

SC-04-23_Rev1

**4th Meeting of the Southern Indian Ocean Fisheries Agreement (SIOFA)
Scientific Committee
25-29 March 2019, Yokohama, Japan**

National Report – European Union

Relates to agenda item: 3

Working paper Info paper

Delegation of the European Union

Abstract

Two vessels from EU-Spain were operating in the SIOFA Area in 2018, in the Areas 2, 3b and 7. None from EU-France operated in SIOFA in 2018. In 2018, a second EU-Spain vessel operated in region for 77 fishing days. The EU continues the process of improving the fine scale data collection from fishing activities in the SIOFA. EU-Spain implemented a dedicated scientific observation in 2017 and 2018 (observation coverage were 72% and 100% by vessel in 2018). As no EU-France vessel asked for a SIOFA authorization for 2018, the observer program was not implemented in 2018. However, the training program though is ready, as well as the observer recruitment process in a case the fishing operation resume in the future.

Recommendations *(working papers only)*

1. That the Scientific Committee considers the National Report provided by the European Union.
-

National Report (European Union)

Submitted to SIOFA SC annual meeting (Yokohama, Japan, 25-29 March 2019)

1. Introduction

The report presents an overview of the fishery data available from the EU fleets operating at SIOFA Area. This information should be considered merely informative, as some inconsistencies continue to be detected regarding species identification.

The information is still valuable to provide a general overview of past and present fishing activities and of the main marine resources with commercial interest in the Area. The implementation of a system to collect the appropriate data using SIOFA standard forms is still needed.

2. Summary of fishing activity in the SIOFA Area

This report includes data from the EU Member States (EU-France & EU-Spain) active in SIOFA Area during the period indicated in Tables 1 and 2.

Table 1. Summary of EU-France fishing activity in the SIOFA Area.

Year	Number of vessels
2009	2
2010	2
2011	2
2012	2
2013	2
2014	1
2015	interruption
2016	1
2017	1
2018	0

Two EU-France longliners, less than 25m, have a demersal fishery history in the SIOFA Area, in the Saya de Malha Bank – Area 8, in addition of their tuna directed activities. However, in 2018 they did not request any authorization and did not fish in the SIOFA Area.

Table 2. Summary of EU-Spain fishing activity in the SIOFA Area.

Year	Number vessels (effort metric)	Fishing period	Gear
2000	1	May - November	Bottom trawl / Midwater trawl
2001	1	October - November	Bottom trawl / Midwater trawl
2003	1	May - June	Bottom longline
2004	2	August - November September - December	Bottom longline
2005	2	August - November January-February & November - December	Bottom longline
2006	2	August - December January & November - December	Bottom longline
2007	2	January - December January-February & December	Bottom longline
2008	2	January - May January - December	Bottom longline
2009	1	January - March	Bottom longline
2013	1	January - December	Gillnet
2014	1	January - December	Gillnet
2015	1	January - December	Gillnet: January-March Bottom longline: April-December
2016	1	January - December	Bottom longline
2017	1	January & May-December	Bottom longline
2018	2	January-February & April-October May-August	Bottom longline

Information on Table 2 summarizes records on trawl, bottom longline and bottom gillnet fisheries conducted by the EU-Spain fishing vessels in the SIOFA. In 2018 two fishing vessels were present in the area fishing with bottom longline (207+82 fishing days).

The fishing footprint of EU-Spain fishing vessels is shown in Figure 1, using a 10'x10' grid. This activity took place in Areas 1, 2, 3, 3b, 7 and 8, where the greatest density of fishing operations occurred in Area 2 (Walters Shoals).

