernández, 2018a).

The assessment team has not found any other non-compliance of the UoA to the management measures in place.

#### 2.2.5 Traceability issues

Authorized landing and auction points remain unchanged since the PCR.

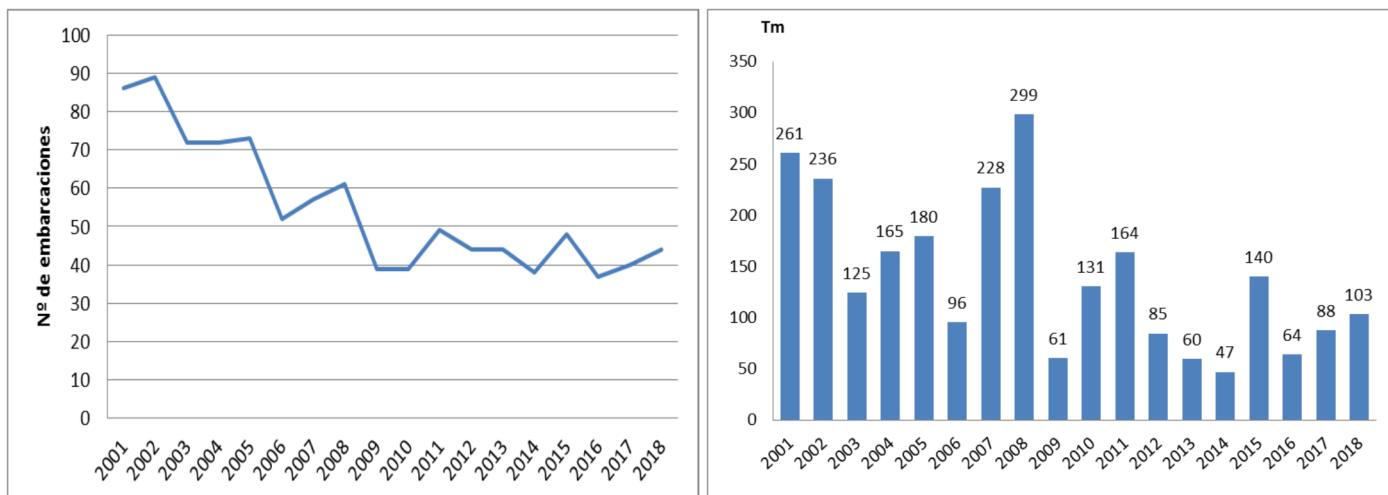
No changes in the traceability system described in the PCR and comments included in the previous SA report. The system allows segregating the certified octopus from the one that is not certified.

#### 2.2.6 Scientific based information related to P1

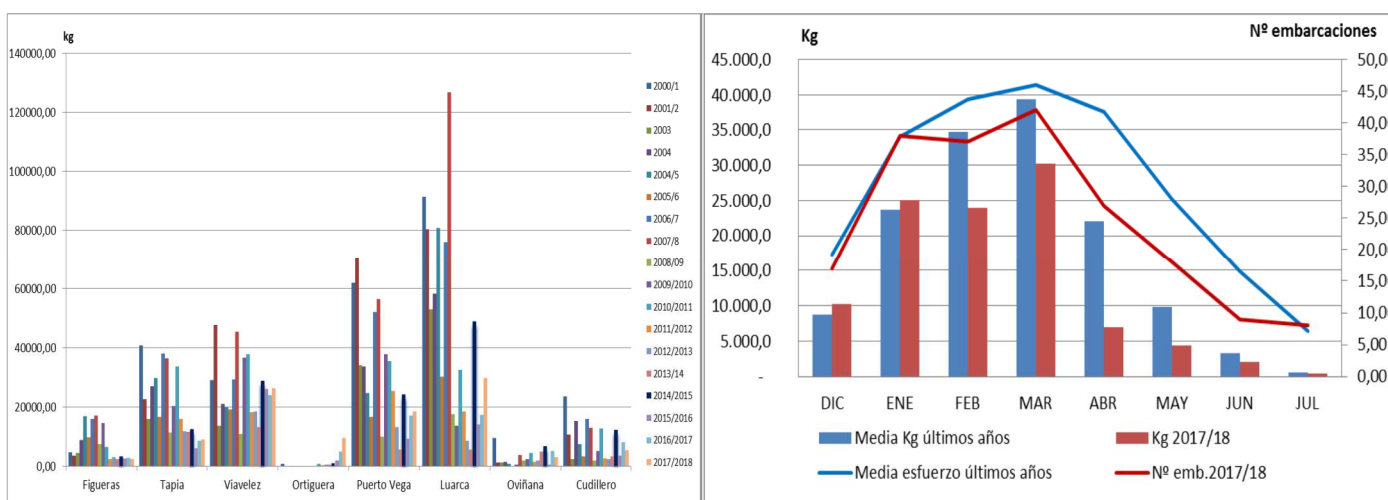
The assessment team considered that the information presented below means that the information base for P1 PIs has not changed and no re-scoring is needed.

The CEP annual report of the fishing season 2018-19 was still not available (expected to be available in fall 2019) during the on-site visit of this SA, so information showed below is from the 2017-18 fishing season report (Fernández, 2018a) from which the fishery statistics were obtained. Besides the yearly report when the fishing season is finished, the CEP is now producing mid-term reports during the fishing season in March, in order to come up with early indicators on the status of the fishery (Fernández, 2019a).

The number of vessels in the OFMP was kept around 40-50 vessels per season in the last 5 years (40 and 44 vessels in 2017 and 2018 respectively) (Fernández, 2018a) (Fig. 2-1). Catches in 2015-2016 went up considerably to 140 t for descending drastically to 64 t the next season, and increasing again in the following two years up to 103 t in the last 2017-18 fishing season (Fernández, 2018a) (Fig. 2-1). The main fishing ports this last fishing season and historically are Luarca, Puerto de Vega, Viavélez and Tapia (all of them are part of the UoC except for Luarca that is part of the UoA) (Fig. 2-2). Monthly effort (number of vessels) and octopus' catches (kg) were in the 2017-18 fishing season below the averages for the 2001-17 period (Fernández, 2018a) (Fig. 2-2). The ex-vessel price per kg for octopus in the UoA has drastically increased in the last two fishing seasons (7 and 10 €/kg in the 2016-17 and 2017-18 fishing season respectively) from an average that historically has been always around 4-6 €/kg from 2000-01 to 2015-16 fishing season (Fernández, 2018a).

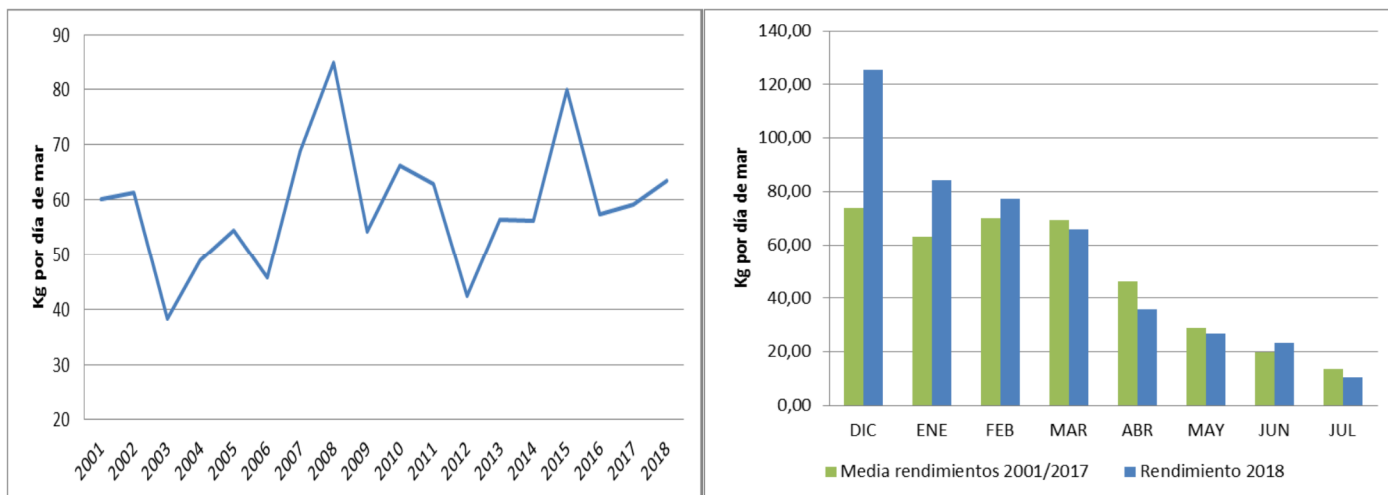


**Figure 2-1.** Historic number of vessels assisting to the octopus' fishery in Asturias (left graph) and historic catches (right graph) since 2001. Source: Fernández, 2018a.

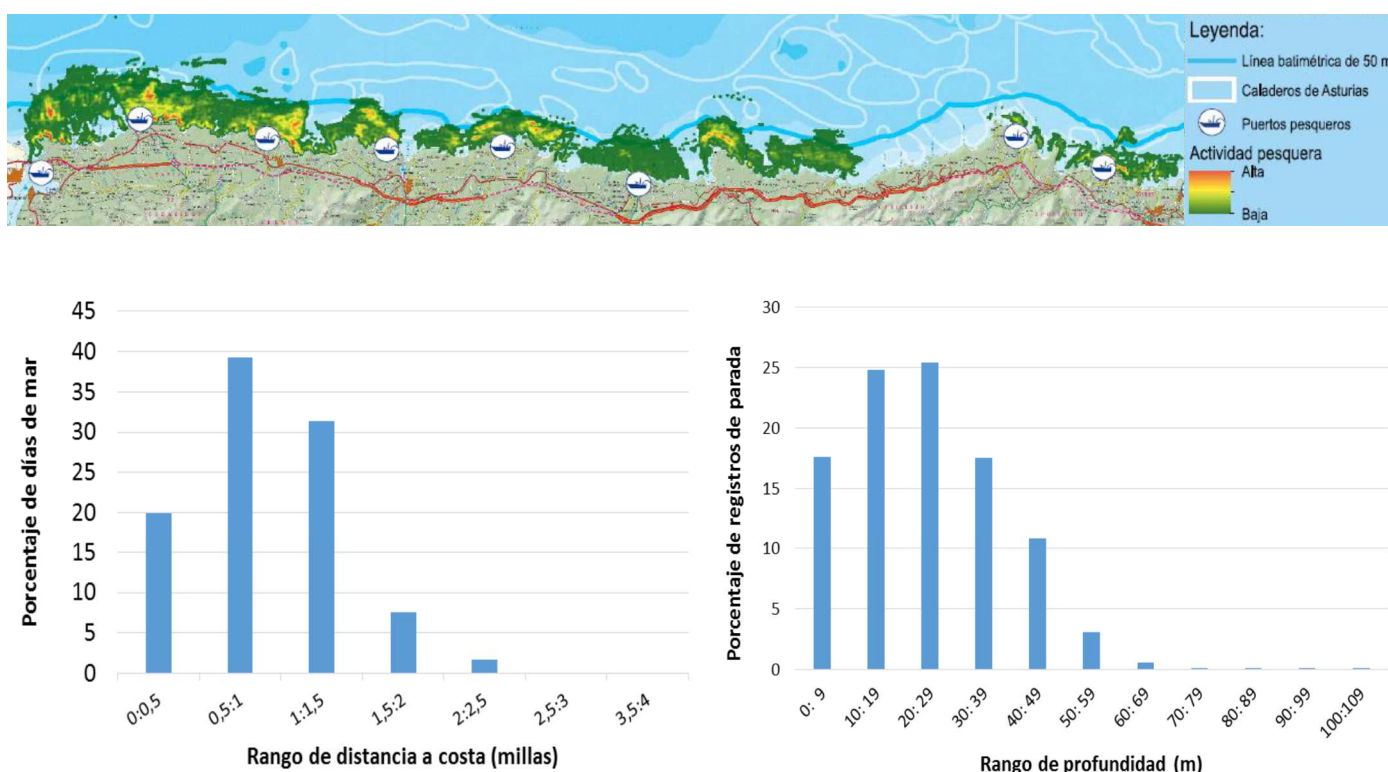


**Figure 2-2.** Historic octopus' landings by fishing ports part of the OFMP in Asturias (left graph) and monthly effort ((lines: number of vessels) and catches (bars: kg) comparing the last fishing season (in red) with the average historic data from 2001-17 (in blue) (right graph). Source: Fernández, 2018a.

Last CPUE available for the 2017-18 fishing season was 64 kg per fishing day, in line with the historic data (Fernández, 2018a) (Fig. 2-3). Monthly CPUEs were similar to the historic data observed, but in December the CPUE observed in the 2017-18 fishing season was over 120 kg/day, way over the 70kg observed on average during the historic 2001-17 data for this same month (Fig. 2-3). As in past years the highest CPUEs were observed in December and winter (60-120 kg/day) while the lowest were in spring (20-40 kg/day) and July (~10 kg/day); a constant decrease in CPUE is observed from March to the end of the fishing season in July (Fig. 2-3).



**Figure 2-3.** Historic yearly CPUE (kg per fishing day) (left graph) from 2000-01 to 2017-18 fishing season and monthly CPUE (comparing last 2017-18 fishing season to 2001-17 average) for the octopus' fishery in Asturias. Source: Fernández, 2018a.



**Figure 2-4.** Fishing intensity (top graph) (high in red, medium in yellow and low in green), distance to the coast in miles (down left graph) and fishing depth range (down right graph) of the 43 octopus' vessels tracked by GPS in the coast of Asturias during the fishing season 2017-18. Source: Fernández, 2018a.

During the 2017-18 fishing season all the vessels that assisted to the fishery were tracked by GPS (43 vessels) when fishing octopus (just one vessel which only fished octopus during four days did not have a GPS installed) (Fernández, 2018a). Based on the vessel speeds of 39 of those vessels (1,359 fishing days, representing 83% of the total fishing days) a map of relative fishing intensity could be drawn (Fig. 2-4). From this information it is clear that most of the octopus' catches (91%) are done very close to the coast (<1.5 miles) and at shallow depths (96% at <50 m) (Fernández, 2018a) (Fig. 2-4).

Besides the yearly report when the fishing season is finished, the CEP is now producing mid-term reports during the fishing season in March, in order to come up with early indicators (octopus' weight and CPUE) on the status of the fishery (Fernández, 2019a). On the 4 March 2019 the first of this kind of reports was



delivered, and it is expected that this reports will be yearly delivered in the future in the middle of each fishing season. This mid-term report uses data from the on board observers' program and also from the monitoring of landings.

