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## **Deliverable D3.3**

# **Evaluation of the governance structures of the cases**

14/04/2019



## Executive Summary

This report contains an evaluation of the governance structures of the EU long-distance fishing fleet in the six case studies of the FarFish project. These case studies include two high-seas fisheries and four fisheries that are based on Sustainable Fisheries Partnership Agreements (SFPAs) between the EU and coastal states. All of these fisheries are important for the fishing fleets of multiple EU countries or respond to the priorities of Regional Fisheries Management Organisations (RFMOs) and the Common Fisheries Policy (CFP). The report focuses on different aspects of both the structural and actor conditions, in particular focusing on monitoring, control and surveillance (MCS) of the EU external fishing fleet. For each of the four SFPAs, we present the requirements set within the SFPAs, the legal framework and systems for MCS in the coastal state and their capacity. For the high-seas cases, we present the governing framework of the area where such is in place and the practice of managing the EU fleet. For all cases, challenges of and measures to mitigate by-catch and discard issues and IUU fishing are presented. Lastly, we summaries the main findings regarding both achievements and identified challenges for the six case studies. This report is based on available data and synthesizes already existing information. It will function as input to the work in WP4 on management recommendations (MRs) and as a basis for further studies in the FarFish project of the governance structure of the EU fisheries outside Europe.



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## List of abbreviations and acronyms

AIS – Automatic Identification System  
CCAMLR – Convention for the Conservation of Antarctic Marine Living Resources  
CCSBT - Commission for the Conservation of Southern Bluefin Tuna  
CCS – Catch Certificate Scheme  
CECAF - Fisheries Committee for the Eastern Central Atlantic  
CFP - Common Fisheries Policy  
COFI – Committee on Fisheries (of FAO)  
CRODT - Oceanographic Research Center Dakar-Thiaroye  
DG DEVCO - Directorate-General for International Cooperation and Development  
DG MARE - Directorate-General for Maritime Affairs and Fisheries  
DNEM - National Directorate of Maritime Economy (Direcção Nacional de Economia Marítima)  
EDF – European Development Fund  
EEZ – Exclusive Economic Zone  
EFCA - European Fisheries Control Agency  
ERS – Electronic catch reporting system  
FAD - Fish Aggregating Device  
FAO – Food and Agriculture Organisation of the United Nations  
FAD – Fish Aggregating Device  
FAR - Fisheries Authorisations Regulation  
FIQCU – Fish Inspection and Quality Control Unit (of Seychelles)  
FMC – Fishing Monitoring Centre  
FPA - Fisheries Partnership Agreement  
ICCAT – International Commission for the Conservation of Atlantic Tunas  
IMO – International Maritime Organisation  
INDP - National Institute of Fisheries Development (Instituto Nacional do Desenvolvimento das Pescas)  
IOTC - Indian Ocean Tuna Commission  
ITLOS - International Tribunal for the Law of the Sea  
IUU – Illegal, unreported and unregulated  
LDAC – Long Distance Advisory Council  
MAF – Ministry of Agriculture and Fisheries (of Seychelles)  
MCS - Monitoring, control and surveillance  
MPEM - Ministry of Fisheries and Maritime Economy (of Mauritania) (MFME in English)  
MSY – Maximum Sustainable Yield  
NEAFC – North East Atlantic Fisheries Commission  
NAFO – Northwest Atlantic Fisheries Organisation  
PSMA - Port State Measures to Prevent, Deter and Eliminate IUU Fishing  
RFMO – Regional Fisheries Management Organisations  
SAFC – South Atlantic Fisheries Commission  
SCG – Seychelles Coast Guard  
SEAFO - South East Atlantic Fisheries Organisation  
SFA – Seychelles Fisheries Authority  
SFPA - Sustainable Fisheries Partnership Agreements  
SIOFA - Southern Indian Ocean Fisheries Agreement  
SLA – Seychelles Licensing Authority  
SMEFF - EC Regulation on Sustainable Management of External Fishing Fleets  
SMSA – Seychelles Maritime Safety Administration



SRFC - Sub-Regional Fisheries Commission  
TAC – Total Allowable Catch  
UNCLOS – United Nations Convention on the Law of the Sea  
UNFSA - United Nations Fish Stocks Agreement  
UNGA – United Nations General Assembly  
VLD – Vessel Locator Device  
VME - Vulnerable Marine Ecosystems  
VMS – Vessel Monitoring System  
WECAFC - Western Central Atlantic Fisheries Commission



# 1 Introduction

About 21 % of EU fishing fleet's catches are taken in non-EU waters, either under fishing agreements with countries outside the EU (8%) or on the high seas (13%).<sup>3</sup> In order to increase fishing opportunities of the European fishing fleet, the EU negotiates bilateral agreements with non-EU coastal states. These agreements, referred to as Sustainable Fisheries Partnership Agreements (SFPAs) provide EU vessels with access to exploit surplus resources within the Exclusive Economic Zone (EEZ) of a given coastal state, while in return providing the coastal state with financial and technical support. The SFPAs consist of a framework agreement, laying down general guidelines, while the terms and conditions are specified in the accompanying protocol with technical annexes. Both the agreements and protocols are based on the same format, covering similar main issues. These include amongst others financial contribution and sectoral support, monitoring, control, and surveillance, and cooperation between both the coastal state and the EU as well as economic actors and the civil society. Fishing on the high seas often take place under the management of Regional Fisheries Management Organisations (RFMOs), of which coastal states and relevant distant water fishing nations are members. The work of RFMOs are based on a convention, setting general principles for the management of particular fisheries in a given area, which are accompanied by specific measures for species, gear and areas. In the absence of an RFMO or other bi- or multilateral agreements, it is the flag state that holds the responsibility to ensure the sustainability of a given fishery on the high seas.

This report is the first deliverable of Task 3.1 within the FarFish project, which focuses on analysing the governance structures of the external fishing fleet, that is EU vessels fishing outside EU waters. FarFish analyses six case studies; two high seas cases and four SFPAs, all of which contain fisheries that are important for the fishing fleets of multiple EU countries or respond to the priorities of RFMOs and the Common Fisheries Policy (CFP) (FarFish, 2017). The cases cover both tuna and non-tuna fisheries, and the governance of these fisheries involve several RFMOs. The International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Indian Ocean Tuna Commission (IOTC) provide the basis for the tuna fisheries in the case studies: the IOTC for Seychelles and ICCAT for Cabo Verde, Mauritania and Senegal.<sup>4</sup> The high seas fisheries in the South East Atlantic in FAO major fishing area 47 is managed by the South East Atlantic Fisheries Organization (SEAFO), while the fisheries on the high seas in the South West Atlantic in FAO major fishing area 41 are not covered by an RFMO.

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<sup>3</sup> <https://publications.europa.eu/en/publication-detail/-/publication/c8b5d962-0d38-11e7-8a35-01aa75ed71a1/language-en/format-PDF>

<sup>4</sup> In the West African cases also the advisory regional fisheries bodies, the Western Central Atlantic Fisheries Commission (WECAFC) and the Fisheries Committee for the Eastern Central Atlantic (CECAF), where the EU participates are relevant.



The evaluation of the governance structures of the selected fisheries focuses on different aspects of both the structural conditions and the actor conditions, in particular focusing on monitoring, control and surveillance (MCS) of the EU external fishing fleet, by the EU, flag/member states, coastal states and under RFMOs (see Figure 1). For each of the four SFPAs, we present the requirements under the SFPA, and the relevant RFMO, the legal framework and systems for MCS in the coastal state and their capacity. For the high seas cases, we present the governing framework of the area where such is in place and the practice of managing the EU fleet. For all cases, challenges of and measures to mitigate by-catch and discard issues and IUU fishing are also presented. Lastly, we summaries the main findings regarding both achievements and identified challenges for the six case studies.



*Figure 1 Framework used in this deliverable for evaluating the case studies*

This report is based on available data. This includes documents such as the ex-post/ex-ante evaluations of the different agreements, EC-initiated reports, as well as independent studies of the agreements and the external dimension of the EU fleet. Case study representatives have also been consulted. The reports from the Joint Committee meetings between the parties of the different SFPAs are publicly available upon request, but we have not received them. For this reason, the Joint Committee meeting reports are not included. The report synthesizes already existing information and will provide background information for the development of the management recommendations (MRs) in WP4. D3.3 is a part of the first iteration loop in the spiral development model and delivers context information about the different case studies that is essential when considering different outcome targets (OTs). The MRs and particular OTs defined for each case study will then, together with findings in this report, form the basis for more in-depth analysis of particular issues identified in each case study. This report therefore functions as a primer for further studies within the FarFish project into issues not yet covered in adequate detail of the governance structure of the EU fisheries outside Europe.

## 2 EUs Common Fisheries Policy (CFP) and fishing outside EU

The long-distance (external) fishing fleet of the EU includes around 700 fishing vessels, and about 300 of these fish under fisheries agreements between the EU and third countries (EP, 2018). Vessels may however fish within the EEZs of third countries under a separate agreement made directly with the coastal state in question (i.e. so-called “private agreements”) or they may operate under a flag different than that of its home country, i.e. by way of “reflagging”.

In the mid-1970s, an increasing number of coastal states extended their EEZ, ultimately to 200 nautical miles offshore from their baselines, which brought about 90% of the global fisheries resources under the control of coastal countries. This dramatically changed the condition for the fleets of the EU Member States. While fisheries on the high seas initially could proceed as before, the establishment of EEZs would displace the activity of various distant water fisheries from important fishing grounds. Meanwhile, ocean areas beyond national jurisdictions became subjected to management and regulation initiatives of RFMOs. To enable the Member States' fleets to continue their activities in these areas, the Community negotiated fisheries agreements with third countries and became a member of the relevant RFMOs.

As new Member States with distant water fishing interests joined the European Community, so did the number of fisheries agreements. The agreements helped to maintain the activity of the EU fishing fleet, which far exceeded the capacity needed to harvest the resources available within the EUs collective EEZ. In addition, the agreements helped meet increased European demands for fish. With the ratification of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, the fisheries agreements received a formal basis. The UNCLOS required that coastal states provide access to other states to harvest the surplus of the allowable catch in its EEZ, that is the resources they do not have the capacity to harvest itself.