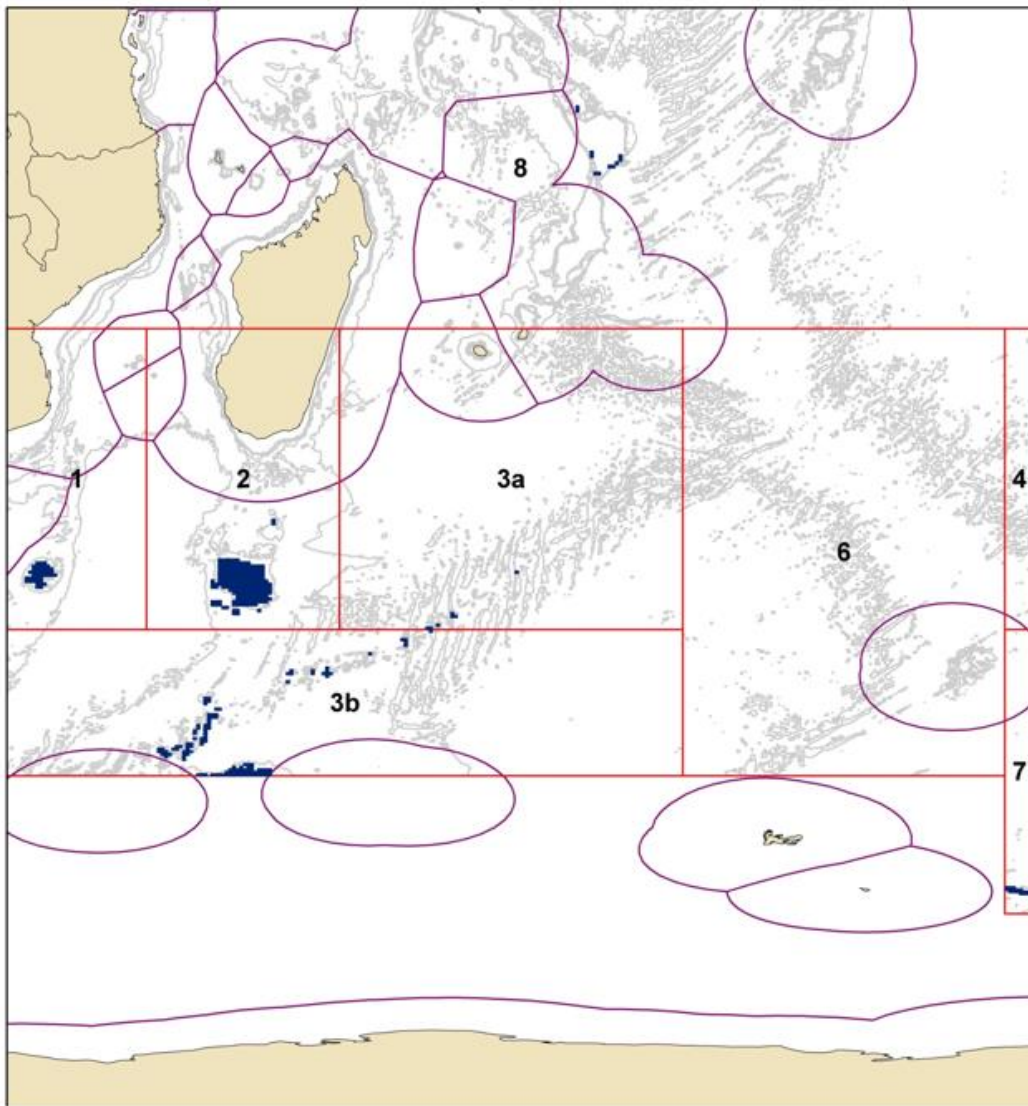


Figure 1. EU-Spain fleets fishing footprint (10°x10° grid; 2000-2018).

3. Target species - catch and effort summaries

No fishing activity occurred in the SIOFA Area in 2018 by EU-France. However, one vessel has declared tuna related fisheries: the data have been transmitted to the IOTC.

Traditionally, the target species of EU-France fleet operating in the SIOFA Area were the following: Jobfish (PFM); Snappers (SNA, AVR, ETC, ETA); Seabreams (SBX); Groupers (GPX, EEP, EWU, EEA, EML); and Emperors (EMP, LTQ).

Table 3. Specific catch composition for the EU-France fleet (2009-2018).

Year	Snappers	Jobfish	Groupers	Emperors	Seabreams	Others
2009	0,31	0,17	0,13	0,16	0,05	0,18
2010	0,25	0,34	0,15	0,13	0,06	0,07
2011	0,29	0,18	0,14	0,09	0,07	0,22
2012	0,33	0,33	0,06	0,04	0,00	0,24
2013	0,16	0,41	0,07	0,04	0,08	0,25
2014	0,06	0,46	0,06	0,00	0,00	0,42
2016	0,25	0,05	0,17	0,01	0,24	0,28
2017	0.19	0.03	0.38	0.04	0.28	0.06
2018	-	-	-	-	-	-

Historically, the target species of EU-Spain vessels operating in SIOFA seamount were: Alfonsinos (*Beryx* spp.); Orange roughy (*Hoplostethus atlanticus*); Wreckfish (*Polyprion* spp.); Portuguese dogfish (*Centroscymnus coelolepis*); Southern boarfish (*Pseudopentaceros richardsoni*); and Patagonian toothfish (*Dissostichuseleginoides*).