Regarding the landings monitoring the report (Fernández, 2019a) concludes that:

- 1. The average catches per fishing day [CPUE] during the present season shows high values in relation to previous fishing seasons, especially in January, which seems to indicate a good stock status.*
- 2. Although the vessels have been able to fish a relatively high number of days compared to the previous fishing seasons, which it has caused a high volume of landings, there is not a worrying increase in the number of vessels in the fishery.*

Regarding the on board observation the report (Fernández, 2019a) concludes that:

*In this fishing season a good status of the resource is observed compared to the previous seasons, especially regarding the number of individuals, although lower weights are detected among retained individuals.*

Besides the monitoring done by CEP and the work done in the past by the OMA from the University of Oviedo (see 2SA report), currently the fishery is working on a third option for setting HCRs based on a stock assessment depletion model that the DGPM has recently commissioned (July 2019) to Rubén Roa-Ureta, an independent consultant with strong expertise in this type of fisheries and models (DGPM 2019b). In order to apply this model daily catches by boat from the fishing season 2000-01 has been compiled and a database on weekly effort and catches has been constructed (UOVI-CEP, 2019). The model is expected to estimate statistically precise reference points ( $F$ ,  $MSY$ ,  $B_{MSY}$ ,...) and a HCR would be set based on the reference points derived from the model results. Preliminary results show that the fishing mortality ( $F$ ) is low compared to the natural mortality, and therefore the fishery would be biologically sustainable (UOVI-CEP, 2019). When the model is ready the consultant commissioned is expected to develop a software for the fishery assessment and to give a training to the CEP and UOVI staff. No more information was given to the CAB regarding this third HCR option during the site visit.

### 2.2.7 Scientific based information related to P2

Data collected by observers on board the UoC between December 2014 and July 2015 provided a comprehensive insight on the catch composition of this fishery. This information was considered in the previous SA report and as a result all Primary and Secondary Species P2-Components were re-scored (Rios & Macho 2017).

Since 2016 all vessels included in the 2016/17 OFMP are bound to collaborate with this sampling (by getting a biologist on board) under CEP request. Therefore, this on board sampling has been extended to the whole UoA in the latest years. This observer program continued during 2018/19 and this fishery is now integrated within the observer program put in place by the DGPM which aims a total of 4 observed fishing trips per months distributed among the different local fisheries in Asturias and, according to the objectives included in the OFMP 2 out of those 4 will always correspond to the octopus' fishery. Taking into account previous n°fishing days/year, this would correspond to around 1% of observer coverage in this fishery. The tender to contract this services for 2020 has already been launched (evidence presented).

Results collected during the fishing 2018/19 by the observers on board fleet targeting and also by the biologists working at the CEP were compiled and analysed at Fernandez 2019b. This report also reports data from biological sampling performed by CEP biologists at ports. These monthly samplings were started in 200/01 and involve weights, sex ratio and maturity. This data is being used for the depletion model. The information collected by the observers related to catch composition, discarding and bait used is presented below was extracted from Fernandez 2019b. This information is aligned with the information already assessed.

Catch composition from sampling catches on board at least 10 different vessels from 6 different ports (Figueras, Tapia de Casariego, Viavélez, Ortiguera, Puerto de Vega and Luarca) along 14 fishing trips

between December 2018 and July 2019 are presented in **table 2-2**. Results are similar with those presented in previous years. Octopus comprised between 91.18% of the total catches, and 99.17% of the retained catches. Apart from the octopus, the only significant commercial species being retained is the velvet crab (*Necora puber*) and slipper lobster (*Scyllarus arctus*), but they accounted for 0.96% and 0.06% respectively of the total catches. The only ETP species listed is the *Charonia lampas*, and 100% of the catches are discarded alive (**Table 2-3**).

Discarding affects up to 37.04% of the total catches in weight (78.29% in number of individuals), either because of not having commercial interest or because of not reaching the minimum commercial size/weight (in the case of the octopus and slipper lobster). Observers also recorded whether the catches were alive or dead at the moment of being removed from the traps, and 99% of those discards were alive (**Table 2-3**). The lowest % of survival are for two small fish: *Coris julis* (71.6%) and *Labrus mixtus* (80.6%), while for most of the species survival rates is 100%.

Further, this study also provides some qualitative information of the type of bait used by the sampled fleet in the sampled ports. The different types of bait used are (in order of importance): artificial, bogue, mackerel, sardine and chicken. However, the report does not provide the volumes of bait used. This results are consistent with previous data.

**Table 2-2** Catch composition recorded by observers on board the UoA during the 2018/19 fishing season. Retained (RET) and discarded (DESC) catches in number (N) and in weight (Peso). Source: Fernandez 2019b

Nombre Comun	Nombre Científico	Nº RET	Nº DESC	Nº TOTAL	Peso RET	Peso DESC	PESO TOTAL	% N	% PESO
Bertorella	Gaidropsarus mediterraneus	-	5	5	-	298	298	0,19%	0,03%
Blenio	Parablennius pilicornis	-	26	26	-	297	297	1,01%	0,02%
Buey de mar	Cancer pagurus	-	5	5	-	915	915	0,19%	0,08%
Cabrilla	Serranus cabrilla	-	235	235	-	16.008	16.008	9,09%	1,35%
Cabruza	Parablennius gattorugine	-	12	12	-	601	601	0,46%	0,05%
Cangrejo de arena	Liocarcinus marmoreus	-	1	1	-	1	1	0,04%	0,00%
Caracola	Charonia lampas	-	13	13	-	4.784	4.784	0,50%	0,40%
Centollo	Maja squinado	-	4	4	-	320	320	0,15%	0,03%
Congrio	Conger conger	-	10	10	-	10.970	10.970	0,39%	0,92%
Erizo de mar común	Paracentrotus lividus	-	2	2	-	125	125	0,08%	0,01%
Erizo violáceo	Sphaerechinus granularis	-	13	13	-	2.331	2.331	0,50%	0,20%
Estrella de mar común	Marthasterias glacialis	-	676	676	-	48.784	48.784	26,16%	4,10%
Estrella espinosa	Echinaster sepositus	-	4	4	-	44	44	0,15%	0,00%
Farro	Centrolabrus exoletus	-	1	1	-	25	25	0,04%	0,00%
Gallano	Labrus mixtus	-	11	11	-	1.008	1.008	0,43%	0,08%
Holoturia negra	Holothuria forskali	-	7	7	-	557	557	0,27%	0,05%
Holoturia	Holothuria spp	-	14	14	-	760	760	0,54%	0,06%
Inachus	Inachus thoracicus	-	14	14	-	68	68	0,54%	0,01%
Julia	Coris julis	-	8	8	-	619	619	0,31%	0,05%
Lota	Gaidropsarus vulgaris	-	2	2	-	329	329	0,08%	0,03%
Nécora	Necora puber	64	76	140	5.585	5.875	11.460	5,42%	0,96%
Negrita	Spondyllosoma cantharus	-	1	1	-	365	365	0,04%	0,03%
Ofiura	Ophiura ophiura	-	1	1	-	N/A	N/A	0,04%	N/A
Ofiura lisa	Ophioderma longicauda	-	94	94	-	1.119	1.119	3,64%	0,09%
Patexo	Polybius henslowii	-	128	128	-	1.394	1.394	4,95%	0,12%
Pulpo	Octopus vulgaris	491	616	1.107	742.400	341.748	1.084.148	42,84%	91,18%
Quisquilla	Palaemon serratus	-	2	2	-	8	8	0,08%	0,00%
Santiaguín	Scyllarus arctus	6	3	9	625	145	770	0,35%	0,06%
Sastre	Galathea strigosa	-	11	11	-	328	328	0,43%	0,03%
Tabernero	Ctenolabrus rupestris	-	28	28	-	531	531	1,08%	0,04%
Total		561	2.023	2.584	748.610	440.357	1.188.967	100%	100%



**Table 2-3.** Species discarded in sampling on board made during the 2018/2019 campaign. For each species total number of discarded specimens in number and weight (g) is indicated, as well as the total discards that were alive (vivo) at the time of extracting from the traps (absolute value and %). Source: Fernandez 2019b.

Nombre Comun	Nombre Científico	Nº DESC	Peso DESC	Nº Vivo	Peso Vivo	% Vivo (Nº)	% Vivo (peso)
Bertorella	<i>Gaidropsarus mediterraneus</i>	5	298,00	5	298,00	100,0%	100,0%
Blenio	<i>Parablennius pilicornis</i>	26	297,00	26	297,00	100,0%	100,0%
Buey de mar	<i>Cancer pagurus</i>	5	915,00	5	915,00	100,0%	100,0%
Cabrilla	<i>Serranus cabrilla</i>	235	16.008,00	225	15.617,00	95,7%	97,6%
Cabruza	<i>Parablennius gattorugine</i>	12	601,00	11	586,00	91,7%	97,5%
Cangrejo de arena	<i>Liocarcinus marmoreus</i>	1	1,00	1	1,00	100,0%	100,0%
Caracola	<i>Charonia lampas</i>	13	4.784,00	13	4.784,00	100,0%	100,0%
Centollo	<i>Maja squinado</i>	4	320,00	3	306,00	75,0%	95,6%
Congrio	<i>Conger conger</i>	10	10.970,00	10	10.970,00	100,0%	100,0%
Erizo de mar común	<i>Paracentrotus lividus</i>	2	125,00	2	125,00	100,0%	100,0%
Erizo violáceo	<i>Sphaerechinus granularis</i>	13	2.331,00	13	2.331,00	100,0%	100,0%
Estrella de mar común	<i>Marthasterias glacialis</i>	676	48.784,00	676	48.784,00	100,0%	100,0%
Estrella espinosa	<i>Echinaster sepositus</i>	4	44,00	4	44,00	100,0%	100,0%
Farro	<i>Centrolabrus exoletus</i>	1	25,00	1	25,00	100,0%	100,0%
Gallano	<i>Labrus mixtus</i>	11	1.008,00	9	812,00	81,8%	80,6%
Holoturia negra	<i>Holothuria forskali</i>	7	557,00	7	557,00	100,0%	100,0%
Holoturia negra sin det	<i>Holothuria spp</i>	14	760,00	14	760,00	100,0%	100,0%
Inachus (placas)	<i>Inachus thoracicus</i>	14	68,00	14	68,00	100,0%	100,0%
Julia	<i>Coris julis</i>	8	619,00	5	443,00	62,5%	71,6%
Lota	<i>Gaidropsarus vulgaris</i>	2	329,00	2	329,00	100,0%	100,0%
Nécora	<i>Necora puber</i>	76	5.875,00	76	5.875,00	100,0%	100,0%
Negrita	<i>Spondyllosoma cantharus</i>	1	365,00	0	0,00	0,0%	0,0%
Ofiura	<i>Ophiura ophiura</i>	1	N/A	1	N/A	100,0%	N/A
Ofiura lisa	<i>Ophioderma longicauda</i>	94	1.119,00	94	1.119,00	100,0%	100,0%
Patexo	<i>Polybius henslowii</i>	128	1.394,00	128	1.394,00	100,0%	100,0%
Pulpo	<i>Octopus vulgaris</i>	616	341.748,00	613	340.800,00	99,5%	99,7%
Quisquilla	<i>Palaemon serratus</i>	2	8,00	2	8,00	100,0%	100,0%
Santiago	<i>Scyllarus arctus</i>	3	145,00	3	145,00	100,0%	100,0%
Sastre	<i>Galathea strigosa</i>	11	328,00	11	328,00	100,0%	100,0%
Tabernero	<i>Ctenolabrus rupestris</i>	28	531,00	28	531,00	100,0%	100,0%
Total		2.023	440.357	2.002	438.252,00	99,0%	99,5%

## 2.3 Version details

Details on the version of the fisheries program documents used for this assessment are presented in **table 2.4**, as required in the 'MSC Surveillance Reporting Template v2.01'.

**Table 2.4.** Details on the versions of the fisheries program documents used for this assessment

Document	Version number, date of publication (and date effective)
MSC Fisheries Certification Process	FCP v2.1
MSC Fisheries Standard	Version 2.0, 1 October 2014 (1 April 2015)
MSC General Certification Requirements	Version 2.3, 31 August 2019 (28 February 2019)
MSC Surveillance Reporting Template	Version 2.01, 28 March 2019 (28 March 2019)



## 3 Results

### 3.1 Surveillance results overview

#### 3.1.1 Summary of conditions

**Table 3.1** lists the conditions raised in the PCR of the fishery, and also presents their status after current surveillance audit.

As a result of current surveillance audit, condition 3 was closed and PI 3.2.2 re-scored (see **section 3-4** for the re-scoring table), while remaining conditions remain open (two 'on target' and on 'behind target'). The CAB identified exceptional circumstances for two of the condition and therefore the deadline was extended beyond the certification period, and milestones and action plan revised (**section 3.2** present the details on the progress for each of the conditions).

**Table 3.1.** Summary of conditions

Condition number	Condition	Performance Indicator (PI)	Status	PI original score	PI revised score
1	Before the end of the certification cycle, evidence must be presented that shows there are well-defined HCRs in place which are responsive to the state of the octopus stock in the coast of Asturias. Management tools and measures should ensure that the exploitation rate is adequate to the octopus population status and are expected to keep the stock fluctuating around a sustainable long-term highly productive level and above an acceptable risk range.	1.2.2	<b>On target (milestones and action plan revised)</b>	<b>75</b>	<b>Not revised</b>
2	By the third surveillance audit, short and long-term objectives for the fishery which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, need to be explicitly included within the fishery management plan. There should also be a clear means of assessing performance relative to these objectives.	3.2.1	<b>Closed</b>	<b>60</b>	<b>80</b>
3	By the third surveillance audit, evidence shall demonstrate that Information on the fishery's performance and management action is available on request, and explanations for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity occurs	3.2.2	<b>On target</b>	<b>75</b>	<b>Not revised</b>
4a	By the fourth year, the fishery must provide evidence that: (i) the monitoring, control and surveillance system implemented in the fishery has demonstrated an ability to enforce relevant management measures, strategies and/or rules (including the regulation limiting the maximum number of traps per vessel), and (ii) that professional fishers are being inspected consistently and sanctions applied.	3.2.3	<b>Behind target (milestones and action plan revised)</b>	<b>65</b>	<b>Not revised</b>

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

No TAC is set for the octopus' fishery in Asturias but instead a maximum catch of 10 t is fixed per vessel and fishing season (see **Table 3.2**), regardless of the total number of vessels targeting octopus. Since the fishing season stretches from mid-December until mid-July, UoC landings from the latest fishing season (2018/19) were already available at the time of preparing the current SA report.

**Table 3.2** Total Allowable Catch (TAC) and catch data

	Fishing season	Volume (tons)
TAC	2018/19	N/A
UoA share of TAC	2018/19	N/A
UoA share of total TAC	2018/19	N/A
Total green weight catch by UoC	2018/19	77.9
Total green weight catch by UoC	2017/18	64.9

**Table 3.3** shows an increasing trend in the sales of MSC certified octopus caught by the UoC and sold in the authorised auction points as established in the PCR. The low MSC certified sales in the 2015/16 fishing season can be explained because certification was only awarded in February 2016. Official data for total landings of octopus caught within the OFMP during the 2018/19 fishing season were still not available at the moment of preparing the current report (not all the fishers are included in the UoC), but total OFMP catches during the 2017/18 fishing season amounted to 103,451.31 Kg (Fernandez 2018a). Therefore, 75.1% of the octopus caught under the OFMP was sold as MSC certified.