Altogether, these developments were the drivers of an 'external' fisheries policy for the EU, which thus became structured around two types of arrangements: multilateral agreements for fishing on the high seas, and bilateral agreements with third countries for fishing in areas under their jurisdiction. Multilateral agreements are based on EU membership of RFMOs, which have the competence to establish conservation and management measures for fisheries on the high seas. Some RFMOs focus on highly-migratory species, notably tuna, throughout vast geographical areas (the tuna RFMOs) in which these species migrate including both EEZs and the high seas, while others have broad mandates to manage the fish stocks in a specific area (the non-tuna RFMOs). The EU, represented by the European Commission, plays an active role in six tuna and nine non-tuna RFMOs, out of the current 18 RFMOs worldwide (Figure 2) (EC, 2015).



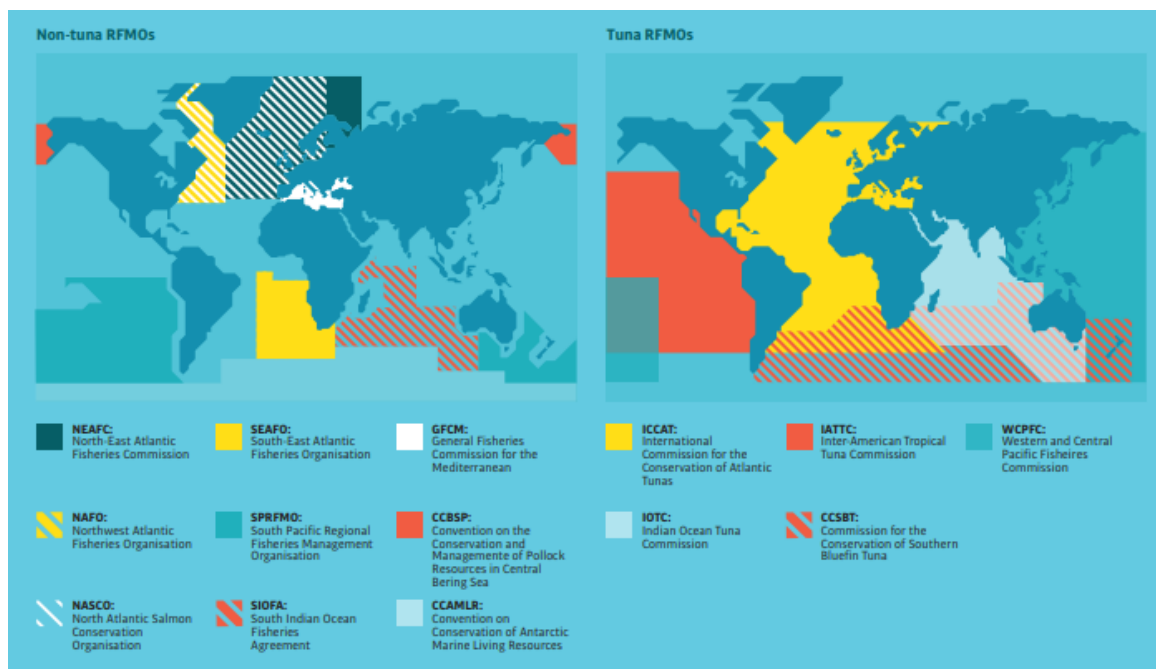


Figure 2 Global overview of Tuna RFMOs and Non-tuna RFMOs. Source: EC 2015.

The EU's early bilateral agreements were established without a comprehensive internal policy basis and were critically viewed to as arrangements to “pay fish and go”. The review of the CFP that led to the 2002 reform, recognized a need for a policy change to promote sustainability through the bilateral agreements. This resulted in the EU's framework for “Fisheries Partnership Agreements” (FPAs) (Witbooi, 2008). In addition to providing EU vessels access to fisheries, the FPAs aimed to strengthen the capacity of partner countries in developing countries to manage their fisheries sustainably, and to develop the local fisheries sector (EC, 2009a). Although the FPA represented significant progress towards the aims of sustainable and responsible fisheries management, they were still subjected to a number of deficiencies. Reported deficiencies of the FPAs include: an inability to ensure equitable agreements between EU and third countries in terms of the size of payments for fisheries resources; a lack of transparency regarding the terms of the agreements and inappropriate procedural aspects associated with their negotiation and implementation; inability to ensure that resources earmarked to sector development in the partnership country are being fully utilized as intended; a lack of ability to ensure that the fisheries for which agreements are made are actually managed sustainably and consistent with the notion that the agreements concern surplus MSY (e.g., Le Manach et al., 2013; Nagel and Gray, 2012; Corten, 2014; Sobrino and Oanta, 2015). Accordingly, the 2013 CFP reform amended the basis for the EU fisheries agreements. The revised framework for Sustainable Fisheries Partnership Agreements (SFPAs) provides the current basis for the EU when it negotiates new access agreements with third countries. Currently, some of the EU's fisheries agreements remain under the FPA framework, but this will change in the coming years as the SFPA framework will provide the basis for re-negotiating existing agreements or establishing new agreements.

The EU currently has 23 fisheries agreements with third countries, of which 14 are active. 12 of these agreements are bilateral agreements based on the FPA and SFPA frameworks. Most of these agreements concern tuna and tuna like species, but there are also some multispecies agreements giving access to variety of species including species of hake, certain small pelagic species and shrimp. In addition, the EU has two reciprocal agreements (with Norway and the Faroe Islands) which grant the partner country access to fishing within EU countries in return for access to EU vessels in the partner country.

In the following sections, we briefly address governance of EU fisheries in third countries through SFPAs or otherwise, before turning to governance aspects of EU fisheries operating in the high seas.

## **2.1 Governance of EU vessels fishing in the EEZs of third countries**

A basic principle in the Law of the Sea is the responsibility of the flag state to control the fishing activities of vessels flying its flag, no matter where the vessel operates. In the case of the EU, where it is the Member States that lend its flag to the vessel, the International Tribunal for the Law of the Sea (ITLOS) found that it is the Union, not its Member States, which is liable for any breach of the fisheries access agreements it has with coastal states (ITLOS, 2015). Accordingly, the EU fishing activities outside EU waters should be based on the same principles and standards as those applicable under EU law in the area of the CFP, and the EU should be able to monitor its fleet wherever it operates and whatever the framework. The Lisbon Treaty confers the Union with exclusive competence for the management of fisheries, and this responsibility includes the activity of EU vessels that fish under private agreements or under foreign flags (EC, 2009a).

To promote policy coherence, the external policy of the CFP of 2013 requires that EU fishing activities outside European waters follow the same principles and standards as within EU waters. The current CFP also demands that increased efforts are made to monitor EU vessels fishing in non-EU waters outside the framework of SFPAs (EP, 2018).

### ***2.1.1 Objectives and principles in SFPAs***

Sobrino and Oanta (2015) provide an extensive overview of the European policy framework relating to SFPAs, where the CFP is of particular importance, although consistency with the Treaty of the Functioning of European Union and the European development cooperation policy as well as international fisheries conventions (i.e. UNCLOS) and norms is also central. The 2013 CFP reform included a number of new objectives and principles for SFPAs. In general, the Union shall endeavour to ensure that SFPAs are of mutual benefit for the Union and for the partner country, including the local population and fishing industry of the latter. Overarching principles of SFPAs are defined in article 31 of the CFP (EC, 2013). The main objective of SFPAs is to “...establish a legal, environmental,

economic and social governance framework for fishing activities carried out by Union fishing vessels in third country waters”.

The objectives of the external CFP (Part VI, Articles 28-33) include:

- Development of scientific knowledge and advice
- Coherence with other external EU activities
- Sustainable and economically viable fishing activities
- Promotion of EU employment
- EU fishing activities outside and inside EU waters based on the same principles and standards
- Action to eradicate IUU
- Improving the performance of RFMOs

The Union shall also endeavour to include provisions about the landing of fish and fish products that are similar to the standards that apply for fisheries in EU waters.

With reference to the UNCLOS (article 62), a basic principle of the SFPAs is that EU vessels only are permitted to catch a surplus of the allowable catch. Further, this surplus shall be determined in a clear and transparent manner, based on the “best available scientific advice” as well as on information on the total fishing effort on the affected stocks by all fleets. This information shall be obtained through the exchanges between the Union and the third country. For straddling and highly migratory fish stocks, the assessments and conservation measures of RFMOs should be taken into account.

SFPAs also include an exclusivity clause. This clause implies that if the EU has a fisheries agreement with a third country, then EU vessels cannot operate in the third country's waters outside the framework of this agreement, even when no protocol is in force. Further, the external policy also sets objectives and principles for the EU vessels that operate without a basis in SFPAs. The Union shall make efforts to monitor the activity of such vessels, and it shall also ensure that these “are in a position to provide detailed and accurate documentation of all fishing and processing activities.”

A clause to safeguard that democratic principles and human rights are respected is now included in protocols to fisheries agreements. The need for a human rights clause was observed in relation to the EU-Morocco agreement in 2011, which was seen to violate self-determination rights of people in Western Sahara (Hadjimichael, 2018).

### **2.1.2 Regulations**

In this section, we provide a (non-exhaustive) overview of European regulations that apply in the context of management of EU vessels fishing in the waters of third countries. In addition to these, vessels will have to abide by any third country regulations that apply to their operations.

The CFP (EC, 2013) in particular aims to promote a sustainable, ecosystem-based and precautionary approach to fisheries management, emphasising the coherence between its internal and external dimension. The CFP requests Member States to ensure that vessels reflagging to a third country and subsequently returning to the EU fleet have operated in a way consistent with EU standards. The Member States are also required to collect detailed and accurate documentation of all fishing activities of their vessels fishing in non-EU waters outside the framework of bilateral agreements of the EU with third countries (EP, 2018).

There are three implementing pillars of the external dimension of the CFP; the Fisheries Authorisations Regulation (EC, 2018), the Control Regulation 1224/2009 (EC, 2009a) and the IUU Regulation 1005/2008 (EC, 2008a).