Within the by-catch species of commercial interest, it can be highlighted: Bluenose warehou (*Hyperoglyphe antarctica*); Blackbelly rosefish (*Helicolenus dactylopterus*); Common mora (*Mora moro*); Oilfish (*Ruvettus pretiosus*); Black cardinal fish (*Epigonus telescopus*); Birdbeak dogfish (*Deania calcea*); Kitefin shark (*Dalatias licha*); Gulper sharks (*Centrophorus* spp); Lanternshark (*Etmopterus* spp); Roudi escolar (*Promethichthys prometheus*); Violet warehou (*Schedophilus velaini*); Oreo dories (Oreosomatidae) and others.

Correct identification of deep-sea sharks species in the catches is improving, with the collaboration of observers on board, but it continues to be a difficult task, e.g. for *Deania*, *Etmopterus* and *Centrophorus* genus.

In Table 4, specific catch composition is shown for the last five fishing seasons (2014-2018) and areas where the catches occurred. In figure 2 and 3, graphs presented the species composition on the catches and the evolution of fishing effort, respectively. In this period, the Portuguese dogfish was the main species in the catches and the fishery activities were mainly concentrated in Area 2. However, in 2018 the EU-Spain vessels fishing in the SIOFA have also conducted fishing operations in Areas 3b and 7 targeting Patagonian toothfish.

The main groups or species discarded in 2018 were *Macrourus* spp, *Antimora rostrata*, *Amblyraja taaf* and Chimaeriformes.

Table 4. Specific catch composition (%) by year and area for the EU-Spain fleet (2014-2018).
(Under review)

Species/Year	2014	2015	2016	2017	2018	Area 2	Area 3b	Area 7
<i>Beryx</i> spp	0.11	0.03				0.03		
<i>Centrophorus granulosus</i>	6.95	7.04	4.04	1.64	0.27	4.49		
<i>Centrophorus squamosus</i>					6.99	1.68		
<i>Centroscyrnus coelolepis</i>	33.06	48.70	69.35	43.07	37.92	52.53	0.02	
<i>Dalatias licha</i>	22.36	19.27	14.48	15.20	15.66	19.33		
<i>Deania calcea</i>	20.59	15.31	7.11	7.51	1.09	11.31		
<i>Epigonus telescopus</i>	0.51					0.10		
<i>Etmopterus</i> spp	1.35	0.99	1.51	10.25	4.08	3.59	2.06	
<i>Helicolenus</i> spp	0.01	0.004				0.00		
Lophiidae	0.27	0.58	0.23	0.24		0.30		
<i>Mora moro</i>	10.42	6.75	3.08	3.88	0.37	5.30	0.30	
<i>Paralithodes</i> spp	2.53	0.56				0.65		
<i>Polyprion americanus</i>		0.04				0.01		
<i>Pseudopentaceros richardsoni</i>	1.85	0.73	0.20	0.43		0.68		
<i>Ruvettus pretiosus</i>	0.01					0.002		
<i>Dissostichus eleginoides</i>				10.07	27.46		55.46	99.81
<i>Macrourus</i> spp				2.89	3.42		19.17	0.13
<i>Amblyraja taaf</i>				1.99	0.69		7.53	0.03
<i>Coryphaenoides</i> spp				0.01	0.0005		0.03	
<i>Antimora rostrata</i>				2.81	2.37		15.42	0.03