As a final note, pointing that 99.7% of the octopus sold at the authorised auction points is identified as MSC, only 0.3% is sold with the generalistic code (OCT, not MSC-OCT).

**Table 3.3** Kilograms of MSC certified octopus sales in the different authorised auction points

Auction points	Kg / fishing season			
	2015/16	2016/17	2017/18	2018/19
<b>Puerto de Vega</b>	2 148	23 533	25 032	31 803
<b>Tapia de Casariego</b>	1 305	10 023	14 105	16 794
<b>Viavélez (*)</b>	2 856	23 968	25 944	29 082
<b>Ortiguera</b>	<i>Catches sold at Puerto de Vega auction point</i>			
<b>TOTAL</b>	<b>6 309</b>	<b>57 523</b>	<b>65 081</b>	<b>77 679</b>

(\*) Data provided on annual basis for the years 2016, 2017 and 2018 respectively, instead of fishing season

### 3.1.3 Recommendations

No recommendations were initially set to the fishery. However, during the first surveillance audit a recommendation was set. See **table 3-8** to see progress achieved by the client.

## 3.2 Conditions

As of the third annual surveillance there were four open conditions related to PIs 1.2.2, 3.2.1, 3.2.2 and 3.2.3. The CAB considers that the milestones placed for conditions 1 (PI 1.2.2) and 4A (PI 3.2.3) during full assessment and in the 1SA report were not going to be achievable by the client in the period specified along this certification cycle due to exceptional circumstances (FCP v2.1, 7.18.1.5) found in both conditions (see tables) that merit a timeline extension beyond the current certificate cycle.

Timelines and milestones have been modified accordingly. For every condition the CAB has assigned a milestone that must be achieved by the end of this certification period (2020). The CAB has also described what constitutes a successful overall outcome to achieve the SG80 performance level by the next certification

cycle. Modifications to the milestones have been done in a row below the previous milestones titled “Revised milestones 3SA -2019-”.

3.2.1 Table 3.4. **Condition 1**

<b>Performance Indicator</b>	<p><b>1.2.2</b></p> <p><b>SI(a) SG80-</b> Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY</p>
<b>Score</b>	<b>75</b>
<b>Justification</b>	Well defined HCRs are not in place for this fishery and some of them are not responsive to the state of the stock. Several management tools and measures (like the TAC) are not well defined and have not changed in the last 15 years, and cannot ensure that the susceptibility of octopus to removal is no higher than that which would cause the risk to octopus to be above an acceptable risk range
<b>Condition</b>	Before the end of the certification cycle, evidence must be presented that shows there are well-defined HCRs in place which are responsive to the state of the octopus stock in the coast of Asturias. Management tools and measures should ensure that the exploitation rate is adequate to the octopus population status and are expected to keep the stock fluctuating around a sustainable long-term highly productive level and above an acceptable risk range.
<b>Milestones (as in 2SA -2018-)</b>	<p>The following actions can be verified during annual surveillance audit:</p> <p>Year 1: The client shall demonstrate that it has taken steps to support the development of comprehensive HCRs.</p> <p><b>Year 2&amp;3: The fishery shall demonstrate that options for HCRs have been outlined and discussed with stakeholders, and a policy document developed.</b></p> <p>Year 4: The fishery shall demonstrate that the HCRs are responsive to the state of the stock and the policy changes agreed in previous years and have been formally accepted by the government of the Principality of Asturias with clear evidence of the implementation of the agreed HCRs.</p>
<b>Revised milestones 3SA -2019-</b>	<p>During the first 3 years of the certification period the fishery has implemented several actions to support the development of comprehensive HCRs (i.e. continuation of the fishery on board monitoring, tracking devices in almost all vessels, CEP analysis of the CPUE indicator, OMA study and a recent stock assessment depletion model). Several possible HCRs to reduce the exploitation rate have been proposed and discussed with stakeholders within the OFMC, and options appears in several policy documents. Nevertheless, issues have arisen with candidate HCRs, and a depletion model is being applied to the fishery data. More time is required for this relevant research to be funded, undertaken and published. The CAB interpreted this as exceptional circumstances (FCP v2.1, 7.18.1.5), leading to a revision of milestones for year four and an extension of the timeline into the next certificate cycle. Therefore, in accordance with 7.18.1.5 (FCP v2.1), the CAB determines that achieving a performance level of 80 may take longer than the period of certification, so milestone for year 4 was revised and spell out what constitutes a successful overall outcome to achieve the 80 performance level over a longer, specified time period.</p> <p>As a remedial action the revised milestones are proposed as follow, and also the client prepared a revised action plan (see <b>Section 3.3</b> for more details):</p> <p><b>Year 4 (2020):</b> The fishery shall demonstrate with documents that research for delivering HCRs is ongoing and new options for HCRs have been outlined. No score change is expected</p>

	<p><b>Next certificate cycle after reassessment:</b></p> <p><b>Year 1 (2021):</b> The fishery shall demonstrate with documents that new options for HCRs have been outlined and discussed with stakeholders. No score change is expected</p> <p><b>Year 2 (2022):</b> The fishery shall demonstrate that proposed HCRs are being tested within the management system, and a policy document developed. No score change is expected</p> <p><b>Year 3 (2023):</b> The fishery shall demonstrate that well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY. SG80 would be met.</p>
<p><b>Consultation on condition</b></p>	<p>The action plan was consulted with the CEP and therefore with the DGPM. They agreed to closely collaborate with the fleet.</p>
<p><b>Progress on Condition</b></p> <p><b>Year 1 -2017-</b></p>	<p>As a result of the multi-stakeholder COFWG meetings (see <b>Section 2.4</b> for more details on the COFWG), certified vessel owners agreed on the following proposals aimed to help the design and later implementation of HCRs responsive to the state of the octopus stock in the coast of Asturias:</p> <ul style="list-style-type: none"> <li>▪ To promote the implementation of a daily and/ or weekly quota per vessel (notwithstanding current maximum quota per fishing season -10t/vessel). This proposal includes an operational methodology: (i) every February fishery data would be reviewed and assessed by the CEP; (ii) daily/weekly quotas would be discussed and agreed by the MC; (iii) agreed quotas would be implemented in the second half of the fishing season (mid-March - mid-July)</li> <li>▪ To promote a limitation on the number of fishing hours/day: Current regulation establishes that fishing is allowed from dawn to dusk from Monday until Friday (no fishing during weekends is allowed). Participants would agree to include in the OFMP a regulation establishing an earlier hour of arrival to limit fishing effort (Note: later on, when ARPESOS was created, the members decided to limit their arrival time at 17h).</li> <li>▪ To promote research on the adequacy of the different available indicators to be used as CPUE (Kg/day, Kg/trap*day, €/day), and how to integrate them in the fishery management.</li> <li>▪ To collaborate with the CEP in relevant data gathering. Certified vessels agreed to collaborate with the CEP to collect detailed information on the fishery (biologists on board taking samples, GPS installed under CEP requirement, 1 vessel in each cofradía fills a log-book with information on fishing operations – number of traps hauled and re-hauled and their respective octopus catches- using a specific form). Some of these requirements, such as the obligation to install the GPS tracking devices under CEP requirement, have already been incorporated in the OFMP.</li> <li>▪ To promote a drill on the next fishing season (2017/2018) to test drafted management measures.</li> </ul> <p>ARPESOS has committed to elaborate a report compiling all these proposals, so they can be brought up for discussion within the fishery MC, which integrates all vessels included in the fishery MP. The following OFMC meeting is scheduled for next autumn, before the next fishing season (2017/18) starts.</p> <p>On the other hand, the CEP works in parallel with the following initiatives aimed to gain knowledge on the fishery to improve its management and support the development of HCRs:</p> <ul style="list-style-type: none"> <li>▪ Biological sampling on board fishing vessels. This project started 3 years ago and it is kept in place. A consultancy firm, SIGMA, S.L., is hired for sampling twice a month throughout the fishing season (initially the sampling frequency was 4 times/month, and it was lowered after the first year). Two biologists get on board for sampling, visiting each cofradía every 10 working days approximately. They collect information on fishing operations and sample octopus catches, other retained species and</li> </ul>

	<p>discards. Samplings are also used for other supplementary studies that may provide information on stock structure (i.e. genetics, tagging<sup>3</sup>...).</p> <ul style="list-style-type: none"> <li>▪ GPS/GPRS tracking of the vessels. As explained in <b>section 2.5</b> the installation of tracking devices already started in the fishing season 2014/15 through a project commissioned to the SIGMA SL. This measure has been included in the OFMP for the 2016/17 fishing season, and although not all vessels are tracked, it is mandatory for the vessel owner to allow the installation of the device under CEP requirement. According to CEP representatives, the aim for the next fishing season (2017/18) is to have a 100% GPS/GPRS coverage in the fleet included in the OFMP.</li> <li>▪ A self-monitoring program was implemented during last fishing season (2016/17). CEP designed and distributed among the fishers a form to collect detailed information on fishing operations (number of traps hauled and re-hauled and their respective octopus catches). 1 vessel per cofradía was committed to use this form daily.</li> <li>▪ Recently, the OMA (from the University of Oviedo) has been commissioned to study the possible applicability of new tools for a scientific assessment of the octopus' fishery and assess different monitoring indicators used in other alike fisheries around the world (see <b>section 2.3</b> for more details). This study was tendered by the DGPM at the CEP's request, and it is expected to be finished by the end of 2017.</li> </ul> <p>The result of these initiatives will help CEP to achieve a detailed understanding of the fishery, which allows identifying the best CPUE indicators and how to integrate them in the management. So far, no other possible index is thought to be used as an indicator on which a HCR could be based on.</p> <p>As CEP representatives are participating in the COFWG and OFMC meetings these results have been presented and discussed with the fishers in these fora. Further, CEP representatives confirmed they share the proposed operational methodology in relation to the implementation of future HCRs discussed within the COFWG (see above). During the site visit the assessment team confirmed that certified fishers and CEP are aligned on this issue. However, both certified fishers and CEP acknowledge that discussions on the fishery management must be held at the OFMC as they would affect the whole fleet included in the MP.</p> <p>Finally, the client included in its action plan the organization of a technical workshop on the octopus fishery at a regional level (Asturias, Galicia and Portugal) to discuss scientific information on the octopus fishery and to draw conclusions on potential measures to improve the different management plans. During the site visit the assessment team could check that a similar workshop, but restricted to the Asturian fishery, was planned to be held in June 2017. The draft agenda was shown to the assessment team during the site visit. This workshop was finally postponed due to funding issues. However, although in its action plan the client mentions that WWF-Spain would collaborate in this event, the WWF representative interviewed during the site visit confirmed that no contacts were made in relation to this issue.</p>
<p><b>Progress on Condition</b></p> <p><b>Year 2 -2018-</b></p>	<p>The monitoring implemented by the CEP aimed to gain knowledge on the fishery to improve its management and support the development of HCRs is still ongoing:</p> <ul style="list-style-type: none"> <li>• Biological sampling on board fishing vessels. This project started in the 2014-15 fishing campaign and it is kept in place. A consultancy firm, SIGMA, S.L., is hired for sampling twice a month throughout the fishing season (initially the sampling frequency was 4 times/month, and it was lowered after the first year). Two biologists get on board for sampling, visiting each cofradía every 10 working days approximately. They collect information on fishing operations and sample octopus catches, other retained species and discards. Since 2016 all vessels included in the 2016/17 OFMP are bound to collaborate with this sampling (by getting a biologist on board) under CEP request. Therefore, this on board sampling has been extended to the majority of the UoA in the latest years. In the 2017-18 fishing campaign, samplings were done on 7 different vessels from 5 different ports</li> </ul>

<sup>3</sup> Tagging experiments were implemented but recaptures were very low and showed very little displacement. As a result CEP decided to abandon this technique



(Figueras, Tapia de Casariego, Ortiguera, Puerto de Vega and Cudillero) along 16 fishing trips.

- GPS/GPRS tracking of the vessels. The installation of tracking devices already started in the fishing season 2014/15 through a project commissioned to the SIGMA SL. This measure has been included in the OFMP for the 2016/17 fishing season. In the 2017-18 fishing campaign this measure is mandatory for all vessels included in the OFMP; 43 vessels out of 45 were tracked (only two vessels that started late in the fishery did not install a GPS, although it is CEP intention to do it before the next fishing campaign).

- A self-monitoring program was implemented during last fishing season (2016/17). CEP designed and distributed among the fishers a form to collect detailed information on fishing operations (number of traps hauled and re-hauled and their respective octopus catches). Only 1 vessel per cofradía was committed to use this form daily in 2016-17. This data has not been analysed and the assessment team did not receive new information on the status of this program.

The CEP is using data from the different monitoring explained above to try different CPUE that better show the status of the stock. The intention is to compare current CPUE with the CPUE in the last 5 years and take decisions before and/or along the fishing season if some additional harvest control would be necessary. Using this CPUE indicator a proposal will be discussed inside the OFMC and if agreement is achieved, the proposal will be shifted to the DGPM to being implemented. The two harvest control measures that has been proposed so far for reducing the effort are: 1) reduce the fishing hours per day and 2) establish a daily and/or weekly quota per vessel. At the March 2018 meeting of the OFMC the CEP proposed a weekly quota of 400 kg per crew member (a similar measure was preliminary discussed in the October 2017 OFMC meeting). This proposal was sent to all fishing guilds included in the OFMP for consulting. Due to the lack of transparency at this stage of the decision making process, the assessment team does not know how supported is this proposal by the fishing sector, and if it is the DGPM intention to include it in the OFMP for the next fishing campaign. Based on the OFMC meeting notes, 3 out of 4 of the ARPESOS (=UoC) fishing guilds agreed with this measure, but other fishing guilds of the UoA participating in the OFMP did not agree. ARPESOS has also sent a similar proposal to discuss in the October 2017 OFMC meeting.

Another con-current initiative for developing a HCR has been developed by the Asturian Marine Observatory (OMA, University of Oviedo). The DGPM commissioned the OMA a work for studying the possible applicability of new tools for a scientific assessment of the octopus' fishery. The objectives of this study are directly related to the development of a HCR:

1. Gain understanding on the biology of octopus and its changes along time.
2. Describe and analyze the fishery statistics and its evolution along time.
3. Find forecasting variables that could be used as management tools.
4. Develop and propose a HCR incorporating the forecasting capacity of some of the variables analyzed, and propose reference points.

**Forecasting variables:** in the OMA report a positive relationship of the CPUE has been found with the sea surface temperature of the occidental coast of Asturias 5 and 13 months before the starting of the fishing season (see **section 2.8**). Other possible forecasting variables checked were winds, upwelling index and the North Atlantic Oscillation (NAO), but no relevant results were found. Nevertheless, the head of the study considers that the relationship found with temperature is weak for establishing a HCR based on it.