In itself the 2013 CFP did not ensure the Commission oversight of the conditions under which an EU vessel could fish in third country waters outside an SFPAs, for instance as enabled through private agreement between an EU Company and third country authorities. In part, this motivated the adoption of a new regulation (EC, 2017b) by the European Parliament and the Council in December 2017, which revised the previous **Fisheries Authorisations Regulation (FAR)** for the external fleets (EC, 2018). The new EC Regulation on Sustainable Management of External Fishing Fleets (SMEFF – ex-“FAR” in force in April 2018) sets up a new fishing authorization regime for EU vessels fishing outside EU waters, extending the scope of the authorisation system to public, private agreements and reflagged EU vessels. The new SMEFF also increases transparency by defining a common set of criteria that must be fulfilled for a vessel to obtain a fishing authorisation. Further, it makes elements of the electronic fishing authorisations register publicly available, showing who fishes for what and where.

**The Control Regulation** shall apply without prejudice to special provisions contained in SFPAs. Member States shall control access to waters and resources and control activities outside Community waters carried out by Community fishing vessels flying their flag. Moreover, Member States shall adopt appropriate measures (financial, human, technical resources and structures) necessary for ensuring control, inspection and enforcement of activities carried out within the scope of the CFP. The fisheries monitoring center of a particular Member State is in charge to monitor the fishing vessels flying its flag, whatever the waters in which they are operating or the port they are in (EC No 1224/2009).

The aim of **the IUU Regulation** is to ensure the legality of products entering the EU market and close the European market to imports of IUU fish, through import controls and sanctions against third-country vessels and states. The EC shall identify the third countries that it considers as non-cooperating third countries in fighting IUU fishing. A third country may be identified as a non-cooperating third country if it fails to discharge its duties to combat IUU fishing under international law as flag, port, coastal or market state. A fishing vessel shall be presumed to be engaged in IUU fishing if it: is fished without a valid license; not fulfil its obligations to record and report catch; has fished in a closed area, during a closed season; has used prohibited or non-compliant fishing gear; has taken on board, transshipped or landed undersized fish; has carried out fishing activities in third countries areas in contravention of the conservation and management measures.

A relevant issue concerning IUU is transshipping. Transshipments at sea escape any proper control by flag or coastal states; it constitutes a usual way for operators carrying out IUU fishing to dissimulate the illegal nature of their catches. It is therefore justified for the EC to authorize transshipment operations only if they occur within the designated ports of Member States, in ports of third countries between Community fishing vessels, or outside Community waters between Community fishing vessels and fishing vessels registered as carrier vessels under the auspices of a RFMO.

The EC, in collaboration with Member States, the Community Fisheries Control Agency (EFCA), third States and other bodies, should identify fishing vessels suspected of carrying out IUU fishing, on the basis of risk management. A system for mutual assistance should be established to enhance such cooperation. In addition, fishing vessels included in the IUU vessel lists adopted by RFMOs are to be also included in the Community IUU vessel list.

### ***2.1.3 Roles and institutions involved in SFPAs***

The SFPAs include three parts which comprise the contractual, regulatory and technical details of the agreements (EC, 2017a): The Fisheries Agreement defines the scope and the basic principles for the agreement and establishes a commitment to cooperate in Joint Committees with the third country to review its performance. The protocol authorises access for EU vessels and defines details of cooperation and payments. The technical annexes of the agreement define details of implementation of the agreement, including aspects of the licensing of EU vessels, catch reporting, technical measures, monitoring and control. In this section, we provide a brief overview of the roles of agencies involved with SFPAs (table 1). The EC agencies also engage in the management of high sea fisheries by EU vessels.



**Table 1** The role of the parties involved in fisheries agreements. Data source: EP 2016.

Party	Main responsibilities
Council	Gives the Commission a mandate to negotiate an agreement; adopts the agreement.
Parliament	Must consent to the agreement to be adopted; must be fully and promptly informed while agreements are drafted, negotiated and adopted.
European Commission	Negotiates the agreements; takes care of the administrative, financial and technical management; arranges independent <i>ex ante</i> and <i>ex post</i> and evaluations of the protocols that associate fisheries agreements. The evaluations provide a basis for renegotiating the protocols with third countries.
Coastal State (Third country)	Negotiates the agreements and details of the accompanying protocols; main responsible for resource monitoring, fisheries control and inspection in their ports and EEZ.
Joint Scientific Committee (JSC)	Consist of representatives of the EC and third countries authorities. JSC role is to monitor the performance, interpretation and application of the SFPAs. In addition, it has the competence to approve amendments regarding fishing opportunities, financial contribution, sectoral support procedures and any other technical provisions.
Member States	Flag state responsibility over the enforcement of control measures and other provisions of the fisheries agreements, including reporting of catch and VMS data.
The European Long-Distance Fleet Advisory Council (LDAC)	Represents a broad range of stakeholders and provides advice to the European institutions and Member States on issues relating to the external dimension of the CFP, including the fisheries agreements, RFMOs, and international business relations and issues concerning the market for fish products.
Ship-owners / operators	Payment of licence fees; compliance with the specific conditions of the agreement (e.g. landing part of the catches in the third country, taking local fishermen on board, and catch reporting).

### The Commission, the Council and the Parliament

The *European Commission* negotiates SFPAs with the third countries on behalf of the EU. In preparation for the negotiation, the Commission assesses the stock surplus based on data collected by joint scientific committees set up in the framework of SFPAs and/or the relevant RFMOs. When an agreement of the terms of the SFPAs is reached, the Commission draws it up as a legal proposal for adoption by the European Parliament and the Council. The European Commission also aims to facilitate scientific cooperation between EU and relevant scientific communities for the SFPAs in question.

The *Council* plays an important role in the negotiation and conclusion of agreements between the EU and third countries. It is involved at all stages of the procedure; from providing the mandate for negotiations to the Commission, to signing the agreement on behalf of the EU and adopting the final decision implementing it into EU law. The Commission represents the EU during the negotiations.



The *Commission* submits recommendations to the Council on each specific agreement. Then the Council adopts a decision authorising the opening of negotiations. Both the Council and the Commission are jointly responsible for checking that the agreements negotiated are compatible with internal EU policies and rules.

### **The coastal state (third country)**

Coastal States play a central role in global fisheries regulation and enforcement. Their role complements, supplements, and counter-balances those of the Flag State, the Port State, and international organisations that enforce fisheries rules, regulations and standards. The Coastal State has the main responsibility for effective application of fisheries monitoring measures in its EEZ. However, it is common practice for the SFPAs that the Coastal State and the EU share this responsibility and jointly monitor the state of fishing resources in the third country EEZ.

### **Joint Scientific Committee**

A Joint Scientific Committee is established for each SFPA to ensure that management measures are based on the best scientific advice available and are consistent with the precautionary approach. The European Commission shall select the EU JSC members in a personal capacity for the duration of the enforced Protocol. The scientific collaboration between the Coastal State and EU is based on recommendations and resolutions adopted within relevant tuna-RFMOs in the tuna-SFPAs, inputs from external scientists and observers, and inputs from representatives of any other regional fisheries management bodies.

Monitoring of SFPAs is pursued through regular and annual Joint Committee meetings between the EU and the third country.

### **European Fisheries Control Agency (EFCA)**

The European Fisheries Control Agency (EFCA) was established to strengthen and harmonize compliance, and to combat IUU fishing (EC, 2005). This role extends to cooperation with third countries (including within SFPAs) and to international organisations dealing with fisheries (including RFMOs). At present, EFCA is involved in the PESCAO<sup>5</sup> project, funded under the European Development Fund (EDF). This project aims to improve regional fisheries governance in Western Africa through better coordination of national fisheries policies. Further, PESCAO aims to contribute to strengthened prevention and control measures against IUU fishing by improving MCS at national and regional levels.

### **Long-Distance Advisory Board (LDAC)**

The European Long-Distance Fleet Advisory Council (LDAC) represents a broad array of stakeholders regarding fisheries in high seas as well as fisheries in the EEZ of third countries. The LDAC represents stakeholder interests related to both the fishing and processing sectors in Europe as well as other

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<sup>5</sup> <https://www.efca.europa.eu/es/content/new-jdp-reports-western-waters>

interests such as environmental NGOs and consumer organisations. Advisory Councils were established by the CFP to strengthen stakeholder involvement in policy development and implementation. The LDAC provides advice to the European Institutions (Commission, Council and Parliament) and EU Member States on matters related to Fisheries Agreements, RFMOs, or other international organisations that manage waters in which EU vessels are operating. It also provides advice on business relations and the international market for fishing products. LDAC aims to promote sustainable fisheries, marine conservation, and transparency in fisheries governance.

### **Ship-owners/operators**

The activity of the EU fleet is governed by the SFPAs but is also subject to the laws and regulations of the third country. EU vessels may fish in the different EZZ only if they are in possession of a fish license. The authorization procedure for obtaining a fishing license, the applicable taxes and the payment methods used by ship-owners shall be set out in the particular agreement. Each SFA contains a specific catch reporting protocol (logbooks, landing and transshipment declarations, and when feasible, electronic data exchange procedures). EU vessels fishing under the SFA are obligated to fill a statement of catch form and to report their catches to the responsible national authority within a previously established period of time that is referred into the protocols. Also, a copy of those statements must be submitted to the EU and the different scientific institutions.

## **2.2 Governance of EU vessels fishing in the high seas**

The high seas cover more than 60% of the global ocean surface. Fishing in high seas is dominated by a small number of fishing countries. Five countries alone accounted for about 64% of the global high seas fishing revenue in 2014: China (21%), Taiwan (13%), Japan (11%), South Korea (11%), and Spain (8%). The total catch from the high seas was 4,4 million metric tons, with aggregated landed catch value of \$7.6 billion (Sala et al., 2018).

Although the external dimension of the CFP provides a framework for the activities of EU vessels fishing on the high seas (multilateral agreements), the comprehensive legal framework for all these instruments is the UNCLOS and UN Fish Stocks Agreement (UNFSA) and associated agreements and guidelines. The EU institutions involved in high sea fisheries are the same as those listed in table 1 for SFPAs.