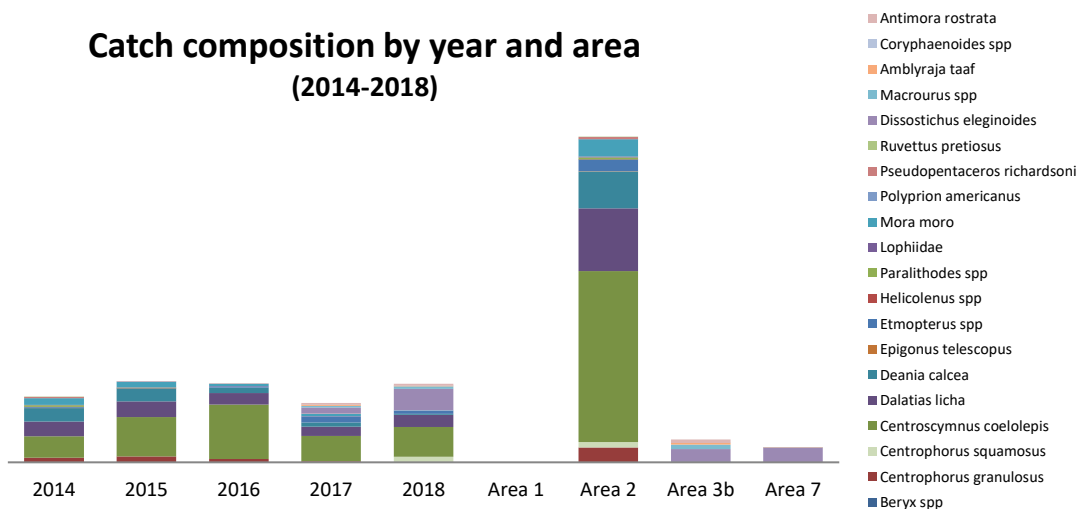


Figure 2. Specific catch composition by year and area of the EU-Spain fleet (period 2014- 2018).

The number of hooks (Fig. 3) remained stable in the period 2016-2017 at a level of around 3 200 000 hooks per year (one vessel) and in 2018 increased up to 4 940 000 hooks (two vessels).

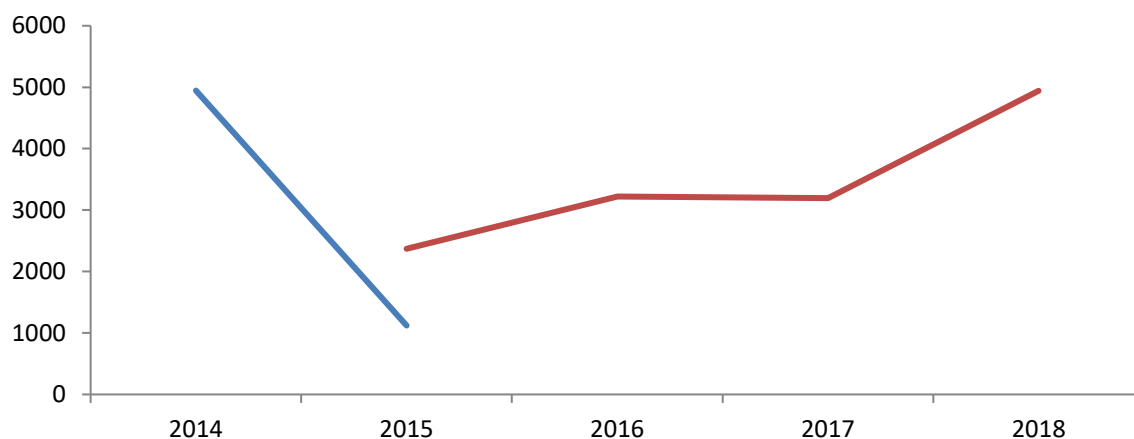


Figure 3. Evolution of GNS and number of hooks of the EU-Spain LLs (period 2014-2018) (red line: thousands of hooks; blue line: km of GNS).

Nominal CPUE by gear type for the main species caught can be obtained at any time using the catch and effort data in the SIOFA database.

4. Fisheries data collection

EU-France data come from the capture declaration system. EU-Spain data were obtained from different sources: declaration system, records from the master and scientific observation, when available.

5. VME encounter protocols and thresholds

The VME encounter rules that EU-France vessels applied are defined by the Muséum national d'Histoire Naturelle, as stated in the « Amended Order of 25 February 2013 establishing RFMO fishing authorizations for certain non-quota or quota-managed fisheries subject to management measures adopted under certain Regional Fisheries Management Organizations».

The EU-Spain bottom longline fleet is applying the rules adopted by the Fishing Administration, similar to those applied in SEAFO and CCAMLR in the definition of the VME encounter and thresholds, together with the protocols adopted in the SIOFA CMM 2018-01. These measures are reflected in the following indications to the fishing vessels:

"It is considered an encounter with Vulnerable Marine Ecosystems (VME) when the occurrence of VME indicators exceeds the established limits.