**HCRs:** the OMA has proposed several possible HCR based on the relationship between CPUE in December and total catch at the end of the fishing season (see **section 2.8**). These possible HCRs were explained and discussed in the March 2018 meeting of the OFMC. The debate was polarized between the fishing guilds more motivated to the establishment of a HCR (ARPESOS was in favor) and the rest of the UoA.

The OMA study also tried a forecasting model to estimate an annual TAC for the fishery. A Surplus Production Models was tried but results were not reasonable and with a large uncertainty, so the model was dismissed. While a new formal study gets funded, the OMA is committed to informally keep working on this topic. Actually, after the report was delivered, the OMA successfully tried depletion models on this fishery in collaboration with Rubén Roa-

	<p>Ureta, an independent consultant; since this work is still preliminary the assessment team did not have access to the analysis' results.</p>
<p><b>Progress on Condition</b></p> <p><b>Year 3 -2019-</b></p>	<p>There are currently 3 initiatives in order to set in place a well defined HCR:</p> <ol style="list-style-type: none"> <li>1) OMA study: TAC proportional to <math>CPUE_{DEC}</math></li> <li>2) CEP monitoring: daily quotas after April if <math>CPUE_{DEC-JAN}</math> is below historic levels</li> <li>3) Stock assessment depletion model: HCR not defined yet</li> </ol> <p>In the first two years after the certification, options 1 and 2 of the HCR have been developed and discussed with the fishing sector and stakeholders within the Octopus Fishery Monitoring Committee (OFMC). Option 1 has been extensively explained in the 2SA report. Along the 3SA the CEP provided documentation and explained the CAB the second option considered for setting a HCR.</p> <p>This second option has been developed by the CEP using the <math>CPUE_{DEC-JAN}</math> (CPUE at the beginning of the fishing season during the months of December and January) based on both, the on-board monitoring and the fishery landings data (see section 2.2.6 for details). Under this option, effort reduction measures would be only implemented in April if the CPUE is below the minimum observed in the previous 5 years. The measures to reduce effort would be an early daily closure of the fishery at 16h (instead of at 17h) and a maximum daily quota of 60, 120 or 180kg for 1, 2 or &gt;2 crew members respectively.</p> <p>The CAB considers that the first option for a HCR is consistent with SI(a) SG80, since it seems to ensure that the exploitation rate is reduced as the PRI is approached, and it is expected to keep the stock fluctuating around a target level consistent with (or above) MSY. Nevertheless, we do not consider that option 2 for HCR would actually reduce significantly the exploitation rate since it would only take place late in the season (April), when the number of boats and octopus landings are considerably reduced. Moreover, the daily quotas proposed (60, 120 or 180kg for 1, 2 or &gt;2 crew members respectively) were set way over the observed <math>CPUE_{APR-JUL}</math> usually between 20-50 kg/boat (Fernández 2018a), so most probably no exploitation rate reduction would be expected if applied. Moreover, if this measure is applied only after April, most of the females have already laid the eggs and therefore its effectivity would be limited (José Luis Acuña, personal communication).</p> <p>Both HCR options have been discussed in several meetings of the OFMC (CS 2018, 2019) and are included in the 2017-2018 fishing season report as possible measures to include (Fernández, 2018a). The second option for HCR was better accepted by the fleet and has been finally proposed to be included in the OFMP (Fernández 2018b). Despite its consideration in the previous policy documents, at the end none of the HCRs discussed were finally included in the OFMP for the 2018-19 fishing season (Resolución de 4 de Diciembre de 2018).</p> <p>Currently the fishery is working on a third option for setting HCRs based on a stock assessment depletion model that the DGPM has recently commissioned (July 2019) to Rubén Roa-Ureta, an independent consultant with strong expertise in this type of fisheries and models (DGPM 2019b). The model is expected to estimate reference points (<math>MSY</math>, <math>B_{MSY}</math>,...) and a HCR would be set based on the reference points derived from the model results. No more information was given to the CAB regarding this third HCR option during the site visit. For more information on this model see section 2.2.6 of this report.</p>
<p><b>Status</b></p>	<p>The fishery has implemented several actions to support the development of comprehensive HCRs (i.e. continuation of the fishery on board monitoring, tracking devices in almost all vessels, CEP analysis of the CPUE indicator, OMA study and a recent stock assessment depletion model). Several possible HCRs to reduce the exploitation rate have been proposed and discussed with stakeholders within the OFMC, and options appears in several policy documents.</p> <p>Based on the information presented above, the assessment team considers this condition to be 'ON TARGET'.</p> <p>Nevertheless, issues have arisen with the two possible HCR initially thought and a third one is now being developed, which is seriously compromising meeting the milestones set for year</p>



	<p>4 in 2020. CEP and OMA, responsible institutions for the first two HCR proposed, consider that strong uncertainty is still under the HCR considered so far and more time for researching is necessary to develop a HCR derived from stock assessment reference points. A depletion model is being applied but old un-digitalized data was needed which has slow down the process. More time is required for this relevant research to be funded, undertaken and published. Moreover, the OFMP affects more fishing organizations (Cudillero, Oviñana, Luarca and Figueras) beyond the ones included in the this MSC UoC (Tapia de Casariego, Viavélez, Ortiguera, and Puerto de Vega). This circumstance has created two groups with different interests and timing.</p> <p>The CAB interpreted these as exceptional circumstances (FCP v2.1, 7.18.1.5), leading to a revision of milestones for year four and an extension of timelines into the next certificate cycle to match management timelines. Revised milestones were proposed as a remedial action (see above) and the client prepared a revised action plan in accordance (see <b>Section 3.3</b>).</p>
<p><b>Additional information</b></p>	<p>The revised client action plan is presented in section 3.3. However, previous actions plan included in the PCR is presented below:</p> <p><i>The proposal for actions to be carried out entails the following plans:</i></p> <p><i>January – October 2016: Joint assessment by the parties involved in the OFMP of current knowledge about capture control and the determination of the variables that will be needed for finding out and recording within a given time period the number of specimens, weight, location, variability of fishing grounds, seasonal fluctuation, etc. with regard to the specific determination of the CPUE in the assessed area.</i></p> <p><i>The biological information needed to establish correlations that will enable the adaptation of management systems will be taken into account, with a basic review of the HCRs and the TAC in order to ensure the sustainability of the stock and to avoid its over-exploitation above a risk level acceptable for the population.</i></p> <p><i>A research programme with the methods and instruments needed to properly record the HCRs and any diagnostic instruments needed will be designed with the biological indices to be taken into account defined.</i></p> <p><i>The objective is to establish a harvest threshold risk level for a given period. This implicitly means proposing minimal models of resource abundance based on which a fishery control mechanism would be established, with the possibility of closing the fishery when it is deemed that the population has reached an acceptable minimum.</i></p> <p><i>These actions will be developed jointly, and will result in clear and firm cooperation commitments between the regional administration, fishermen's guilds included in the Principality of Asturias' Octopus OFMP and the CEP. Other organisations, such as the Navia-Porcía Coastal Action Group will also be collaborating.</i></p> <p><i>A document containing objectives, goals and a commitment to agreements among all the parties involved and that will ensure rigorous control of catches for sustainable self-management of stocks will be drawn up.</i></p> <p><i>October 2016 – September 2018: Application of the methodology designed in the previous phase with the recording and harvest control by the fisheries sector under the supervision of the CEP in order to determine acceptable levels of biological risk.</i></p> <p><i>Working sessions between all the parties involved to follow up the work will be held based on a pre-established schedule, and the results obtained by applying the recording and harvest control instruments proposed will be assessed. Follow-up reports will be drafted with the results obtained in the successive fishing campaigns.</i></p> <p><i>November 2016 – December 2018: Organisation of technical workshops on octopus fishery which will address the Forum's recommendations on octopus fishery in northwestern Spain, held in Santiago de Compostela in January 2015. The aim – among others – of these workshops will be an analysis and discussion by the scientific community of the results that are being obtained from field work, and conclusions will be drawn on measures to implement in the management plans in order to ensure the sustainability of the resources.</i></p>

	<p><i>This action will be organised in collaboration with the Navia-Porcía Coastal Action Group and the WWF, calling on participation from the scientific community and industry not only in Asturias, but also Galicia and Portugal, or other communities related to octopus fishing.</i></p> <p><i>June 2018 – November 2018: Drafting of the conclusions of the research programme, with recommendations to be considered by the administration when developing future management plans that will ensure exploitation based on the fluctuations of the species and that will ensure the non-overexploitation of resources that are below risk levels.</i></p> <p><i>June 2018 – November 2018: Definition and incorporation of the conclusions and recommendations obtained in the research programme into the guidelines for the Octopus MPs in the Principality of Asturias, and addition thereof to the text published in the Official Gazette of the Principality of Asturias (BOPA), ensuring the sustainability of the stock through management tools and measures.</i></p> <p><i>The objective is to incorporate exploitation control measures that complement current fisheries management strategies with regard to the octopus catch (annual quota per vessel, number of creels per vessel, minimum weight, closed season) into criteria relating to the species' biomass, considering the results per unit of fishing effort not for the whole period, but rather continuously, ensuring that a minimum of octopus fishing is not exceeded.</i></p> <p><i>This way, should the results so indicate, a limitation could be placed on the current criteria for the closed season, or on the number of traps included in the current HCR, or a review – depending on the trend of the catches – carried out of the minimum authorised weights.</i></p> <p><i>November 2018 – November 2019: Implementation of the OFMP for the 2018-2019 campaign, collection of information and assessment of results.</i></p> <p><i>Analysis of the possibility of establishing a protocol for self-management of the fishery by each guild included in the plan, within the general framework, based on the maintenance of the fishing effort at limits acceptable for the sustainability of the species, with the possibility of the closure of the fishery when this limit is reached.</i></p> <p><i>The co-responsibility for coordinating the proposed targets will be assumed by the member of the four fishermen's guilds involved in the certification process for which the Puerto de Vega guild acts as coordinator.</i></p> <p><i>Achieving the objectives and goals proposed requires the necessary involvement of the politicians and technicians deemed responsible as determined by the DGPM and leveraging the already-existing formal channels of information and discussion of the octopus MP, which provides for meetings and agreements between: the other members of the fishermen's guilds included in the Octopus OFMP of the Principality of Asturias; those politically and technically responsible for the CEP; and – to a lesser extent – other agencies and bodies of local scope, such as the Navia-Porcía Zone Coastal Action Group.</i></p>
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3.2.2 Table 3.5. **Condition 2**

<b>Performance Indicator</b>	<p><b>3.2.1</b></p> <p><b>SI(a) SG80-</b> 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</p>
<b>Score</b>	60
<b>Justification</b>	<p>The MP for the Octopus in Asturias implicitly determines objectives consistent with achieving the outcomes expressed in Principles 1 and 2 of the MSC. Certain general objectives are also spelt out in the Ley 2/1993 of the Principality of Asturias (see PI 3.1.3).</p> <p>However, short- and long-term objectives are not clearly spelt out in the MP; it states explicitly only that the plan's objective is to preserve the resource and improve its marketing within the geographical scope of the participating fishermen's guilds (Resolution of 26 November 2014).</p>

	The lack of specificity in the objectives shows that these might not be consistent with achieving the outcomes expressed in Principles 1 and 2 of the MSC.
<b>Condition</b>	By the fourth surveillance audit, short and long-term objectives for the fishery which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, need to be explicitly included within the fishery management plan. There should also be a clear means of assessing performance relative to these objectives
<b>Milestones</b>	<p>The following elements can be verified during annual surveillance audit:</p> <p><b>Year 1:</b> the client shall demonstrate there is documented evidence that policy options based on defined objectives have been outlined and discussed with stakeholders. The client should work to encourage this first stage in forums and meetings providing information and data from the fishery.</p> <p><b>Year 2 &amp; 3:</b> all stakeholders involved in the management of the fishery in collaboration with the scientific community should be working to develop a specific OFMP for this fishery with clear, specific short and long term objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2. Client should provide deliverables that shows the state of the work done.</p> <p><b>Year 4:</b> clear evidence that the agreed policy has been implemented should be provided. The client must provide information on the existence and implementation of a OFMP specific to this fishery, which is consistent with achieving the outcomes expressed by MSC Principle 1 and 2. SG80.</p>
<b>Consultation on condition</b>	The action plan was consulted with the CEP and therefore with the DGPM. They agreed to closely collaborate with the fleet.
<b>Progress on Condition</b>  <b>Year 1 -2017-</b>	<p>The client showed evidences that policy options based on defined objectives have been discussed within the multi-stakeholder COFWG (see section 2.4 for more details on the COFWG). At the beginning, the discussions focused on the need to include as many vessels in the certificate as possible to ensure that management decisions implemented to achieve MSC requirements could be effectively adopted by the fishery MP. Otherwise, conflicts of interests between the certified and non-certified fishers could arise and block any decision affecting fishery management. This was identified as a priority by fishers and led to a relevant initiative: the creation of ARPESOS (see section 2.4 for more details), including the development of entry protocols and internal regulations (still in progress).</p> <p>Further, it was considered that more detailed information on the likely monitoring indicators, reference points and subsequent HCRs was needed before outlining a policy option. Therefore, this work was decided to be postponed until CEP could come back with the analysis of the study commissioned to the OMA.</p> <p>The technical workshop on the octopus' fishery included in the client's action plan and scheduled for June 2017 (see progress on condition 1 for more details) was also thought as a valuable tool to bring up and discuss fishery-specific policy objectives. However, this workshop has been postponed.</p>
<b>Progress on Condition</b>  <b>Year 2 -2018-</b>	<p>The client showed evidences that policy options based on defined objectives have been discussed within several multi-stakeholder forums: the OFMC, the meeting between ARPESOS and CEP and the technical workshop on the octopus' fishery (see section 2.5 for more details on the OFMC).</p> <p>It is still considered by the stakeholders that more detailed information is still needed on the likely monitoring indicators, reference points and subsequent HCRs before outlining a policy option that defines clear, specific short and long term objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2. CEP and OMA are still working on analysing information to have a better understanding on the fishery to develop objectives based on this information.</p>