### ***2.2.1 The role of RFMOs***

According to the law of the sea, fishing on the high seas is to be managed by the states involved through cooperative arrangements such as Regional Fisheries Management Organisations (RFMOs).<sup>6</sup> It is in these organisations that states<sup>7</sup> cooperate to adopt management measures for straddling and highly migratory fish stocks. The enforcement of fisheries regulations adopted under RFMOs or other arrangements is primarily the responsibility of the flag state. Nevertheless, some flag states do not exert effective control over ships flying their flag as required by UNCLOS (“flag of convenience” states). As a response, regional and global arrangements to strengthen the role of port states in promoting compliance have been developed. Certain supplementary agreements have also been developed, which allow states other than the flag state to verify compliance with agreed international rules and, in some cases, take enforcement action on the high seas.

The parties to an RFMO are usually the coastal states bordering the high seas area in the region and relevant distant water fishing nations. The fisheries conservation and management measures are binding on their members. In addition to RFMOs there are regional fisheries organisations or arrangements, without a mandate to make binding decisions, but who provide advice and function as a coordinating mechanism.

The legal competence, structure and performance of the RFMOs varies. All have some sort of scientific committee that gathers data from member states to guide establishment of sustainable catch levels for various species. They also have management powers to set catch and fishing effort limits, technical measures, and control obligations. Today there are RFMOs or bilateral arrangements in place or under establishment, covering nearly all major high seas fish stocks. The major exception is straddling stocks in the Southwest Atlantic Ocean, leaving a large oceanic area and the fisheries taking place there without any common management or control.

So-called tuna-RFMOs manage highly migratory species, like tuna and other large species such as swordfish and marling, for the entire area of their migration. So-called non-tuna RFMOs manage straddling fish stocks, that is a stock that occurs both within the EEZ of one or more states and in an area beyond national jurisdiction, on the high seas. Generally, the RFMO manages the high seas part of the fisheries, and the relevant coastal state the fisheries in the EEZ, but very often this is an interrelated process. Some RFMOs also manage discrete high seas stocks, i.e. stocks occurring only (at least from a stock assessment and management perspective) on the high seas. Countries with large distant water fishing fleets, like the EU, are members of several RFMOs. The EU is a member of 15 RFMOs, including nearly all the tuna ones, and also in two RFMOs with a purely advisory status.

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<sup>6</sup> UNCLOS art. 116 – 118, and also the United Nations Fish Stocks Agreement (UNFA).

<sup>7</sup> And other sovereign actors like the European Union and ‘entities’ like Taiwan

The FarFish SPPA case studies concern fisheries related to two RFMOs: the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Indian Ocean Tuna Committee (IOTC). In addition, the high seas case study FAO major fishing area 47 involves the South East Atlantic Fisheries Organisation (SEAFO). As mentioned, there are no RFMO or other arrangement for the South West Atlantic (FAO major fishing area 41) and the fisheries taking place there without any bi- or multilateral management or control.

ICCAT was established by the Convention for the Conservation of Atlantic Tunas, prepared and adopted in Rio de Janeiro, Brazil in 1966. The Convention entered into force in 1969. ICCAT is responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent waters and is tasked with overseeing and coordinating research and stock assessment on approximately 30 species of tuna and other species such as swordfish. Currently there are 52 contracting parties to ICCAT, including the EU and Cabo Verde, Mauritania and Senegal – the case studies in FarFish.

The IOTC was established in 1993, and oversees the management of several species of tuna, mackerel, marlin and swordfish in the Indian Ocean. The IOTC is responsible for gathering, analysing and disseminating scientific information on stocks and the associated fisheries, as well as on relevant social and economic aspects, to encourage, recommend, and coordinate research and development activities and capacity building, and to adopt measures to ensure the conservation of the stocks covered by the Agreement. There are currently 31 contracting parties to IOTC, including the EU and Seychelles – a case study in FarFish.



## Fisheries under SFPAs



### 3 Cabo Verde

In September 2006 the EU and Cabo Verde concluded a bilateral FPA (Amador et al., 2018). This Agreement provided fishing possibilities exclusively for highly migratory species for EU vessels fishing in Cabo Verde waters. It entered into force on 30 March 2007 and has been automatically renewed twice for periods of 5 years (29 March 2012 and 29 March 2017).

The current Protocol was signed, and entered into provisional application on 23 December 2014, it will expire on 22 December 2018. The Protocol sets out the fishing opportunities and financial contributions provided for in the SFPA. It grants to the EU fishing opportunities for up to 71 vessels to fish for tuna and other highly migratory species in 3 fishing categories: 28 tuna seiners, 30 surface long liners and 13 pole-and-line vessels, with a reference tonnage of 5,000 t/year. The Member States interested in fisheries activities in the EEZ of Cabo Verde are, France (FR), Portugal (PT) and Spain (ES).

The annual EU public financial contribution to Cabo Verde amounts to EUR 550,000/ year out of which EUR 275,000 is earmarked for the support of the Cabo Verde fisheries policy for the first two years of the Protocol, and EUR 250,000/ year for the last two years of the Protocol. The Agreement is classified by the EU as a “tuna agreement”.

#### 3.1 Requirements of the SFPA

*Table 2 Source: European Commission - Cabo Verde FPA<sup>8</sup>*

<b>Cabo Verde Fisheries Partnership Agreement</b>	
<b>Duration of Agreement</b>	29.03.2012 – 29.03.2017
<b>Duration of Protocol</b>	23.12.2014 – 22.12.2018
<b>Fishery</b>	Tuna
<b>Financial contribution</b>	1 <sup>st</sup> - 2 <sup>nd</sup> year = €550.000/year (€275.000 dedicated to fisheries sector support) 3 <sup>rd</sup> - 4 <sup>th</sup> year = €500.000/year (€250.000 dedicated to fisheries sector support)
<b>Reference tonnage</b>	5.000t./year
<b>No. of vessels</b>	Tuna seiners (28) Spain (16) France (12) Surface longliners (30) Spain (23) Portugal (7) Pole and line (13) Spain (7) France (4) Portugal (2)

<sup>8</sup> [https://ec.europa.eu/fisheries/cfp/international/agreements/cape\\_verde](https://ec.europa.eu/fisheries/cfp/international/agreements/cape_verde)

Measures relating to reporting and monitoring of fishing activity are specified in the Annex to the 2014 Protocol, Chapter IV-XI.

Entry or exit from the Cabo Verdean EEZ of EU vessels must be notified to the appropriate authorities a minimum of six hours in advance, specifying the date/time and point of passage, the quantity of each species on board, and the presentation of the products.

All EU vessels fishing under the Agreement must keep a logbook, completed by the vessels master each day while in the Cabo Verde EEZ. The logbook must detail the species on board, as well as the amount, expressed in either kilograms or the number of individual fishes. Where applicable, the same must be filled out for discarded fish.

The logbooks must be submitted to the appropriate authority when the vessel passes through a Cabo Verdean port. If the vessel leaves Cabo Verdean waters without passing through a Cabo Verdean port, the logbook must be submitted to the authorities within 14 days, either by letter, fax or email. Tuna fishing vessels and surface longlines must also send copies of the logbooks to either Institut de recherche pour le développement (IRD), Instituto Español de Oceanografía (IEO), Instituto Português do Mar e da Atmosfèra (IPMA) or Instituto Nacional de Desenvolvimento das Pescas (INDP). Chapter. IV section 3 specifies that the parties shall establish an electronic reporting system (ERS) for reporting catch data.

Upon either landing or transshipping catch from Cabo Verdean waters, the vessel master must notify the authorities at least 24 hours in advance, specifying the vessels name, port of landing/transshipment, date and time, quantity, and in instances of transshipment, the name and health certificate of the receiving vessel.

Vessels fishing under the Agreement are liable to inspection at either sea or port by inspectors from Cabo Verde. Representatives from the European Union may participate in inspections as an observer.

All vessels under the Agreement must be fitted with Vessel Monitoring System (VMS), ensuring continuous communication of their position to the FMC of their flag state. The flag state in turn is responsible for forwarding this information to the FMC of Cabo Verde. The position reports must include the vessels identification, their geographical position, date and time, speed, and course.

## 3.2 Requirements under ICCAT

Cabo Verde is one of 52 contracting parties to the International Commission for the Conservation of Atlantic Tunas (ICCAT). Cabo Verde has been a member of ICCAT since October 11<sup>th</sup> 1979 and is a member of two panels; tropical tunas (Yellowfin tuna, Bigeye tuna and Skipjack tuna) and other species (Swordfish, Billfish and small tunas). A delegation from Cabo Verde has participated in all ICCAT Commission plenary meetings since 2013, and in all the meetings of the Standing Committee for

Research and Statistics (SCRS) since 2011. Cabo Verde has also complied with its obligation of submitting the annual reports and statistical data to the ICCAT Commission, which are key requirements in terms of compliance.

Management of the key stocks covered by the SFPA, which are highly migratory species, is coordinated through ICCAT. The tuna species and swordfish are directly covered by the ICCAT Convention, while the two shark species (Blue shark and shortfin mako) are also identified under the ICCAT Convention as 'by-catch species of special importance'. This implies that Cabo Verde has to comply with all relevant conservation and management measures adopted by ICCAT such as fishing capacity and catch limits, area and seasonal restrictions, etc.

### **3.3 Cabo Verde legal framework for sustainable fisheries – rules and regulations**

The fisheries sector is mainly regulated by Law Decree 53/2005 of 8 August, as amended and republished by Legislative Decree 2/2015 of 9 October, which approves the Policy for the Sustainable Utilization of Fishery Resources and is hereinafter referred to as the Fisheries Law. Under the Fisheries Law, foreign fishing vessels are only allowed to operate in the maritime waters of Cabo Verde under international agreements with the flag state of the vessel, or with the organisations representing them, or exceptionally, when duly authorized by the member of the Government responsible for Fisheries.