Vulnerable Marine Ecosystem (VME) indicators are considered:

- *live corals (coral species identified as antipathari, gorgonians, cerianthids, lophelias, and sea pens); and*
- *live sponges.*

When using the bottom longline will be taken into account:

- It is considered an encounter with Vulnerable Marine Ecosystems (VME) when 10 or more indicator units of a VME have been recovered in a single line section.
- A VME indicator unit refers to a liter of VME indicator organisms that can be placed in a 10-liter container, or one kilogram of VME indicator organisms that do not fit into a 10-liter container.
- A "line section" is a section of the line with 1,000 hooks or a section of 1,200 m in length, whichever is the shorter.

In case of encounter with VME indicators, the captains of the ships:

- Quantify the species of the VME indicator, that is, sea pens, coral and sponge.
- If the number of VME indicators exceeds the limits indicated above per set of fishing:
 - According to Annex 1 of CMM 2018-01, it will indicate the incident to the General Secretariat of Fisheries.
 - According to point 12 of CMM 2018-01, you will stop fishing and will be separated at least 1 nautical mile from the midpoint of the operation, in the direction least likely to lead to an additional encounter. The captain will use his best judgment based on all available sources of information. "

In figure 4, the incidental by-catch on benthos taxa is shown. Data come from Spanish observers information and these reflect the weight of benthos catches by haul (75 longline sets with data).

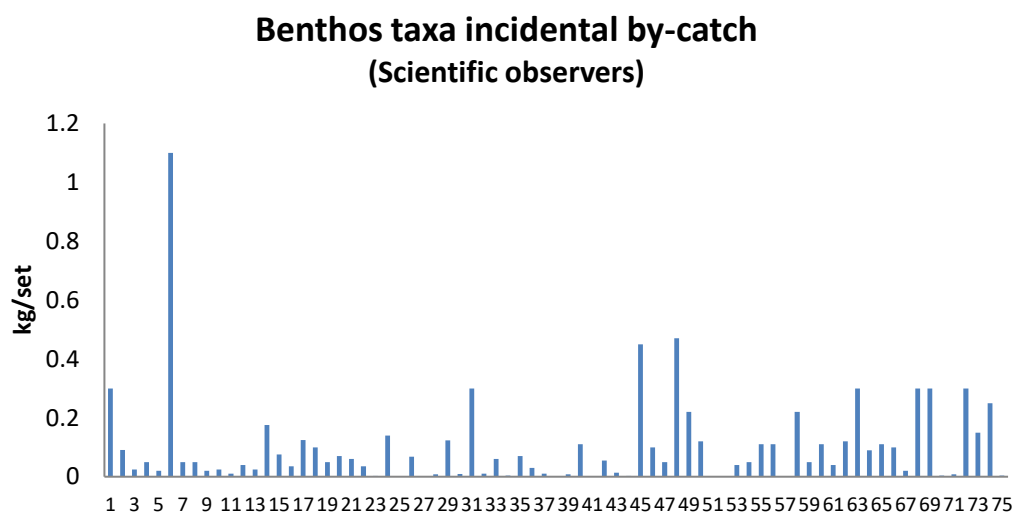


Figure 4. Incidental by-catch of benthos in the EU-Spain fleet (Observer data; 2017-2018).

6. Biological sampling and catch length frequencies

Scientific observers on board of the EU-Spain vessels conducted biological and size composition samplings in 2017 and 2018. This information still needs to be revised, to proceed with the analysis and elaborate the results that will be delivered through working documents.

7. Description of data verification

Data from EU-Spain fleet are reviewed searching for outliers on catch and effort data, species names, and fishing set position errors. In the periods where scientific observation is available, data from the vessels are contrasted with those from observers data. Vessels are also controlled through VMS positioning system.

8. Observer and port sampling program

Two scientific observers have been deployed on board the two EU-Spain fishing vessels operating in the region in 2018. Reports on the scientific observations were prepared and provided to SIOFA Secretariat, and also information on toothfish fishery tag recovering were delivered. The observers were on board during 150 and 82 fishing days, which means 72% and 100% of observation coverage by vessel, respectively. The scientific observers (Biologists or Marine Science degree) are part of the personnel trained at the Instituto Español de Oceanografía; specific training is also adapted for all fleets that are monitored.

EU-Spain and EU-France do not have a port sampling program for vessels fishing SIOFA species.