	<p>A formal proposal to define short and long term objectives has been presented by ARPESOS in the October 2017 OFMC meeting. In this meeting the CEP was commissioned to write a draft of objectives for the OFMP with the agreement of all stakeholders present. During the 2SA the CEP informed that they are already working on this task and the work for defining objectives expressed by MSC's Principle 1 is well advanced. The assessment could check this by reviewing the meeting notes of the OFMC and the study published by the OMA.</p> <p>On the other hand, regarding objectives related to P2, the CEP admitted that state of the work is not as developed as for P1 objectives. Nevertheless, information on by-catch and survival on the species retained in the traps is being collected since the 2014-15 fishing season based on an on board observers program (see section 2.9 and Condition 1 – yearly progress for more information). The GPS/GPRS tracking program is also collecting information on the effort intensity and the type of substratum where the fishing operation takes place and GIS maps were shown to the assessment combining both types of data. The CEP considered this information the base for developing P2 objectives.</p> <p>In the meeting celebrated between ARPESOS and CEP the development of specific objectives for the fishery was also one of the topics debated.</p> <p>The technical workshop on the octopus' fishery included in the client's action plan and scheduled for June 2017 was finally celebrated on the 11th of November 2017. Based on several stakeholders' opinions, this forum was a valuable tool to bring up and discuss fishery-specific policy objectives based on reliable information. The forum was more focus on new information for understanding the fishery than on developing and/or proposing specific objectives.</p>
<p><b>Progress on Condition</b></p> <p><b>Year 3 -2019-</b></p>	<p>Objectives discussed within the OFMC in the past two years are now explicit in the OFMP (Resolución de 4 de Diciembre de 2018). P1 objectives are defined in terms of addressing further declines, rather than specifically maintaining optimum yields or biomass levels. P2 objectives are focus on the impact over other species and the ecosystem. The fishery objectives currently implemented are already explicit in the OFMP:</p> <ol style="list-style-type: none"> <li>1. — The main objective of the management plan for the 2018/2019 campaign is to maintain the balance between the fishing effort and the abundance of the resource, which until now has guaranteed the sustainability of the fishery. For this, and given the risk that changes in socioeconomic conditions may alter the described equilibrium situation, it is considered appropriate to maintain the general rules of previous campaigns and also establish the following specific objective: <ul style="list-style-type: none"> <li>• Determine if there is a risk of overfishing based on early indicators of the state of the stock and limit the fishing effort in the event that such risk is detected.</li> </ul> </li> <li>2. — Although the monitoring data of the octopus fishery in previous campaigns demonstrates its low impact on the ecosystem, it is intended to ensure that this situation is maintained during this campaign, or even improved as far as possible, by establishing the following specific objectives: <ul style="list-style-type: none"> <li>• Conduct at least two sampling per month with observers on board to assess the impact of the fishery on the accessory species.</li> <li>• Maintain the mortality of discarded specimens below 5%.</li> </ul> </li> <li>3. — It is also a basic objective of the management plan to ensure that biological and ecological sustainability are associated with social and economic improvements in the fisheries sector. To this end, the co-management system established in previous campaigns that involves the main actors related to this fishery through the Octopus Fishery Monitoring Committee is maintained.</li> </ol>
<p><b>Status</b></p>	<p>The CAB considers that short and long term objectives are now already explicit in the OFMP consistent with achieving the outcomes expressed by MSC's Principles 1 and 2.</p> <p>The client actions are considered appropriate with the requirements of the condition which is therefore considered to be Ahead-Target. PI was re-scored (see Section 3.4 Re-scoring Performance indicators) and the CONDITION CLOSED within the timescale agreed in the PCR.</p>



**Additional  
information**

The client actions plan included in the PCR is presented below:

*The Action Plan is based on the coordination of actions among all stakeholders involved (managers, fishermen and researchers) and follows the same model applied after the results of the pre-assessment mainly for the components of Principle 2.*

*This action will take place concomitantly with the action planned for the same period in the condition set out for PI 1.2.2., since their objectives are very similar and can be addressed together, leveraging and maximising the benefits from the time and effort invested. The results of the actions for the condition of P.I. 1.2.2 also contribute to achieving this condition, since they will include measurable objectives in the management plan.*

*January – October 2016: The parties involved in the drafting of the MP: DGPM, fishermen's guilds and the CEP will discuss what concrete and specific targets can be incorporated into the OFMP based on existing information and on the feasibility and trend studies carried out in octopus plans from previous years.*

*The science-based studies necessary to incorporate new criteria (related to the ecosystem, the environment, etc.) into fishery management will also be designed in order to thus be able to specify new short- and medium-term objectives in line with Principles 1 and 2 of the MSC. These studies will also serve to assess whatever objectives are set out in the plans, and to validate their relevance or establish any necessary corrections.*

*This action will be carried out by means of meetings between the parties involved not only in the certification, but in the entire management plan (fishermen, researchers and managers from the entire area of implementation of the MP).*

*Minutes of the meetings will be drafted and a report will be requested from the CEP on the results of the assessment and follow-up of the plans implemented and their possible application in the definition of a new plan with the introduction of concrete and measurable objectives. They will also analyse what studies are necessary to incorporate new criteria and measurable objectives into the plan.*

*October 2016 – November 2016: If – based on already-existing data – it is possible to define a measurable objective related to MSC Principles 1 and 2, the possibility of incorporating it into the plan for the following year will be discussed with the DGPM.*

*This action will be framed within any negotiations between the DGPM and the fishing guilds that will be carried out to define the Octopus OFMP and will require the agreement of all parties involved in the fishery.*

*November 2016 – September 2018: During 2016-17 and 2017-18 campaigns, scientifically-based studies designed to incorporate new criteria into the fishery and to establish concrete short- and medium-term objectives in the OFMP will be carried out. An assessment of the objectives that have been included in the plan on the basis of the information already available will also be conducted.*

*This action will be carried out by the CEP in collaboration with fishermen, and the results will be shown in reports that will enable follow-up and assessment of the action.*

*November 2016 - November 2018: Technical seminars on octopus fishery will be organised and will address the recommendations of the forum held in Santiago de Compostela in January 2015 as regards to management plans and elements for their control, assessment and follow-up. These sessions will enable the results being obtained from the research programmes of the successive campaigns to be discussed by the scientific community.*

*This action will be implemented in collaboration with the Navia-Porcía Coastal Action Group and the WWF.*

*June 2018 - November 2018: New criteria and objectives derived from the studies carried out related to Principles 1 and 2 of the MSC, as well as the plan to assess them, will be agreed with the DGPM.*

*To this end, the agreement of all parties involved in the fishery will be sought. The OFMP will be published by the OFMP and will constitute the element that announces that the action plan has been created.*

	<p><i>November 2018 – November 2019: The OFMP with the new criteria and specific objectives will be implemented and an assessment will be carried out, the results of which will be incorporated into the management plan for the following year, thereby making ongoing adjustments of the objectives based on the needs of the fishery.</i></p> <p><i>If studies in previous campaigns enable the introduction of measurable short and medium-term objectives into the exploitation plan for the 2016-2017 campaign, there is a possibility that by the third year it will be possible to show their consistency and comply with the condition. In any case, by the fourth year the objectives derived from the new studies to be carried out will already have been incorporated and there will be data demonstrating the consistency of the MP.</i></p>
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3.2.3 Table 3.6. **Condition 3**

<b>Performance Indicator</b>	<p><b>3.2.2</b></p> <p><b>SI (d) SG80</b> - Information on the fishery's performance and management action is available on request, 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</p>
<b>Score</b>	<b>75</b>
<b>Justification</b>	<p>During the consultations for the drafting of the MP each year, and during the decision-making process, information is offered on the current status and historical evolution of different fishery indicators (catches, sales, CPUE, price, octopus weight distribution, etc.). When a guild requests information, all or part of the fishery surveillance report is provided to it. However, this report – which is prepared by CEP staff – is merely descriptive and does not do a deep analysis of the data (e.g., statistical, modelling or prediction methods) nor does it give recommendations on possible measures to take. One example is the recent report from the 2013-14 campaign in which it states that "this has been the worst campaign since records have been kept", however it does not explain the possible causes or propose any actions to take.</p> <p>This information is not exhaustive nor is it distributed automatically to all stakeholders, and it does not describe how the management system responds to the new information and recommendations arising from research on and/or assessment of the fishery. There is an established decision-making process, although it does not seem to be an entirely transparent process since the information is not publicly accessible. Nevertheless, at the meetings attended by CEP technicians, these technicians advise the DGPM and the guilds on the status of the fishery and on decision-making.</p> <p>Based on the above, it can be concluded that only some information is available and given upon request, therefore this SI gets SG 60, but not all explanations are provided for any actions and there is not a formal reporting to all stakeholders; therefore this SI do not reach neither SG 80 nor SG 100.</p> <p>In conclusion, explanations shall be provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity to meet SG80d.</p>
<b>Condition</b>	By the fourth surveillance audit, evidence shall demonstrate that Information on the fishery's performance and management action is available on request, and explanations for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity occurs
<b>Milestones</b>	The following elements can be verified during annual surveillance audit:

	<p><b>Year 1:</b> the client shall demonstrate that the stakeholders have discussed what information should be included in the annual fishery reports coming from any source of information (research, monitoring and evaluation of the fishery, review activity, ...). The client is required to work actively to promote and support that a plan is established for collecting the information.</p> <p><b>Year 2&amp;3:</b> all stakeholders (but mainly CEP from fisheries administration) should be working to develop a full annual fishery report that includes all the information selected in year 1. Stakeholders should be working to develop a protocol for the decision making process of the fishery that explains how actions or lack of action is taken based on the information available. A protocol to deliver this information (annual fishery reports and explanations for actions or lack of action) to any stakeholder, upon request, should also be developed. Client should provide deliverables that shows the state of the work done.</p> <p><b>Year 4:</b> the client should provide clear evidence that the Information on the fishery's performance and management action is available on request, and explanations for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity occurs.</p>
<b>Consultation on condition</b>	The action plan was consulted with the CEP and therefore with the DGPM. They agreed to closely collaborate with the fleet.
<b>Progress on Condition</b>  <b>Year 1 -2017-</b>	<p>As explained in section 2.5, a Monitoring Commission (OFMC) was included in the 2016/17 OFMP and commenced its activity in February 2017. As described in the OFMP, the Commission should function as an advisory forum where different stakeholders can present and discuss information relevant to the fishery and, if needed, propose management measures and regulations.</p> <p>WWF-Spain expressed its interest in participating in the OFMC, application that has been approved in the first meeting of the OFMC (minutes showing this was handled to the assessment team during the site visit). Therefore, it is expected that this NGOs takes part in the next OFMC meeting.</p> <p>During the first meeting of the OFMC held in February 8, 2017, functions and operational protocol of the Committee were agreed. This protocol includes the commitment on behalf of the CEP of sharing in advance with all the other stakeholders the fishery annual report along with management proposals to be discussed in the meeting. The CEP representatives presented and explained the kind of information included in the fishery annual reports and also provided details of other studies or initiatives such as the implementation of tracking devices on board and the study commissioned to the OMA (see progress on Condition 1 for more details). All these issues were discussed and agreed.</p> <p>Although, so far, the CM is just an advisory body, all stakeholders interviewed trust that all decisions taken at these meetings will be later included in the MP. The problem lies in achieving consensus among fishers (mainly between those included in the certificate and the rest). Nevertheless, during the site visit everybody agreed on considering the establishment of the OFMC as a great step forward in term of exchanging information and improving decision making.</p> <p>The CEP is developing a public dissemination website specific for this fishery. This website provides to the general public information on the fishery, including latest catches, main fishing grounds, regulation, gears used, etc. The website is still under work but a test version was shown to the assessment team during the site visit. So far the information posted is very general and with the focus on the public society and it is not valid as a transparent tool of management related information in a decision making process.</p> <p>CEP representatives explained that according to their standard procedure, any modification made to the fishery management must be based on a technical justification and an internal file had to be created. However, they recognized this was not public available and sometimes it may not be sufficiently shared with those affected by the decision. They believe the protocol developed for sharing and discussing information at the MC, together with the public website they are preparing will solve this shortage.</p>



**Progress on  
Condition**

**Year 2  
-2018-**

As explained in section 2.5, an Octopus Fishery Monitoring Commission (OFMC) was created in the 2016/17 OFMP and commenced its activity in February 2017. Two more meetings were celebrated in October 2017 and March 2018. The Commission should function as an advisory forum where different stakeholders can present and discuss information relevant to the fishery and propose management measures and regulations. WWF-Spain, a stakeholder which had showed interest in the Commission, was invited to participate and attended both meetings (reports discussed in the meeting were provided to WWF in advance, as to the rest of the participants).

How decision and proposals should be taken inside the OFMC is not clear at this point to the assessment team. The OFMC is just as a consultative body, nevertheless, the UoC vessel owners consulted would like (and expect) that in the future the OFMC proposals become binding. The OFMC has worked so far as a forum for debating different proposals between stakeholders around the octopus' fishery. A protocol dated in July 2018 for information sharing and decision making in the OFMP was delivered to the assessment team. Parts of this protocol have been discussed and agreed with the stakeholders inside the OFMC, nevertheless, to our knowledge the whole protocol has not been delivered to stakeholders yet.

This "Information sharing and Decision making" protocol established that the OFMC is the main forum for information sharing around the octopus' fishery and for debating management proposals. Nevertheless, some stakeholders included in the UoA but outside the UoC do not agree on this and have expressed that proposals should be debated in the Federation of fishing guilds (see October 2017 OFMC meeting notes). Besides this lack of understanding the rest of the stakeholders agree on the OFMC as the right forum for debating proposals, as it is stated since the 2016-17 OFMP (see section 2.5).

The protocol established that the OFMC will have two meetings per fishing campaign. The first meeting (February-March), in the middle of the fishing season, is intended to analyze how the fishing season is going and decide if any decision should be taken. The second meeting (October-November) before the OFMP is published, is intended to review the past fishing season (the CEP provides in advance a report on the status of the fishery) and discuss management measures for the next management plan.

This protocol also defines how and when the information will be disseminated from CEP to the rest of stakeholders: (i) the agenda will be sent by the CEP before each meeting, together with relevant reports and documents (it is expected that each stakeholder shares this information internally and have a previous debate on the topics that will be discussed in the meeting), (ii) minutes will be sent after each meeting.

Regarding decision making, the protocol leaves clear that the creation of the OFMC has not changed how final decisions are taken in the octopus' fishery:

"The final process for managing the plan [OFMP] will be the same as before: after the second meeting [October-November], and with prior knowledge of the topics discussed therein, the Chief of Fisheries Management Service [Jefe de Servicio de Ordenación Pesquera] will send a draft Resolution to all fishing guilds establishing a deadline for allegations and, after hearing all the interested, the Principality [of Asturias] will approve by Resolution the rules for the following fishing campaign".

The assessment team could not meet during the current off-site surveillance with the Chief of Fisheries Management Service of the DGPM, therefore a clear understanding on the connection of the DGPM with the OFMC regarding the decision making is lacking. How this process for drafting a Resolution for the OFMP, the hearing of stakeholders and the approved final Resolution is decided, is not explained in the protocol. The lack of meeting notes available for the assessment team on this final stage of the decision making does not allow us to have a clear understanding of this stage.

The "Information sharing and Decision making" protocol sent to the assessment team is clearly a step forward on the transparency of the system. Nevertheless, a complete protocol for the decision making process of the fishery (focusing on how final decisions are taken by the Chief of Fisheries Management Service) that explains how actions or lack of action is taken based on the information available, is still lacking.