The Fisheries Policy Charter (Carta da Política das Pescas - CPP) was adopted in 2014 by Resolution 17/2014 and establishes the Government's strategic options for the fisheries sector over the period 2013-2018. It aligns with wider economic and social development plans and its objective is for integrated and sustained development of the sector, thus contributing to improved living conditions of the various directly or indirectly related actors.

A National Council of Fisheries was established by the Fisheries Law to advise the Government on the definition and implementation of the policy for the Fisheries sector. This was recently replaced by the National Council of Maritime Economy, which is not yet operational.

The Fishery Resource Management Plan (Plano de Gestão dos Recursos da Pesca - PGRP) was adopted in 2004 under the National Environment Plan 2004-2014 (Plano de Acção Nacional para o Ambiente - PANA II) with the objective to ensure that the fisheries of Cabo Verde contribute to increase national production, food safety, quality of fishery products, employment, and to decrease the balance of payments deficit. The Plan covers different segments of the fisheries activities, with sections relating to industrial fisheries, artisanal fisheries, foreign fishing, sport and amateur fishing. In each case, it sets out the problems to be resolved, the sub-sectoral objectives, the results to be achieved and the proposed activities.



A review of the plan is pending and in the meantime, the plan is implemented by means of Biannual Executive Plans, published in the Boletim Oficial da República de Cabo Verde, detailing the regulations and management measures. The current execution of the plan concerns the period 2018-2019. The plan sets out a number of policy restrictions on foreign fishing in general, as well as specific measures in relation to specific fisheries, including foreign fishing. In respect of tuna fishing, the Plan estimates the potential available in the EEZ, allows a gradual development of the fishery, and proposes a cautious expansion of the fishing effort, subject to control of the number of fishing licenses issued. Fishing for live bait by foreign vessels is prohibited within the 12 nautical miles. Live bait is normally caught within 3 nautical miles, an area reserved exclusively for artisanal fishing; support vessels are however allowed to operate in bays and in non-inhabited areas within 3 nautical miles, exclusively to catch live bait; bait caught under such circumstances shall under no circumstances be marketed for consumption.

## 3.4 Cabo Verde MCS institutions

### 3.4.1 Institutions and mandates

The recent institutional reform of the Government moved fisheries, previously under the Ministry of Infrastructures and Maritime Economy, under the Ministry of Economy and Employment (MEE) which is in charge of proposing, implementing and evaluating public policies in a number of fields including fisheries. However, it is not entirely clear whether an announced remodelling of the Government has come to a conclusion, placing fisheries affairs under a Ministry of Tourism, Transport, and Maritime Economy (Governo de Capo Verde, 2018). The following description of the institutional setup is expected to continue in a similar structure under the new ministry.

The National Directorate of Maritime Economy (Direcção Nacional de Economia Marítima - DNEM) is a central service of the Ministry of Economy and Employment in charge of the elaboration, implementation and coordination of the maritime, marine resources, fisheries and aquaculture policies. It is the competent authority responsible for the issue of fishing licenses to national vessels and to advise regarding applications for fishing licenses by foreign vessels which are subsequently issued by the Minister.

Under the DNEM, the Marine Resources, Aquaculture and Fisheries Service (Serviço de Recursos Marinhos, Aquacultura e Pescas - SRMAP) is in charge of keeping a database of the licensing of fishing activities by nationals or foreigners in the EEZ of Cabo Verde, and promoting continuous updating, in conjunction with other relevant departments, of statistical data in the field of fisheries, aquaculture and marine living resources.

With regard to MCS, DNEM is in charge of ensuring the control of the fishing activities in the country involving technical measures, fishing activity and other conditions that ensure safety and catch standardization; coordinating the execution of the inspection functions and ensuring the inspection

and control of the fishing activities; instructing processes resulting from violations of laws and regulations and proposing the correspondent sanction scheme. The National Institute of Fisheries Development (Instituto Nacional do Desenvolvimento das Pescas - INDP) has the responsibility for research and development inputs for fisheries management with core activities in stock assessment, elaboration of management measures, compilation of statistics in the fisheries sector, promotion and development (co-management and support to fishing communities).

The Coast Guard, part of the Armed Forces of Cabo Verde, plays a key role in MCS with functions such as search and rescue, fisheries control and surveillance, and marine controls on immigration, smuggling, pollution etc. The Coast Guard Command oversees the Maritime Safety Operations Centre (Centro de Coordenação de Segurança Marítima – COSMAR). This is an interagency organisation that coordinates the work of the various specialized national agencies with competence in the area of maritime safety (Navy, Coast Guard, Maritime Police, Customs, Borders Services and DNEM). Each year the Coast Guard develops a joint plan on routine inspections in coordination with DNEM, which is then formalized through a MoU.

Maritime and Ports Authority (AMP - Agência Marítima e Portuária) was established in 2013, to replace the Maritime and Ports Institute, as an independent entity with the purpose of performing the technical and economic regulation and supervision of the maritime and ports sector. It should be noted that the two major ports in Mindelo on Sao Vicente island and Praia Port on Santiago Island are operated by the state-owned port company National Company of Ports Administration (Empresa Nacional de Administração dos Portos – ENAPOR).

The Maritime Police was previously under the Maritime and Ports Institute (replaced by AMP), but since 2006 is a branch of the National Police (Ministry of Internal Affairs). The Maritime Police takes part in inspections at sea within the territorial limit of 12 nautical miles but is mainly involved with port inspections together with DNEM, Coastal Guard, and ENAPOR.

Cabo Verde also participates in the Gulf of Guinea Inter-regional Network (GOGIN) of MCS centres which kicked-off in June 2016 and includes a planned Multinational Maritime Co-ordination Centre based in Praia.

### ***3.4.2 Capabilities***

#### **Physical and technical resources**

Monitoring, Control and Surveillance (MCS) involves several institutions. The activities are organized in actions and tools such as monitoring by the Automatic Identification System (AIS) and the Vessel Monitoring System (VMS), inspections of vessels at landing, maritime patrol operations, and certification of catches.

Physical assets available to the Coast Guard include seven patrol vessels, two SAR vessels, and one Dornier aircraft. The capacity of the service is limited however by the means available (and keeping them in full operational condition). Several of the patrol vessels and the aircraft have been out of commission for long periods. Operational budgets are limited, placing a limit on the frequency and range of activities. The Government is in the process of acquiring two autonomous aircraft (drones) to improve the MCS capacity.

VMS is required by law (amended in Legislative Decree 2/2015 of 9 October) and applies to semi-industrial and industrial fishing vessels, both domestic and foreign; national fishing vessels operating in international waters and/or in third countries; and to fishing vessels used exclusively for aquaculture and recreational fishing. COSMAR operates and hosts the VMS Centre (as well as other monitoring tools such as AIS, surveillance and inspection reports etc.) which is based in Praia.

### **Human resources**

In the training needs assessment of FarFish (FarFish D7.4, 2017), INDP reports that even though they are receiving logbook and catch data from the EU fleet, the data does not seem to be processed or used to control the fisheries due to lack of resources and training.

The Coast Guard has its central command in Mindelo, and operational bases in Praia and Palmeira in Sal with a staff complement of 206. Due to the strategic geopolitical position of Cabo Verde in relation to Europe and the USA, joint maritime security inspections are undertaken with Portugal, Spain and the American forces. A joint inspection is undertaken on average every four months.

21 fisheries inspectors (attached to the DNEM) have been trained over the past years of which two are based in COSMAR working from 8am-4pm. At other hours, the Coastguard perform the duties of MCS.

There is no provision for observers in the Cabo Verdean legislation and the country does not have an observer programme in place and as such does not participate in the ICCAT Regional Observer Programme. Several attempts at training and establishing such an observer programme have taken place but with no success so far, including the lack of provisions in the fisheries legislation.

The General Inspection of Economic Activities (Inspeção Geral das Actividades Económicas – IGAE) has a staff of 12 inspectors with the responsibility supervising industrial, touristic, commercial, agricultural, fishing or service activities are carried out and carrying out preliminary investigations in relation to economic and sanitary matters, including the domestic fishery sector.

## 3.5 Implementation in Cabo Verde

### 3.5.1 Monitoring of catch data

EU catches in the context of the SFPA with Cabo Verde have been an annual average of 6,539 tonnes in the period 2011-2017, albeit these are very variable (9,982 thousand tonnes in 2017) (Amador et al., 2018). Catches are dominated by Spanish vessels, accounting for 98% of the catch in 2017. Catches by French and Portuguese vessels have fluctuated at much lower levels.

Catch reporting requirements are defined in the SFPA Protocol, where the masters of EU vessels shall keep a fishing logbook for each day the vessel is present in Cabo Verdean waters and record the quantity of each species, as well as discards. The logbook should be submitted to the Cabo Verde authorities in original within 30 days after leaving the Cabo Verdean zone, as well as sending copies to the relevant Member State or Cabo Verdean scientific institute. Provisions are made for the establishment and operation of an electronic logbook and ERS, and guidelines for its operation were set out with the aim of making it operational from 1 September 2015.

Concerns were expressed by Cabo Verdean stakeholders with regard to the frequency of the catch reporting by foreign vessels, including EU vessels. The ERS system is not yet operational so data on catches is still not yet being transmitted automatically. It was expected that the catch reporting arrangements will improve with the operationalization of the ERS during the first half of 2018, but so far it is not operational.

Data on catches by non-EU foreign vessels in the Cabo Verde EEZ is not readily available, but there appears to be concern in relation to the reliability of these data. These vessels report to ICCAT on their catches, but there appear to be difficulties in reconciling this with the reports being provided to Cabo Verde. This concerns the following flags in 2017 (Amador et al., 2018), although more Japanese and Chinese vessels have operated in Cabo Verde waters in the past:

- Japan 8 (longliners)
- Senegal 6 (4 purse seine, 2 pole & line)
- El Salvador 4 (purse seine)
- Curaçao 3 (purse seine)
- Panama 2 (purse seine)
- Belize 1 (purse seine)

For domestic commercial tuna fisheries, catch and effort data, supplemented with data from other sources (Customs, DNEM, fish processing factories) are collected by INDP. Sport fishing is increasingly important economically, socially and politically but there is no data available on this fishery.