Besides the above, the CEP has also developed a public dissemination website specific for this fishery; <http://pulpodeasturias.es>. This website provides to the general public information

	<p>on the fishery, including main fishing grounds, regulation, gears used, information collected, videos, etc. So far the information posted is very general and with the focus on the public society and it is not valid as a transparent tool of management related information in a decision making process (the CEP annual reports on the state of the fishery, the OFMC meeting notes, the OMA report, the CEP-SIGMA on-board monitoring reports and the “Information sharing and Decision making” protocol are not posted on this website).</p>
<p><b>Progress on Condition</b></p> <p><b>Year 3 -2019-</b></p>	<p>The Octopus Fishery Monitoring Commission (OFMC) created in the 2016/17 OFMP is functioning as an advisory forum where issues and proposals are discussed between stakeholders. Nevertheless, so far, the OFMC do not propose measures and/or changes in the regulation, which is one of its objectives. A new role has been added to the OFMC in the last Management Plan (Resolución de 4 de Diciembre de 2018); “To do a follow up of the degree of execution of the objectives of the plan”. It is expected that the OFMC will review the objectives status for the first time along the next 2019-2020 fishing season.</p> <p>Fishery reports are being distributed before the meeting to all members participating in the OFMC. The fishery sector, the OMA and WWF-Spain, part of this Monitoring Committee, have received the fishery status reports (past season fishery status report -Fernández, 2018a- and in-season early indicators -Fernández, 2019a-) and the recent Decision-making protocol (DGPM, 2019a). Nevertheless, some relevant information, as the on-board monitoring reports (Fernández, 2019b) are not being distributed by the CEP.</p> <p>The recent Decision-making protocol (DGPM, 2019a) has been discussed within the OFMC, stakeholders could send their comments, and after several drafts a final version is now available. This protocol is specific for the OFMP and clearly defines the steps in the decision-making process:</p> <ol style="list-style-type: none"> <li>1- Proposals to consider: within the OFMC.</li> <li>2- Collection and dissemination of information: CEP monitoring.</li> <li>3- Evaluation of the information: within the OFMC.</li> <li>4- Analysis of the different options and proposed regulations for fisheries management: outside the OFMC, under the responsibility of the Head of Fisheries Management Service - <i>Jefe de Servicio de Ordenación Pesquera</i> (from the DGPM).</li> <li>5- Allegations of the interested stakeholders: outside the OFMC, administrative process.</li> <li>6- Decision making and management application (final OFMP): outside the OFMC, under the responsibility of the Head of Fisheries Management Service and the Managing Director – <i>Director General</i> (from the DGPM).</li> <li>7- Evaluation of the effectiveness of decisions (responsible is not indicated).</li> </ol> <p>Some stakeholders have criticized (e.g WWF-Spain) that the OFMC it is only a consultative body without capacity for taking decisions, and that the DGPM persons responsible for taking those decisions (Head of Service and Managing Director of the DGPM) do not participate in the OFMC. Moreover, as the DGPM explained the CAB during the site visit, in the step 5 the allegations are not answered and explanations for any actions or lack of action are not given. Although explanations are not given the protocol establishes (step 6) that new proposed measures will be accepted if no allegations take place by the fishing sector, and in case of a conflictive measure decision will be taken by simple majority. This step also establishes that the CEP will be the institution for consulting new proposals not discussed in the OFMC.</p> <p>Besides the share of information within the OFMC, a public website, specific for this fishery (<a href="http://pulpodeasturias.es">http://pulpodeasturias.es</a>), provides information on the octopus fishery to the general public. So far the information posted is very general and with the focus on the public society and it is not valid as a transparent tool of management related information in a decision making process (the CEP annual reports on the state of the fishery, the OFMC meeting notes, the CEP-SIGMA on-board monitoring reports and the “Information sharing and Decision making” protocol are not posted on this website).</p>
<p><b>Status</b></p>	<p>Reports and information are shared and discussed within the OFMC, although the committee is so far not proposing management measures, although this is one of its expected roles under the OFMP. The CAB has received the Decision-making protocol (DGPM, 2019a) which has</p>

	<p>been also sent to all stakeholders. Finally, the website also increases the transparency of the system and gives the general public a great tool for understanding the fishery.</p> <p>Based on the information presented above, the assessment team considers this condition to be 'ON TARGET'.</p> <p>Nevertheless, despite the work done under the OFMC, decisions are finally taken outside this forum by the Head of Service and Managing Director of the DGPM, who do not participate in the OFMC. Moreover, the stakeholders allegations to the yearly proposed management plan are not answered, and therefore, explanations for any actions or lack of action are not consistently given. This circumstance does not allow to close this condition on the decision making process. Although the progress is very relevant, in order to close the condition a further step is still necessary for explaining in the decision making process how actions or lack of action will be taken based on the information available.</p>
<b>Additional information</b>	<p>The client actions plan included in the PCR is presented below:</p> <p><i>The Action Plan includes measures to develop in order to relevant information for the management of the fishery is organized, completed and accessible to all stakeholders:</i></p> <p><i>Year 1: The implementation of a protocol for the diffusion of the generated information in the processes of evaluation and monitoring of the fishery will be arranged. This protocol will affect the studies and reports referred in the Action Plan of the indicator 3.2.1.</i></p> <p><i>In the protocol minimum contents of the reports will be established, which shall include at least the sources of obtaining information (researches, surveillance, etc.), established methodology and, where appropriate, recommendations and proposals about possible measurements to include in the management plan.</i></p> <p><i>In the protocol the notification system of the report will be fixed to all stakeholders, not only in the certification, but throughout the management plan (fisher, researchers and managers in the application area of the management plan). It must be a system that evidences the information has been received by stakeholders. It can contemplate an argument period to which stakeholders make contributions to the results of reports. Mass media will be also included (web, publications) in order to the information that is not considered eligible for protection may come to any stakeholder and the general public.</i></p> <p><i>The protocol will be agreed and approved for all the stakeholders in the fishery in the meetings referred to the Action Plan for the indicator 3.2.1 and it will be reflected in the corresponding proceedings, which will evidence the work done.</i></p> <p><i>Year 2 and 3: A protocol will be applied, making the reports as it shows and its effectiveness will be reviewed in the follow-up meetings of the management plan, consulting all the stakeholders about its validity and introducing relevant improvements. As a sample of the work done, reports, notifications to the parts, allegations, requests for additional information and samples of the diffusion will be included. The results of the evaluation of the protocol will be also provided</i></p>

#### 3.2.4 Table 3.7. Condition 4A

<b>Performance Indicator</b>	<p>3.2.3</p> <p><b>SI(a) SG80</b> - A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.</p> <p><b>SI(b) SG80</b> - Sanctions to deal with non-compliance exists, are consistently applied and thought to provide effective deterrence</p> <p><b>SI(d) SG80</b> - There is no evidence of systematic non-compliance.</p>
<b>Score</b>	65

Justification	<p>The system has proven to be sufficient to meet most of the rules set out in the MP. However, it is known that there is a lack of robustness to enforce the rules exhaustively in relation to the total number of traps set at sea or to monitor the unloading of the catches. This seems to be caused by:</p> <ul style="list-style-type: none"> <li>i. Shortage of operational means on behalf of the DGPMs Office of Fisheries Inspection and Surveillance Unit to enforce at sea the regulation limiting the maximum number of traps per vessel</li> <li>ii. The <i>guardapescas</i> perform other tasks beyond those provided for in the Decree 23/1995, limiting the effectiveness of their control and surveillance activities.</li> <li>iii. The volume and number of undersized individuals is not recorded (even for statistical purposes) and those illegal individuals are either released back to sea (if the octopus is alive) or given back to the vessel owner (if it is dead).</li> </ul> <p>Evidence provided also showed that there is a systematic non-compliance with the regulation limiting the maximum number of traps per vessel. Despite the non-compliance is documented, no sanctions were issued relation to lack of compliance with this regulation.</p> <p>In conclusion, it was found that the fishery fails to meet SG80 for SI(a), SI(b) and SI(d).</p>
Condition	<p>By the fourth year, the fishery must provide evidence that: (i) the monitoring, control and surveillance system implemented in the fishery has demonstrated an ability to enforce relevant management measures, strategies and/or rules (including the regulation limiting the maximum number of traps per vessel), and (ii) that professional fishers are being inspected consistently and sanctions applied.</p>
Milestones (as in 2SA -2018-)	<p>The following elements can be verified during annual surveillance audit:</p> <p><u>Year 2:</u> All stakeholders (but mainly guilds and fisheries administration) should be working to develop a protocol that clearly details the <i>guardapescas</i>'s roles and responsibilities regarding the OFMP. Evidences must be provided that relevant stakeholders have discussed the issue of non-compliance with the maximum number of traps per vessel. Evidences that work is being done in relation to improve the enforcement capacity shall be provided.</p> <p><b><u>Year 3:</u> A protocol that clearly details the <i>guardapescas</i>'s roles and responsibilities is ready and multi-stakeholder discussions on how to include it in the management system has started. A set of possible solutions regarding the issue of non-compliance with the regulation limiting the maximum number of traps per vessel has been proposed for its discussion and assessment. Evidences that enforcement capacity has been improved shall be provided.</b></p> <p><u>Year 4:</u> The protocol that clearly details the <i>guardapescas</i>'s roles and responsibilities is included in the management system. Evidences that professional fishers are being inspected consistently and sanctions applied, and the monitoring, control and surveillance system has demonstrated an ability to enforce relevant management measures, strategies and/or rule (including the regulation limiting the maximum number of traps per vessel).</p>
Revised milestones 3SA -2019-	<p>The capacity of the fishery to fulfil this condition is now depending on two long administrative procedures that are beyond the hands of the client and even of the DGPM: 1) a large budget allocation in coordination with EU funds (vessel construction) and 2) public staff positions openings (enforcement officers). Both procedures have to be approved by higher instances in the government of Asturias, beyond the DGPM and the Regional Ministry of Rural Affairs and Fisheries. The CAB interpreted these as exceptional circumstances (FCP v2.1, 7.18.1.5), leading to a revision of milestones for year four and an extension of the timeline into the next certificate cycle. The CAB also spell out what constitutes a successful overall outcome to achieve the 80 performance level over a longer, specified time period.</p> <p>As a remedial action the revised milestones are proposed as follow, and the client presented a revised action plan (see <b>Section 3.3</b> for more details):</p>

	<p><b>Year 4 (2020):</b> The protocol that clearly details the <i>guardapesca</i>'s roles and responsibilities is adopted in the management system. Evidences that professional fishers are being inspected and sanctions applied should be provided. Evidences should be provided that the DGPM is working on the procedures for: 1) building a new vessel with the capacity of enforcing the maximum number of traps on sea, and 2) ensure full manpower capacity for inspection activities. No score change is expected</p> <p><b>Next certificate cycle after reassessment:</b></p> <p><b>Year 1 (2021):</b> The fishery shall demonstrate that there are evidences that professional fishers are being inspected and sanctions applied. Evidences should be provided that the DGPM has made a progress on the procedures for: 1) building a new vessel with the capacity of enforcing the maximum number of traps on sea, and 2) ensure full manpower capacity for inspection activities. No score change is expected</p> <p><b>Year 2 (2022):</b> The fishery shall demonstrate through quantitative indicators (surveillance actions and sanction applied) that the surveillance capacity in the fishery has been increased. Full manpower capacity for inspection activities is ensured and a new vessel with the capacity of enforcing the maximum number of traps on sea is under construction. No score change is expected</p> <p><b>Year 3 (2023):</b> The fishery shall demonstrate that a monitoring, control and surveillance system has been implemented and has demonstrated an ability to enforce relevant management measures, strategies and/or rules. Sanctions to deal with non-compliance exists, are consistently applied and thought to provide effective deterrence. There is no evidence of systematic non-compliance. SG80 would be met.</p>
<b>Consultation on condition</b>	The action plan was consulted with the CEP and therefore with the DGPM. They agreed to closely collaborate with the fleet.
<b>Progress on Condition</b>	
<b>Year 1 -2017-</b>	Since condition 4 was modified after the 1SA, progress on year 1 is no longer relevant for the new condition 4A. Refer to 1SA report for details.
<b>Progress on Condition</b>	
<b>Year 2 -2018-</b>	<p>Regarding the protocol that clearly details the <i>guardapescas</i>' roles and responsibilities in the OFMP, several advances have been done. ARPESOS has formally presented in the bilateral CEP-ARPESOS meeting and in the October 2017 OFMC meeting, a proposal for detailing the specific roles of the <i>guardapescas</i> in the octopus' fishery. ARPESOS has also proposed that these specific roles could be included in the annual DGPM call that funds fishing guilds for hiring <i>guardapescas</i>. The proposal has been debated in both forums and in the last 2017-18 OFMP published in December 2017, the DGPM included an outline of the roles and responsibilities of the <i>guardapesca</i> figure (Sixth regulation, clause 3) (see section 2.5):</p> <p><i>"The duties of the guardapesca assigned to each fishing guild will be to check the weighing of landings, the quotas and admissible catch, when applicable, and the compliance with the minimum weight".</i></p> <p>The meeting notes of the OFMC and the CEP-ARPESOS meeting, shows that stakeholders are working on developing a final protocol on the <i>guardapescas</i>' roles and responsibilities in the OFMP. Nevertheless, in the 1SA ARPESOS in collaboration with CEP have committed to prepare and distribute a survey among the <i>guardapescas</i> asking them about their roles and functions, for include this information in the annual fishery report prepared by the CEP. The assessment team were not provided on information on this survey and in the 2016-17 CEP annual fishery report this topic is not mentioned. The 2017-18 report will be available in October 2018.</p> <p>The issue of non-compliance with the maximum number of traps per vessel has been also debated in the bilateral CEP-ARPESOS meeting and in the OFMC meetings, solutions have been proposed and some improvements have been done. This problem has been anyway drastically reduced in the last fishing season. Although the Fisheries Inspection and Surveillance Unit (unit belonging to the Resource Protection Division of the DGPM) did not</p>



	<p>provide written reports on inspections and infractions in the OFMP, the CEP (2018b) report (based on on-board observations) on the compliance of the number of traps, shows that in the 2017/18 fishing season the average number of traps per vessel with 1, 2 and 3 or more crew members was 125, 238 and 350 respectively, which is within the legal limits. A general compliance of this measure was observed in the OFMP fleet, and only in 12% of the observations the legal limits were exceeded (CEP 2018b). The Surveillance Unit informed the assessment team that no lines of traps were observed on sea without being marked. See section 2.6 for more detailed information.</p> <p>ARPESOS and CEP have debated the possibility that non-compliance with the maximum number of traps could result in the withdrawal of the octopus' trap fishing licence. ARPESOS agreed on this measure and CEP has committed to shift this proposal to DGPM. The assessment team has not been informed on the DGPM answer. This proposal has not been debated in the OFMC.</p> <p>In order to improve the enforcement capacity, it is mandatory in the fishery to mark the line of traps since the 2016-17 OFMP. This new regulation established that the buoys should clearly indicate the vessel name, the number of the batch and the number of traps in the batch (see sections 2.5 and 2.6). For the next fishing campaign (2018-19), it will be mandatory to use a plastic mark (possibly with RFID technology) provided by the Fisheries Inspection and Surveillance Unit.</p> <p>Besides all the improvements and work done, two relevant weak point are still unsolved:</p> <ul style="list-style-type: none"> <li>- The Surveillance Unit has currently no ability to seize and remove lines of traps on the sea. It is expected that a vessel with this capacity will be operational in 2-3 years (see section 2.6 for more information).</li> <li>- The CEP reports shows that there is still several non-compliance with the maximum number of traps (CEP, 2018b) and with the weight limit of 1 kg at the auction markets (Fernández, 2017). (see section 2.6 for more information on the degree of non-compliance). Despite this observed non-compliance the <i>guardapescas</i> did not report any infraction to the Surveillance Unit regarding this issue and the Surveillance Unit did not observed by themselves any non-compliance.</li> </ul>
<p><b>Progress on Condition</b></p> <p><b>Year 3 -2019-</b></p>	<p>Regarding the <i>guardapescas</i>, their specific roles in the octopus fishery have been included in the 2018-19 OFMP (Resolución de 4 de Diciembre de 2018); "Seventh-Control and catch weighting. 3- The duties of the <i>guardapescas</i> assigned to each fishing guild will be to check the weighing of landings, the quotas and admissible catch, when applicable, and the compliance with the minimum weight". Moreover, in May 2019 a meeting was held by the DGPM with the CEP and all the <i>guardapescas</i> in Asturias to check their roles and difficulties for developing those tasks and to clarify doubts (DGPM, 2019d). In this last document a new role for the <i>guardapescas</i>, not included in the OFMP, is included related the future implementation of a marking system for the line of traps; the <i>guardapescas</i> will be responsible for providing the marks to the fishers taking notes on the numbers delivered to each boat. Despite the efforts to clarify the roles of the <i>guardapescas</i> a protocol that clearly details their roles and responsibilities is not yet ready, as it was requested in the year 3 milestones.</p> <p>Regarding the issue of non-compliance with the maximum number of traps per vessel, the fishery has done a strong progress from the fishing season 2014-15 when a high degree of non-compliance was found (see 1SA report), since just a single excess in the number of traps was observed during the on-board observers' program in the 2017-18 fishing season (Fernández, 2018c). The report for the on-board observers' program for the 2018-19 fishing season is already available (Fernández, 2019b), but this time no information on the number of traps is shown. Nevertheless, stakeholders consulted considers that fishers' compliance regarding this measure is very high, and only in the fishing port of Luarca (part of the UoA but outside the UoC) the problem still persists.</p> <p>Based on information from the Surveillance and Control Unit, in 2018 five sanctions (between 400-1250 eur) were issued (all in Luarca) due to an excess of traps. Although no sanctions have been issued in 2019, the problem apparently still persists due to a low capacity of enforcement (Valentín García, Head of the Surveillance and Control Unit, personal communication). This low capacity is linked with the fact that the Surveillance Unit still has no ability to seize and remove lines of traps on the sea. During the site visit the CAB was told</p>

	<p>that it is expected that a vessel with this capacity will be operational by 2021, but no documents were provided showing the progress on this. Funds from the EU will be used for constructing this vessel.</p> <p>The surveillance capacity in the octopus fishery has been reduced in the last year due to a reduction in the number of enforcement officers. From a total of 16 enforcement officers (12 full time and 4 part time) working in the 2017-18 fishing season, 5 of them got retired within 6 months. Currently a total of 11 enforcement officers are in place (10 full time and 1 part time). The staff retired could not be replaced in time due to the long administrative process.</p> <p>According to the data provided by the Surveillance and Control Unit (Valentín García, Head of the Surveillance and Control Unit, personal communication), in 2018, from January to July, a total of 119 actions were done (59 on land and 60 on sea), resulting in a total of 6 sanctions applied (4 due to excess of traps and 2 due to individuals smaller than the minimum weight). One of the sanctions due to minimum weight was issued to a MSC vessel, although the procedure is still ongoing and no final resolution is available. Due to the reduction in the control and enforcement capacity, in 2019, from January to June, a total of 44 actions were done (12 on land and 32 on sea); no sanctions were applied.</p> <p>Due to the enforcement capacity reduction in the 2018-19 fishing season, the implementation of a protocol for marking the line of traps (buoys at the beginning and ending of the line of traps) has been postponed. It is expected that for the next fishing season (2019-2020) this marking regulation will be implemented using labels provided by the DGPM with a bar code (Valentín García, Head of the Surveillance and Control Unit, personal communication).</p>
<b>Status</b>	<p>A protocol detailing the <i>guardapescas</i> roles and responsibilities has not been developed, although their general duties has been included in the OFMP. But the main issue at the moment is the reduction of the enforcement capacity due to the retirement in the last year of 5 officers. This last circumstance and the lack of a vessel with the ability to seize and remove illegal lines of traps on the sea is strongly compromising the capacity of the fishery to fulfil this condition.</p> <p>Based on the information presented above, the assessment team considers this condition to be 'BEHIND TARGET'.</p> <p>The capacity of the fishery to fulfil this condition is now depending on two long administrative procedures that are beyond the hands of the client and even of the DGPM: 1) a large budget allocation in coordination with EU funds (vessel construction) and 2) public staff positions openings (enforcement officers). Both procedures have to be approved by higher instances in the government of Asturias, beyond the DGPM and the Regional Ministry of Rural Affairs and Fisheries. The CAB interpreted these as exceptional circumstances (FCP v2.1, 7.18.1.5), leading to a revision of milestones for years four and an extension of the timeline into the next certificate cycle.</p> <p>As a remedial action the revised milestones are proposed (see above) and the client presented a revised action plan (see <b>Section 3.3</b> for more details).</p> <p>Should the progress against the third milestone be insufficient to bring the condition back to "on target" within 12 months, following FCP v2.1 subsection 7.28.16.2, the CAB shall a) consider progress as inadequate, and b) Apply the requirements of GCR 7.4 (suspension or withdrawal).</p>
<b>Additional information</b>	<p>The updated client action plan modified in accordance with revised milestones and deadline is presented in <b>Section 3.3</b>. However, the previous actions plan modified is presented below.</p> <p><b>MEASURE 1. ARPESOS WILL IMPLEMENT AN EFFECTIVE SANCTIONING PROCEDURE INCLUDING INFRINGEMENTS ON THE MAXIMUM NUMBER OF AUTHORIZED TRAPS PER VESSEL</b></p> <ul style="list-style-type: none"> <li>▪ <b>PERIOD 1 (2017-2018).</b> <i>The ARPESOS Internal Regulations (expected to be adopted by the end of 2017) will include specific punishing measures in case of infringements on the maximum number of authorized traps per vessel (e.g. applying a temporary</i></li> </ul>



suspension of the ARPESOS membership, and consequently the impossibility of using its commercialization channels)

- **PERIOD 2 (2018-2019).** Implement the ARPESOS Internal Regulations and record sanctions established
- **PERIOD 3 (2019-2020).** Introduce the necessary improvements to ensure that the measures included in the ARPESOS Internal Regulations are effective in deterring potential offenders.

**MEASURE 2. A MONITORING, CONTROL AND SURVEILLANCE PLAN INCLUDING ACTIONS AIMED TO CONTROL THE NUMBER OF TRAPS PER VESSELS WILL BE IMPLEMENTED**

Punishing measures agreed in the ARPESOS Internal Regulations will be compiled in a proposal to be upheld for its discussion at the OFMC, expected at the end of 2017.

- **PERIOD 1 (2017-2018).** A meeting will be requested to the DGPM to discuss and agreed on the necessary measures to improve the Monitoring, Control and Surveillance (MCS) system for the maintenance of the MSC certificate. Topics to be discussed: elaboration of a specific MCS Plan for the octopus, update on the new vessel for the Surveillance and Control Unit).
- **PERIOD 2 (2018-2019).** A specific MCS Plan for the octopus has been designed and included in the OFMP
- **PERIOD 3 (2019-2020).** Implement the MCS plan as included in the OFMP

**MEASURE 3. AN EFFECTIVE SYSTEM TO IDENTIFY TRAPS AND IMPROVE ITS CONTROL IS IMPLEMENTED**

- **PERIOD 1 (2017-2018).** ARPESOS will analyze how to improve trap lines identification. This, together with the GPS vessel monitoring system established will allow a more effective MCS by the DGPM. The solutions agreed will be compiled in a proposal to be upheld for its discussion at the OFMC, expected at the end of 2017. A meeting will be requested to the DGPM to discuss measures to identify traps that may assist in their control
- **PERIOD 2 (2018-2019).** To include in the MCS plan (see measure 2) any measure aimed at improving the identification of the traps that may assist in their control
- **PERIOD 3 (2019-2020).** Implement the MCS plan as included in the OFMP

**MEASURE 4. IMPROVE THE ROLE OF THE GUARDAPESCAS IN RELATION REINFORCE CONTROL WITHING THE OFMP BY DESIGNING AN OPERATIONAL PROTOCOL**

- **PERIOD 1 (2017-2018).** Discuss within ARPESOS how to proceed in order to record and report octopus below minimum landing weight. The solutions agreed will be compiled in a proposal to be upheld for its discussion at the OFMC, expected at the end of 2017
- **PERIOD 2 (2018-2019).** Implement the proposed measures to improve the role of the guardapescas to reinforce control at the OFMP, including recording and reporting octopus below minimum landing weight.
- **PERIOD 3 (2019-2020).** Include in the OFMP the necessary measures to improve the role of the guardapescas in relation to the control

**MEASURE 5. DETERMINE A GOAL AIMED TO IMPLEMENT A TECHNOLOGICAL TOOL ALLOWING TO IMPROVE CONTROL ON TRAPS**

- **PERIOD 1 (2017-2018).** To contact at least one technological center that offers solvency in the development of a reasonably and viable technological solution that may assist in the control of trap lines
- **PERIOD 2 (2018-2019).** To assess the feasibility of developing a technological project and search for funding

	<ul style="list-style-type: none"> <li>▪ <b>PERIOD 3 (2019-2020).</b> To present the results of the project and, where appropriate, the technological solution found</li> </ul> <p><b>MEASURE 6. REVIEW EFFORT CONTROL MEASURES INCLUDED IN THE OFMP</b></p> <ul style="list-style-type: none"> <li>▪ <b>PERIOD 1 (2017-2018).</b> To review measures to control effort, such as maximum number of traps allowed per vessel (with the possibility to adjust daily quotas in relation to number of crew members) and the introduction of new measures such limiting the fishing hours per day. These changes will aim to adapt to the actual state of the fishery and, in combination with other regulations on other elements of the OFMP, provide sustainable and profitable conditions for the octopus fishing. These proposals would be upheld for its discussion at the OFMC, expected at the end of 2017.</li> </ul> <p><b>PERIOD 2 (2018-2019).</b> Note: thereafter this measure would be integrated into the existing action plan applicable to <b>CONDITION 1</b></p>
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3.2.5 Table 3.8. Recommendation 1

<b>Performance Indicator</b>	PI 2.1.2 & PI 2.1.3
<b>Score</b>	80 (PI 2.1.2) & 80 (PI 2.1.3)
<b>Justification</b>	<p>The CEP-SIGMA (2016) report characterizing the trap octopus fishery in Asturias, provides new and/or updated information on the way for baiting the traps. Although this study confirmed that most of the vessels are using artificial bait as assessed in the PCR, it also detected that some vessels are using pelagic species as bait (mackerel, horse mackerel and sardine). This information was later confirmed and expanded by the client. Although some information is available, the assessment team considers that the quality and publicity of the information could be improved. So far, some of this information (the one directly provided by the client) is not of public access and the CEP-SIGMA (2016) report is only based on the UoC. The assessment team has been told that several changes in the on board sampling program will happen in the coming fishing seasons, but we do not have the details. Therefore, we are not sure if the amount of bait used, and not only the type, will be collected in the future along the UoA. In line with this, we do not know if information regarding the origin of the fish bait used will also be collected.</p> <p>Further, although factors such as availability and price are commercial considerations for bait sourcing, the sustainability of the resource should also be a criterion. The CoC, on a separate bait management strategy, should clearly outline the criteria and protocols which will be employed to source bait fish from well managed resources, or at least resources that can be demonstrated as not being over fished.</p>
<b>Recommendation</b>	(ISSUED DURING 1SA) The assessment team recommends the client to make the necessary changes in the strategy to manage primary species for establishing a monitoring system that allows improving the estimations of volumes as well as origin (stock/s) of bait species used in the UoA. We also recommend the client not to use species for baiting the octopus traps that do not come from sustainable stocks
<b>Progress on Condition</b>	No improvements were identified regarding this issue during the 2SA
<b>Year 2 -2018-</b>	
<b>Progress on Condition</b>	No improvements were identified regarding this issue during the 3SA
<b>Year 3 -2019-</b>	

### 3.3 Client action plan

The report shall include any updates to the Client Action Plan from the fishery client to address conditions.

Reference(s): FCP v2.1 Section 7.19, 7.28

Below are presented the revised client action plans for the two condition where exceptional circumstances have been considered and the period for completion extended. These client action plans were modified by the DGPM (CEP and Control Unit) in close consultation with the client. The CAB is well aware of the DGPM involvement with the actions described below.

The client action plans were handed to the team in Spanish. Unofficial translation presented below. The original texts are available to any interested stakeholder under consultation.

#### 3.3.1 Modified action plan on Condition 1

##### Year 2020:

1.- At the beginning of the year the General Directorate of Maritime Fisheries (DGPM) will have a model developed specifically for the Octopus Management Plan of Asturias that will allow stock assessments and obtain Biological Reference Points. This model is being designed by a specialized consultant who has been hired by the DGPM for this work.

2.- During the first meeting that the Monitoring Commission will hold in 2020, the Center for Fisheries Experimentation (CEP) will present the results of the octopus evaluation model to the sector, exposing the different options of management measures that could be established according to these results to prevent the fishery from recruitment impairment and thus maintain the octopus stock at a level consistent with MSY.

3.- In the event that the measures proposed by scientists and managers based on the results of the model have the support of the sector and do not pose significant difficulties for its application, these measures will be included directly in the Regulatory Resolution for the 2020/2021 fishing season.

4.- In the event that all possible management measures in accordance with the results of the model pose complex problems in their application, ARPESOS will analyse the different possibilities throughout the second half of the year and before the end of the year, a proposal including the options selected as more compatible options with fleet interests will be selected (always in line with the objective related to MSY). For this task, the collaboration of CEP technicians will be requested if deemed necessary. The proposal may include the introduction of the measures in a progressive manner (e.g. an experimental trial with candidate reference points and HCRs during a fishing season).

##### Year 2021:

1.- In January, ARPESOS will send to the CEP the proposal of management rules to be disseminated among the members of the Monitoring Committee and thus initiate the procedure established in the "Protocol for decision-making in the Management Plan of the common octopus of the Principality of Asturias" so that they can be applied, at least experimentally, during the 2021/2022 campaign.