### ***3.5.2 Monitoring and control at sea***

The Coastguard reported 387 hours spent on fisheries inspections at sea in 2014 (from a total of 1,620 hours on sea-going operations). Fisheries inspection increased slightly to 462 hours in 2015 (ibid.). According to the ex-post and ex-ante evaluation (Amador et al., 2018) no budget was provided from DNEM in 2016 for fisheries inspections. In 2017, a small budget was provided, but the ocean-going inspection vessel was out of service for most of the year and only seven inspections, none of which were taking place on the high seas, were undertaken. This implies that for the last two years, very few inspections at sea are taking place, unless as part of occasional international joint operations, which is linked to limitations in terms of capacity and financial means.

Also, the VMS system carried by EU vessels is not compatible with the VMS in place in Cabo Verde. Efforts are being made at solving this issue with support from the SFPA, but no monitoring has been possible during the current protocol. Furthermore, even though Cabo Verde does not have an observer programme in place, it should be noted that EU vessels are covered by EU observer programmes.

### ***3.5.3 Monitoring and control in port***

The level of inspections taking place in ports was not available for this report, but it is important to note that Cabo Verde acceded to the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing (PSMA) in 2015. Training of fisheries inspectors (21) has taken place as part of building capacity to implement this Agreement, particularly in relation to port inspections. A complementary activity is carried out by 12 inspectors that are responsible for sanitary control and certification of exports.

### ***3.5.4 By-catch and discard issues***

A key issue in relation to the SFPA has been the by-catch of shark species and collection of data on discards. INDP estimates that shark catches by the foreign long line tuna fleet (EU and Japan) now exceed tuna catches (FarFish, 2017). Significant efforts have taken place with links to the SFPA (Coelho et al., 2017). A National Plan of Action (NPOA) for the conservation and management of sharks in the EEZ of Cabo Verde is being elaborated by INDP with the support of FAO. The plan will be aligned with the FAO International Plan of Action (IPOA) for the conservation and management of sharks and the ICCAT recommendations and is expected to be published in 2018. It is also expected that the catches of sharks will be a part of the negotiations of a new protocol.

### ***3.5.5 IUU-fishing issues***

In 2015, Cabo Verde approved the National Plan of Action (NPOA) to prevent, deter and eliminate IUU fishing for the period 2015-2018. Also, in 2015, Cabo Verde acceded the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing (PSMA). Cabo Verde has and will be receiving support from a number of development partners, notably the FAO, World Bank, and EU, in building capacity to implement these Agreements and instruments. Further, with regards to international cooperation, Cabo Verde is part of the Sub-Regional Fisheries Commission (SRFC) which is composed of several West African coastal states. The SRFCs aim, among others, is to support improved MCS capabilities in the participating countries through initiatives such as establishing national vessel registries, following the progress of VMS implementation, and promoting cooperation between national authorities (Interpol, 2014). Cabo Verde has also taken part in operations coordinated by the US Department of Defence's Africa Command (ibid). It should be noted that many of the support measures specified in the SFPA Protocol concerns the strengthening of MCS capability.

## **3.6 Cooperation with EU institutions, flag states and vessels**

### ***3.6.1 Implementation***

As provided for in Article 9, no. 1 of the SFPA, a Joint Committee was established to monitor the performance, interpretation and application of the SFPA, including the definition of the annual and multiannual programming of sector support and evaluation of its implementation, matters of mutual interest relating to fisheries, as well as scientific cooperation. This forum provides also for the settlement of any disputes regarding the interpretation or application of the SFPA, and reassessing, where necessary, the level of fishing opportunities and the corresponding financial contributions. The Joint Committee is constituted by representatives of the Commission and Cabo Verde. The 2018 ex-post evaluation of the Cabo Verde Agreement notes that the Committee has met every year during the period of the current protocol, with the participation of member states with fishing interests in Cabo Verde, i.e. Portugal, Spain and France.

## **3.7 Main achievements and challenges**

### ***3.7.1 Main achievements***

The SFPA provides for an annual financial contribution to Cabo Verde amounting to EUR 550,000. Approximately half is earmarked for the support of the Cabo Verde fisheries policy, including support measures in the area of strengthening MCS, providing valuable funding in this strategic area.

Fisheries governance is relatively well developed in Cabo Verde. The National Directorate of Maritime Economy (Direcção Nacional de Economia Marítima - DNEM) is the main authority responsible for



fisheries, including control and licensing. Management of the sector is implemented by means of Biannual Executive Plans, detailing the regulations and management measures.

The Coast Guard plays a key role in MCS functions in fisheries and the maritime environment. It oversees the Maritime Safety Operations Centre (Centro de Coordenação de Segurança Marítima – COSMAR) which is an interagency organisation that coordinates the work of the various specialized national agencies with competence in the area of maritime activities (Navy, Coast Guard, Maritime Police, Customs, Borders Services and DNEM).

Cabo Verde acceded to the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing (PSMA) in 2015. Training of 21 fisheries inspectors has taken place as part of building capacity to implement this Agreement, particularly in relation to port inspections.

Cabo Verde plays an active role as a member of several Regional Fishery Organizations such as ICCAT, CECAF, and the Sub-Regional Fisheries Commission (SRFC). The SRFC in particular has served as an important vehicle in various donor-supported efforts to support improved MCS capabilities in member countries.

Cabo Verde is also a member of Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic Ocean (ATLAFCO, but better known by its French acronym, COMHAFAT) an intergovernmental organization founded in 1989 which brings together 22 countries from Morocco to Namibia.

Cabo Verde participates in the Gulf of Guinea Inter-regional Network (GOGIN) of MCS centres which kicked-off in June 2016 and includes a planned Multinational Maritime Co-ordination Centre based in Praia.

Due to the strategic geopolitical position of Cabo Verde in relation to Europe and the USA, joint maritime security inspections are undertaken with Portugal, Spain and the American forces. Joint inspections are undertaken on average every four months.

A National Plan of Action (NPOA) for the conservation and management of sharks in the EEZ of Cabo Verde is being elaborated by INDP with the support of FAO.

Under the SFPA and its Protocol, a Joint Committee was established to monitor the performance, interpretation and application of the SFPA. Implementation has functioned to the satisfaction of both parties, although there is room for improvement in several areas.

### ***3.7.2 Challenges and key priorities***

A key priority is to secure capacity and financial means for MCS activities to maintain operational the physical assets and carry out inspections both at sea and on land.

The issue of compatibility between VMS monitoring system at COSMAR and the systems onboard EU vessels and other foreign vessels should be solved.

The systems should be put in place for electronic reporting, so that Cabo Verde can receive the information from EU vessels automatically and this system should also cover the activities of other foreign vessels.

Cabo Verde does not have an observer programme in place and should take the necessary steps to establish one, including the necessary legal framework and establishment of a corps of scientific observers.

Cabo Verde should take even more advantage of regional efforts and coordination of MCS assets and activities, including the use of emerging technologies, in order to improve MCS coverage of the high seas in an efficient and effective manner.





## 4 Mauritania

The current four-year Protocol to the Fisheries Partnership Agreement (FPA) between the EU and Mauritania entered into force on 16 November 2015. This protocol confirms several decades of cooperation in the field of fisheries, a key sector for the development of Mauritania and one of the pillars of the European strategy for sustainable blue growth.<sup>9</sup> Under the Protocol, the EU fleet is allowed to fish in Mauritanian waters for shrimp, demersal fish, tuna and small pelagic fish, up to a total of 287,050 tonnes a year, under improved operational conditions. In addition to the fees paid by the European fleet (tonnage fees and para-fiscal taxes), the EU pays a financial contribution of 61.625 million euros per year for this partnership, comprising 57.5 million euros for the access to waters and 4.125 million euros for supporting local fishing communities in Mauritania and improving fisheries governance.

In line with the EU's fisheries policy, the protocol contributes to responsible fishing and the sustainable management of fisheries resources, including enhanced transparency measures. It seeks to minimise fishing impacts on marine ecosystems and is intended to respect the activities of the Mauritanian coastal and artisanal fleets. Fisheries is a key sector for the development of Mauritania, which has some of the world's most fish-abundant waters. The FPA is therefore extremely important for both contracting partners.

### 4.1 Requirements of the SFPA

Table 3 Source: European Commission - Mauritania FPA

Mauritania Fisheries Partnership Agreement	
<b>Duration of Agreement</b>	6 years renewable (30/11/2006- 29/11/2012; 30/11/2012 – 29/11/2018)
<b>Duration of Protocol</b>	4 years (from 16/11/2015 to 15/11/2019)
<b>Initialisation</b>	26 November 2015
<b>Nature of the FPA</b>	Multi species Agreement
<b>Financial contribution</b>	61 625 million €/year, of which 4 125 million €/year to support the fisheries sector
<b>Fee for ship owners</b>	<p>Category 1 — Fishing vessels specialising in crustaceans other than spiny lobster and crab (maximum 5 000 t/year; maximum 25 vessels). Fee: 400 €/t, annual advance fee of 1 000 €/vessel deducted from total fee due.</p> <p>Category 2 — Black hake non-freezer trawlers (maximum 6 000 t/year; and maximum 6 vessels). Fee: 90 €/t, annual advance fee of 1 000 €/vessel deducted from total fee due.</p> <p>Category 2 bis — Black hake freezer trawlers (main target species: black hake, maximum 3 500 tonnes/year; secondary species: squid maximum 1 450 t/year and cuttlefish, maximum 600 t/year, 25% by-catch allowed for demersal fish other than black hake).</p>

<sup>9</sup> [https://ec.europa.eu/fisheries/cfp/international/agreements/mauritania\\_en](https://ec.europa.eu/fisheries/cfp/international/agreements/mauritania_en)

Fees: black hake: 70 €/t, squid: 575 €/t, cuttlefish: 250€/t and 90 €/t for by-catches; annual advance fee of 1 000 €/vessel deducted from total fee due.

Category 3 — Vessels fishing for demersal species other than black hake with gear other than trawls (maximum 3 000 t; maximum 6 vessels).

Fee: 105 €/, annual advance fee of 1 000 €/vessel deducted from total fee due.

Category 4 — Tuna seiners (reference tonnage 12 500 tonnes; maximum 25 vessels).

Fee: 60 €/t in the 1st and 2nd years; 65 €/t in the 3rd year; 70 €/t in the 4th year/. Annual flat-rate advance fee of 1 750 €/vessel.

Category 5 — Pole-and-line tuna vessels and surface long-liners (reference tonnage 7 500 tonnes; maximum 15 vessels).

Fee: 60 €/t in the 1st and 2nd years; 65 €/t in the 3rd year; 70 €/t in the 4th year. Annual flat-rate advance fee of 2 500 €/pole-and-line vessel and of 3 500 €/surface long-liner.

Category 6 — Pelagic freezer trawlers (maximum 225 000 tonnes; maximum 19 vessels).

Fee: 123 €/t, annual advance fee of 5 000 € / vessel deducted from total fee due.

Category 7 — Non-freezer pelagic vessels (maximum 15 000 tonnes/year, deducted from category 6; maximum 2 vessels).

Fee: 123 €/t, annual advance fee of 5 000 € / vessel deducted from total fee due.

Category 8 – Cephalopods: no fishing opportunities granted under the current protocol.

**Fishing opportunities  
& Reference tonnage**

- 
- a) Category 1 — Vessels fishing for crustaceans other than spiny lobster and crab:  
 Spain: 4 150 tonnes  
 Italy: 600 tonnes  
 Portugal: 250 tonnes  
 A maximum of 25 vessels may be deployed in Mauritanian waters at any one time
- b) Category 2 — Black hake (non-freezer) trawlers and bottom longliners:  
 Spain: 6 000 tonnes  
 Within this category, a maximum of 6 vessels may be deployed in Mauritanian waters at any one time.
- c) Category 3 — Vessels fishing for demersal species other than black hake with gear other than trawls:  
 Spain: 3 000 3 000 tonnes  
 Within this category, a maximum of 6 vessels may be deployed in Mauritanian waters at any one time.
- d) Category 4 — Tuna seiners:  
 Spain: 17 annual licences  
 France: 8 annual licences
- e) Category 5 — Pole-and-line tuna vessels and surface longliners:  
 Spain: 14 annual licences  
 France: 1 annual licence
- f) Category 6 — Pelagic freezer trawlers:  
 Germany: 12 560 tonnes  
 France: 2 615 tonnes  
 Latvia: 53 913 tonnes  
 Lithuania: 57 642 tonnes  
 Netherlands: 62 592 tonnes  
 Poland: 26 112 tonnes  
 United Kingdom: 8 531 tonnes  
 Ireland: 8 535 tonnes  
 During each year of the validity of the Protocol, the following number of quarterly licences shall be held by Member States:  
 Germany: 4
-

France:	2
Latvia:	20
Lithuania:	22
Netherlands:	16
Poland:	8
United Kingdom:	2
Ireland:	2

Within this category, a maximum of 19 vessels may be deployed in Mauritanian waters at any one time.

- g) Category 7 — Non-freezer pelagic vessels:  
Ireland 15 000 tonnes  
These fishing opportunities may, if they are not used, be transferred to category 6 according to the method of allocation of that category. Ireland shall inform the Commission, by 1 July of every year of the validity of the Protocol at the latest, whether fishing opportunities may become available for other Member States.

Certain terms of the 2015-2019 Protocol have been renegotiated (Decision (EU) 2017/451 of 14 March 2017) in an extraordinary session of the Joint Committee in Nouakchott on 15 and 16 November 2016. Here the modification of the fishing opportunities and the conditions for fishing applicable as well as the financial contribution was adopted, taking into account the Union's request to create a new fishing category for freezer trawlers targeting black hake.

The Protocol offers fishing possibilities for shrimp, demersal fish, tuna and small pelagic fish, up to 287,050 tonnes per year. The allocations among EU Member States are set under Council Regulation (EU) 2015/2192, as shown in the table above.

The total number of tuna vessels (purse seiners, pole-and-line vessels and longliners, all flags) authorized in the Mauritanian zone was 62 vessels in 2016. Thirty vessels had a fishing authorization issued under the 2015-2019 Protocol, of which 21 were flying the Spanish flag and 9 flying the French flag. The authorization number is similar to that of previous years, despite the interruption of fishing operations from August 2014 to November 2015, related to the negotiation of the new Protocol. Tuna vessels operating in the area are of three types: baitboats, longliners and purse seiners. The Union vessels concerned are under two flag States: Spain and France and consists of 8 pole-and-line vessels, 3 longliners and 19 purse seiners.

Measures relating to reporting and monitoring of fishing activities are specified in the Annex 1 (conditions governing fishing activities by EU vessels in Mauritanian fishing zones) to the Protocol, Chapter VI – Monitoring. Entering and leaving the Mauritanian fishing zone for Union vessels holding a fishing authorisation under this Protocol must be notified to Mauritania at the latest 36 hours before entry or exit, with the exception of tuna seiners, pole-and-line tuna vessels and longliners, in respect of which this period is reduced to 6 hours. The notification includes the name of the vessel, vessel call sign, estimated date and time (UTC), crossing point (deg/min/sec) and the quantity of each species held on board. In addition, the entry and exit reports must be kept on board the vessel for a period of at least one year following the date of notification.

The demersal fleet is subject to a landing obligation, with specific exceptions is granted to the shrimp fleet at the shipowner's request during periods of hot weather, in particular August and September. Landing must be notified to the port authorities of Nouadhibou (PAN) and the Mauritanian coast guard at least 24 hours before landing, specifying the name of the fishing vessel, the planned date and time of the landing, the quantity to be landed. European Union vessels landing at a Mauritanian port are exempted from all taxes or charges other than port fees and charges which apply on the same terms to Mauritanian vessels. Shipowners must decide on the destination of their catches. It may be processed, stored under customs control, sold in Mauritania or exported (in foreign currency).

Transshipment must be notified to the port authorities of Nouadhibou (PAN) and the Mauritanian maritime coast guard at least 24 hours before landing, specifying the name of the fishing vessel concerned, the planned date and time of the transshipment, the quantity of each species to be transhipped. In response to the above notification, the Mauritanian coast guard shall, within the following 12 hours, notify its consent to the master of the vessel or the master's agent. However, Mauritania reserves the right to refuse transshipment if the carrier vessel has carried out IUU fishing inside or outside Mauritanian fishing zones.

All EU vessels fishing under the current Agreement, must be equipped with a satellite monitoring system (VMS) to enable automatic and continuous communication of their position at all times, to the Fisheries Monitoring Centre (FMC) of their flag State. The satellite monitoring of Union vessels is ensured by dual transmission based on a triangular system, as follows: (1) EU vessel — Flag State FMC — Mauritanian FMC (2) EU vessel — Mauritanian FMC — Flag State FMC. The FMC of the flag State and the FMC of Mauritania ensure the automatic processing and, if necessary, the electronic transmission of the position messages. The position messages shall be recorded in a secure manner and kept for a period of three years. The position message contains the following information: vessel identification; the most recent geographical position of the vessel (longitude, latitude), the date and time the position is recorded; the speed and the course of the vessel.

The vessels have also to keep a logbook, recorded daily of all the operations specified in the fishing log (model in Appendix 4 of the Protocol). The fishing logbooks must be transmitted to the authorities within a period of 7 days after arrival in any other port, and in any event within a period of 20 days after leaving the Mauritanian zone for vessels, when leaving the Mauritanian fishing zone without first passing through a Mauritanian port.

The landing and transshipment declarations are also subject to supplementary fishing log. At the end of each authorised transshipment, the master must immediately send the original of the supplementary fishing log to the Mauritanian coast guard, with a copy to the ministry. Within 7 working days, a copy shall be sent to the national authorities of the flag Member State and to the European Union, via the Delegation.

## 4.2 Requirements under ICCAT

Mauritania is one of 52 contracting parties to the International Commission for the Conservation of Atlantic Tunas (ICCAT) since December 2008. Mauritania is member to two panels: the first one is related to tropical tuna (Yellowfin tuna, Bigeye and Skipjack), the second is related to Northern temperate tuna (Albacore and Atlantic bluefin) and the third one concerns other species (Swordfish, Billfish and small tunas).

Several species of tropical deep-sea tunas are present in Mauritanian waters. These are mainly yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*) and skipjack tuna (*Katsuwonus pelamis*). These species undertake migrations in the eastern Atlantic zone between the Azores-Canaries axis to the equatorial zone and the South Atlantic.

In Mauritania, high seas tunas are targeted only by foreign fleets working within the framework of bilateral agreements and operating under the open license regime. The fleets of these Contracting Parties, which reached around 62 tuna vessels in 2016, land their products in foreign ports. The total of EU vessels allowed to fish tuna species in the case of the Protocol is limited to 40. The Protocol specifies that all tuna vessels operating in the Mauritania EEZ must comply with all the recommendations adopted by the ICCAT.

Small tunas are exploited mainly by coastal fisheries and artisanal fisheries, although substantial catches are also made as target species and as by-catch by purse seine, mid-water trawl (i.e. pelagic fisheries in Mauritania), handline and small-scale gillnets. Unknown quantities of small tuna also comprise the incidental catches of some longline fisheries.

Since 2013, Mauritania has obtained a quota of 100 tonnes of swordfish following transfer of 25 tonnes from Brazil, Japan, Senegal and the United States, which is expected to be exploited by artisanal and coastal fisheries. Following the decisions taken at the November 2016 meeting in Vilamoura (Portugal), Mauritania has to submit a development plan under paragraph 5 of the ICCAT Recommendation [16-03].

The Committee reported that they have not received any report related to research activities conducted by Mauritania, either alone or in collaborations with an ICCAT CPC of its choice, related to bluefin tuna caught under this quota. Thus, it has been recommended that Mauritania will conduct research activities in cooperation with an ICCAT CPC of its choice, and will be subject to the presentation of a specific programme to the SCRS.