2.- If, in the Regulatory Resolution of the Management Plan for the 2021/2022 fishing campaign, management measures could no longer be collected in the entire management area of the Plan, ARPESOS and the CEP will draft a document to apply as evidence only in a part of the fishermen's associations and / or the fleet. In this case, ARPESOS will take the necessary steps to achieve the greatest possible collaboration in the performance of this test.

##### Year 2022:

1.- At the first meeting of the Monitoring Committee of the year 2022, all members may assess the new measures established during the campaign as a test and make the contributions they deem appropriate.

2.- Once the trial period is over and the opinions of all stakeholders have been collected, the CEP will define the catch control rules that should be applied to adapt the fishing effort to the biomass of the octopus population, so that recruitment not be affected by the fishery and the population oscillates around a point consistent with the MSY. The “Protocol for decision-making in the Management Plan of the common octopus of the Principality of Asturias” will be applied again in order to apply these measures during the 2022/2023 campaign.

3.- Based on the knowledge and experience accumulated during the previous years, in autumn 2022 the necessary bases will be available to establish new management standards in line with the fisheries sustainability objective for the entire Management Plan. Therefore, in the Regulatory Resolution of the Plan for the octopus fishing campaign 2022/2023 management rules will be established that regulate the fishing effort according to the state of the population so that recruitment is not affected by the fishery. In this way it is expected that the octopus stock remains above a point consistent with the MSY or fluctuates around that point.

### 3.3.2 Modified action plan on Condition 4

#### MEASURE 1: GUARDAPESCAS PROTOCOL

Year 2020: The General Directorate of Maritime Fisheries will develop a protocol to be sent to all the Fishermen's Guilds included in the Octopus Fishery Management Plan. This protocol will detail the roles and responsibilities of the Guardapescas in relation to controlling and monitoring the octopus fishery.

#### MEASURE 2: VESSEL

Year 2020 It is planned to award the contract for the supply of a vessel for fishing surveillance with sufficient capacity for the collection of fishing gears and traps.

Year 2021 during this year the vessel will be under construction at the shipyard awarded the contract.

Year 2022 the vessel should start to operate

#### MEASURE 3: HUMAN RESOURCES

Years 2020 The Administration of the Principality of Asturias has four work teams dedicated to fisheries inspection and surveillance of which one of them works within the scope of the octopus management plan. Each of these teams has three people who work full time and another person working part time. In the event that the octopus team, for some exceptional reason, needs support to ensure the effectiveness of surveillance in the fishery management plan, since this is a priority for the General Directorate of Maritime Fisheries, human resources would be detracted from the others Three teams

Year 2021 The situation of the year 2020 will be maintained.

Year 2022 The situation of the year 2020 will be maintained.

#### MEASURE 4: IDENTIFICATION OF FISHING GEARS

Year 2020 This year, at least 50% of the fleet will test seals for marking each batch of traps. This will make easier to identify the presence of illegal batches and verify that the number of traps per batch corresponds to the previous declaration presented by the fishermen.

Year 2021 The obligation to seal batches will be extended to 100% of vessels operating in the octopus management plan.

Year 2022 The results obtained will be analyzed to see the effectiveness of the measure. In addition, by having a boat with the capacity to haul batches, illegal fishing gears could be confiscated if necessary.

## MEASURE 5: QUANTITATIVE INDICATORS

Given that low level of non-compliance have been detected in recent years in this fishery, the inspections scheduled for the next years will be kept random. However, in case the new breaches detected might indicate the need to focus on some vessels (based on the size of the vessels, port of origin or landing, volume of landings, etc.) targeted controls would be established after identifying the risk factors and estimating the percentage of targeted and randomized controls to be performed.

Year 2020: During the 2019/2020 octopus fishing campaign, the DGPM will conduct inspections on shore (landings) and at sea (fishing gear and vessel inspections).

### Controls on shore:

A minimum of 15% of the total landings from authorised vessels will be monitored (at least once) during each fishing campaign. Those vessels that present irregularities will be subject to targeted inspections, at least once a month during the remaining fishing season and also during the following fishing season.

Random checks will be carried out in all authorized fish auctions.

### Controls at sea:

They are divided into: (i) Identification of batches of traps, (ii) Control of the number of traps per batch and (iii) vessel inspections (minimum sizes, documentation, etc.)

- (i) Identification of batches of traps. The correct marking of the batches of traps will be checked. At least 5% of the maximum number of batches of traps present will be inspected.
- (ii) Control of the number of traps per batch. This check will be done when the traps are being hauled. At least 5% of the maximum number of traps present will be inspected.
- (iii) Vessel inspections while fishing. They will be made in a minimum of 5% of vessels authorized for octopus fishing, at least once during the fishing season. Those vessels that present irregularities will be inspected at least once a month during the remaining fishing season and also during the following fishing season.

Once the 2019/2020 fishing campaign is finished, a report will be made indicating the number of actions carried out and their results, in order to check the level of compliance with the objectives detailed before

## 3.4 Re-scoring Performance Indicators

The following tables used for re-scoring were taken from the PCR (assessment tree version 2.0). The original rationales are presented in black font and crossed out (if needed), while modifications made for re-scoring at the light of the information collected in the third surveillance audit are in blue font.

### 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	<b>Objectives</b> , 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.	<b>Short and long-term objectives</b> , 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.	<b>Well defined and measurable short and long-term objectives</b> , 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	No	Yes
				No
Rationale				

The MP for the Octopus in Asturias implicitly ~~implicitly~~ **explicitly** determines objectives consistent with achieving the outcomes expressed in Principles 1 and 2 of the MSC. Certain general objectives are also spelt out in the Law 2/1993 of the Principality of Asturias (see PI 3.1.3).

~~However, short- and long-term objectives are not clearly spelt out in the MP; it states explicitly only that the plan's objective is to preserve the resource and improve its marketing within the geographical scope of the participating fishermen's guilds (Resolution of 26 November 2014). The lack of specificity in the objectives shows that these are not consistent with achieving the results expressed in Principles 1 and 2 of the MSC.~~

The fishery objectives have been discussed within the OFMC in the past two years and are now explicit in the OFMP (Resolución de 4 de Diciembre de 2018). P1 objectives are defined in terms of addressing further declines, rather than specifically maintaining optimum yields or biomass levels. P2 objectives are focus on the impact over other species and the ecosystem. The fishery objectives currently implemented are already explicit in the OFMP:

1. — The main objective of the management plan for the 2018/2019 campaign is to maintain the balance between the fishing effort and the abundance of the resource, which until now has guaranteed the sustainability of the fishery. For this, and given the risk that changes in socioeconomic conditions may alter the described equilibrium situation, it is considered appropriate to maintain the general rules of previous campaigns and also establish the following specific objective:

- Determine if there is a risk of overfishing based on early indicators of the state of the stock and limit the fishing effort in the event that such risk is detected.

2. — Although the monitoring data of the octopus fishery in previous campaigns demonstrates its low impact on the ecosystem, it is intended to ensure that this situation is maintained during this campaign, or even improved as far as possible, by establishing the following specific objectives:

- Conduct at least two sampling per month with observers on board to assess the impact of the fishery on the accessory species.

- Maintain the mortality of discarded specimens below 5%.

3. — It is also a basic objective of the management plan to ensure that biological and ecological sustainability are associated with social and economic improvements in the fisheries sector. To this end, the co-management system established in previous campaigns that involves the main actors related to this fishery through the Octopus Fishery Monitoring Committee is maintained.

Based on the above, it can be concluded that the fishery-specific management system has ~~implicit~~ **explicit** objectives which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, ~~therefore SG 60 and SG 80 are met.~~ Nevertheless, those objectives (in a short and long-term) are not well defined and measurable, therefore ~~this SI gets SG 60. Neither SG80 nor SG100 is~~ **not** met.

## References

- Resolución de 4 de Diciembre de 2018

Overall Performance Indicator score	<b>6080</b>
Condition number (if relevant)	<b>N/A2</b>

## 4 References

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- CEP-SIGMA [Centro de Experimentación Pesquera - Servicios De Gestión Medioambiental]. 2016. Caracterización de la pesca de pulpo con nasas en el Occidente de Asturias. Consejería de Desarrollo Rural y Recursos Naturales, Gobierno del Principado de Asturias. Febrero de 2016. (Document available under request to the CAB, in accordance with FCP v2.1, 4.4 & 7.16.2).
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- Fernández, MP. 2018b. Propuesta de cambios en la normativa de pulpo para la campaña de pesca 2018/2019. Centro de Experimentación Pesquera, Consejería de Desarrollo Rural y Recursos Naturales, Gobierno del Principado de Asturias. 12 de noviembre de 2018. (Document available under request to the CAB, in accordance with FCP v2.1, 4.4 & 7.16.2).
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## 5 Appendices

### 5.1 Evaluation processes and techniques

#### 5.1.1 Site visit

The remote audit was organized through conferences between the July 17 and 18, 2019. Both the lead auditor (José Ríos) and the assessor (Gonzalo Macho) participated remotely.

The agenda of the remote audit, including institutions and people interviewed main topics discussed are presented in **table 5.1**. During the remote audit the team concentrated in checking for any relevant modification affecting the fishery and assessing progress on the conditions established in the PCR. Information collected on relevant modifications affecting the fishery is summarized in **Section 2.2** of the current report, while the assessment made on the progress towards closing the conditions is presented in tables in **Section 3.2**.

**Table 5.1.** Details of the remote meetings held during the site visit for the 3SA for the western Asturias octopus trap fishery

Day	Time	Place	Attendees	Role, Institution
Wednesday 17/07/2019	10:00-12:00	Dirección General Pesca Marítima, Gob. Asturias (DGPM)	- M <sup>o</sup> del Pino Fernández	CEP, Biologist
			- Lucia García	CEP, Section Head
			-José Luís Menéndez Camí	General Director, DGPM
	16:00-17:30	ARPESOS	Jose Manuel García	Vessel owner, Cofradía Viavélez + ARPESOS (Vicepresident)
			Carlos Bedia	Guardapesca, Cofradía Viavélez (Secretariat)
			Ramón Estiarte	ARPESOS (Secretariat)
Thursday 18/07/2019	10:00-11:00	WWF SPAIN	Beatriz Nieto	Fisheries officer, WWF-España
	11:00-12:00	Universidad de Oviedo (OMA)	- José Luis Acuña	Prof. Ecology, University of Oviedo
	12:20-13:20	DGPM	- Valentín García	Head of the Unit of Inspection and Control
	13:00-13:15	ARPESOS	Jose Manuel García	ARPESOS

## 5.1.2 Stakeholder participation

The site visit for the surveillance audit was announced at the MSC website on the May 30, 2019. In addition, 50 different stakeholders were contacted via e-mail (including Asturian and Galician fishers and manager representatives, research centres –IEO, ICES, Universidad de Oviedo, - and NGOs –WWF, Oceana, Greenpeace, Seo-Birdlife, Ecologistas en Acción-).

Further, the team with the assistance of the client elaborated a list of key stakeholders to be interviewed and were contacted via email and telephone in order to ensure their participation during the site visit and arrange the meetings. The list of institutions and people finally interviewed during the site visit is detailed in **table 5.1**.

## 5.2 Stakeholder input

The stakeholder input was restricted to the information collected during the meetings held at the site visit and the documents sent by the stakeholders as a result of the requests made by the team during those meetings. No other stakeholder inputs were received by email using the template provided by MSC

**Table 5.2** presents the main topics discussed with the different stakeholders during the different meetings. All relevant information collected on updates or modifications affecting the fishery is summarized in **section 2.2** of the current report, while modifications made to the initial assessment due to the harmonisation process with overlapping fisheries are presented in **section 3** (also see **Appendix 5.4** for activities and outputs of the harmonisation process). All documents used for the assessment are listed in **Section 4** (References).

**Table 5.2.** Details of the main topics discussed during the site visit for the Western Asturias octopus trap fishery

Stakeholder	Topics discussed
CEP & DGPM	<ul style="list-style-type: none"><li>- Detailed account of the progress made on conditions 1, 2 &amp; 3</li><li>- Voluntary self-sampling</li><li>- Observer sampling</li><li>- OFM evaluation</li></ul>
ARPESOS	<ul style="list-style-type: none"><li>- Octopus catches during 2018/19 fishing season</li><li>- Internal regime rules</li><li>- Decision-making process and transparency</li><li>- Auction functioning</li><li>- Tasks assigned to the guarda-pescas</li><li>- N of inspections, sanctions and other compliance issues</li></ul>
WWF-Spain	<ul style="list-style-type: none"><li>- OFMC: participatory and decision-making mechanisms, transparency...</li><li>- Redepesca initiative</li></ul>
OMA	<ul style="list-style-type: none"><li>- Trials with depletion model and communication of the results</li><li>- Discussion on existing candidate HCRs</li><li>- Future research on related topics</li></ul>
Control Unit (DGPM)	<ul style="list-style-type: none"><li>- Compliance of the certified fleet</li><li>- MCS activities developed during 2018/19</li><li>- Means at the Control Unit: manpower, vessels, trial with drones...</li><li>- Implementation of the new labels for the lines of traps</li></ul>

## 5.3 Revised surveillance program – delete if not applicable

The fishery was certified against MSC FCR v2.0. A level 2 surveillance was established at the PCR, requiring 1 on-site audit, 2 off-site audit and one review of information. However, the surveillance level and the fishery surveillance program has been modified to level 4 (requiring 2 on-site and 2 off-site audits) at the announcement of current site visit, due to a new fishery from the same client entering into the program.

See tables below for revised surveillance program.

**Table 5.3.** Fishery surveillance program

Surveillance level	Year 1	Year 2	Year 3	Year 4
Level 4	On-site surveillance audit	Off-site surveillance audit	Off-site surveillance audit	On-site surveillance audit & re-certification site visit

**Table 5.4.** Timing of surveillance audit

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
Year 4	15 <sup>th</sup> February 2020	April 2020	Site visit in previous surveillance audits were systematically delayed to July to be aligned with the fishing season (Dec-July). However, this will not be possible at 4 <sup>th</sup> surveillance audit since that visit will also serve for reassessment purposes. FCP 7.30.1 establishes that <i>“The CAB shall announce the reassessment of a certified fishery no later than the date 90 days after the fourth anniversary of the existing certificate”</i> . According to FCP 7.12.1 at the time of the announcement of the fishery, the Announcement Comment Draft Report shall be to MSC database for publication on the MSC website. Taking all above into consideration, BV considers April 2020 as a reasonable timing for performing both the 4 <sup>th</sup> surveillance audit and reassessment site visit.

**Table 5.5.** Surveillance level rationale

Year	Surveillance activity	N auditors	Rationale
Year 4	On-site surveillance audit (& re-certification site visit)	At least 3	Performing a joint site visit for the 4 <sup>th</sup> surveillance audit and reassessment is a standard procedure. No need to provide further rationale here.

## 5.4 Harmonised fishery assessments

There are no overlapping fisheries. Not applicable