EU seine-armed vessels (Category 4) targeting tuna and related and associated species that are authorized in the Mauritanian fishing zone may only operate beyond 30 miles from the baseline. Their number may not exceed 25 units and the annual reference level of catches expected in the Mauritanian fishing zone for purse seiners from the European Union was estimated at 12 500 tonnes. Similarly, European longline vessels (Category 5) targeting tunas, related and associated species that are authorized in the Mauritanian fishing zone may operate only beyond 30 miles from the baseline.

On the other hand, baitboats, also included in category 5, may operate from 15 nautical miles north of latitude 19 ° 21'00"N and from 12 nautical miles south of that latitude. Baitboats can target live bait from 3 nautical miles from the baseline, with the authorized gear being the trawl (16 mm mesh). Their number may not exceed 15 units and the annual reference level of catches in the Mauritanian fishing zone for these vessels has been fixed to 7,500 tonnes.

The details of the technical measures applicable to these categories are given in the fact sheets appended to the 2015-2019 Protocol. Technical conservation measures and any catch limits applicable to the trades concerned by Categories 4 and 5 of the Protocol shall be adopted at the level of the ICCAT of which the European Union and Mauritania are Contracting Parties. These measures and possible catch limits are indicated each year in the compendium published on the ICCAT website.

The fleets that operated during the past three years are mainly from the European Union and Senegal. None of them landed in Mauritania. A fishing agreement with Japanese shipowners was in force until 2018. For the offshore tunas, Mauritania does not have any specific fleets.

### **4.3 Mauritanian legal framework for sustainable fisheries – rules and regulations**

Fisheries access in Mauritania is governed mainly by Law No. 2000-025 on the Fisheries Code (amended in 2007) and its implementing Decree No. 2002-073 (amended in 2010), in addition to the numerous regulations (decrees, orders and circulars) adopted for their implementation. Mauritanian legislation distinguishes between three kinds of fishing: artisanal, coastal and industrial. The access of foreign fleets to Mauritanian EEZ is made possible through bilateral agreements, private arrangements with private companies or by the acquisition of private licenses.

Mauritanian legislation defines the delimitation of fishing zones with the following objectives: (i) the protection of areas of high biological productivity by the prohibition of trawling at shallow depths (less than 20 m); (ii) the reduction of interactions between artisanal, coastal and industrial fisheries through the establishment of an exclusive development zone for artisanal and coastal fisheries and the reduction of industrial fishing effort on cephalopods (octopus). A new zoning was introduced in August 2012 in the same vein, but also to increase the geographical space reserved for the national segment and limit the level of by-catch. The zoning introduced incorporates the provisions of the EU fisheries agreement protocol, which specifies areas for small pelagic fisheries and shrimp fisheries in particular.

Fisheries access is subject to the possession of a fishing license. Law No. 2000-025 on the Fisheries Code as amended by Ordinance No. 2007-022 stipulates that: "No fishing vessel, national or foreign,

may engage in fishing activities in waters under Mauritanian jurisdiction if he does not hold a fishing license or authorization" and that "the license is issued for a vessel engaged in a specific type of fishing using specified equipment, in a specified area and for maximum duration of one year" (Article 22 (new)). According to the legislation in force, a license does not give an absolute right since the purchaser enjoys a privilege limited in time. Indeed, "the license may be suspended or withdrawn by the Minister of Fisheries for reasons related to the implementation of the management plans and management of the fisheries adopted or an unforeseeable evolution of the state of exploited stocks" (Article 27 Code).

Vessels may operate in Mauritania under three regimes, including: (i) the acquisition regime, which concerns vessels flying the national flag and includes the "Mauritanisation" of foreign vessels; (ii) the charter scheme, which involves the leasing of a foreign vessel by a Mauritanian national, with or without his crew; and (iii) the free license regime, which applies to foreign vessels operating under an international agreement on access between states or groups of states or under a private agreement between the Ministry (MPEM) and a foreign owner, including SFPAs.

Technical conservation and management measures, as laid down in Mauritanian legislation, include minimum mesh sizes for nets and trawls, minimum sizes and/or weight of species, restrictions on by-catch and closure periods of the restricted or reserved areas.

The technical measures are therefore applicable to foreign vessels only if they are included in the access agreements with the flag States concerned, or in case of silence of these agreements. In general, the EU Protocol defines conservation and management measures with sustainability objectives higher than national standards.

## 4.4 Mauritanian enforcement institutions

### 4.4.1 *Institutions and mandates*

The competent Mauritanian authority for fisheries is the Ministry of Fisheries and Maritime Economy (MFME, MPEM in French). The Mauritanian Institute for Oceanographic and Fisheries Research (MIOFR, IMROP in French) is in charge of the scientific monitoring of fisheries activity in Mauritania. It submits its recommendations to the management of MPEM.

The Directorate of Industrial Fishing (DIF, DPI in French) is in turn responsible for granting licenses and monitoring payments for access rights. The Directorate for the Management of Oceanic Resources (DMOR, DARO in French) is responsible for the planning, collection and processing of statistical fisheries data and their transmission to the Office of National Statistics (ONS).

The Directorate of the Merchant Marine is responsible for navigation, pollution and safety on board. The Autonomous Port of Nouadhibou (PAN), the main industrial fishing center and the port of Repos



Bay (EPBR), a small-scale fishing center, are now attached to the Nouadhibou Free Zone, established by Law No. 2013- 001 of January 2, 2013.

Finally, the Mauritanian Coast Guard (MCG, GCM in French) under the trusteeship of the MPEM is responsible for monitoring at sea. It is supported by the maritime gendarmerie. The coastguards' fisheries monitoring centre is in Nouadhibou.

#### **4.4.2 Capabilities**

##### **Physical and technical resources**

MPEM exercises the powers of technical supervision over the following public bodies and institutions:

- The Mauritanian Institute of Oceanographic Research and Fisheries (IMROP)
- The National Advisory Council for Fisheries Management and Development (CCNADP)
- The Fisheries Information System (PIS) - data validated by the Technical Committee on Fishery Statistics (STC), supported inter alia by the Select Committee on Fishery Statistics (CRSP) and the Sub-Committee on Industrial Fisheries Nouadhibou
- The National School of Marine Education and Fisheries (ENEMP)
- The Center for Social and Apprenticeship Training for Artisanal and Continental Fisheries (CASAMPAC)
- The Mauritanian Coast Guard (MCG) responsible for surveillance at sea
- National Office for Sanitary Inspection of Fishery and Aquaculture Products (ONISPA)
- The Mauritanian Fish Marketing Company (SMCP)
- The Nouakchott Fish Market (MPN)

In terms of logistics, IMROP has four locations, including two in Nouadhibou, one in Nouakchott and the fourth in Kaédi, on the Senegal River, for monitoring inland fisheries. With its seven scientific laboratories, including three aboard its two large research vessels, it monitors the state of the resource and its environment. The research vessels include one 16m vessel used mainly for coastal assessments, and one 36m vessel used for offshore assessments (FarFish, 2018b). The largest vessel was at sea for a total of 167 days in 2016.

##### **Human resources**

Fisheries management in Mauritania is based on the 2008 - 2012 Strategy and on a series of different fishery management plans (PAPs), based on single species approaches (octopus, shrimp, mullet), as well as on blueprints of an ecosystem approach (small pelagics, artisanal and coastal fisheries, croaker). Intra- and interinstitutional coordination is necessary to ensure good management. MPEM is supported in carrying out its mandate by the National Advisory Council for Fisheries Management and Development. In addition, DARO, DPI and DPA meet regularly in the National Commission for Validation of Catch Data, as part of the monitoring of fisheries plans and agreements. The chosen



management option ensures the necessary operational flexibility while creating formal and informal interfaces between these different plans.

Despite management efforts, there is often a lack of effectiveness of technical management measures for fisheries in the Mauritanian EEZ (first capture sizes, mesh size, biological stoppage, zoning, etc.). To facilitate the implementation of these measures, the country tries to involve the actors in the preparation of the development plans, by defining partnership actions so that the new measures are well perceived and accepted by all the actors, who then share clear and prioritized objectives. To strengthen the management system and ensure its implementation, the country will have to fill the gaps in terms of supervision, support and organisation of operators, as well as monitoring, control and surveillance of fisheries. In terms of data exchange, it is reported that MPEM has recently implemented the Fisheries Information System (Fishery Information System), a fisheries statistical information system managed by DARO, and that the CMG has a database on fishing offenses.

To carry out its missions especially those of the research, Mauritania has in its workforce 150 scientists of whom about twenty are graduates from grandes écoles, mainly French. Around 20 other employees benefit from continuous training, alternately in France, Morocco and Senegal. In total, IMPROP has a staff of roughly 250, of whom 20 have a PhD. Of those 250, 136 work on scientific issues (FarFish 2018b). The training needs assessment conducted as part of FarFish, indicates that there is a need for more competence in areas such as acoustic analysis, bio-economic modelling, use of VMS data, as well as more cooperation between Oceanography and Stock Assessment Laboratories (ibid).

## 4.5 Implementation in Mauritania

### 4.5.1 *Monitoring of catch data*

The satellite Vessel Monitoring System (VMS / SSN in French) allows tracking of EU vessels. Monitoring and surveillance centers identify vessel activities (position, speed and heading, in particular). The monitoring center in Mauritania is operational.

Under the current protocol, satellite position messages from EU vessels must include the heading and speed of the vessel and must be transmitted both to the surveillance center of the flag State (Member State of the EU) and at the monitoring center in Mauritania. This is a so-called triangular system (dual transmission) implemented on an experimental basis at the request of Mauritania and whose effectiveness and interest should be assessed on the basis of an implementation report established by Mauritania: at present, this report is not yet available.

Reception difficulties at the Fisheries Monitoring Center of Mauritania are sometimes noted. The fishing log must be forwarded by the master to the Coast Guard at the end of each trip in accordance with the terms of the protocol. Similarly, fifteen days after the end of each trip, the fishing logs must be forwarded by the shipowner to the Commission under the guise of the EU delegation.

To communicate with the competent authorities of their flag State (EU Member State), EU fishing vessels over 24 m in length must use an electronic fishing log. The EU and Mauritania encourage the use of electronic fishing logs to transmit catch data. Mauritania plans to make this monitoring mechanism mandatory for all industrial fleets (all flags combined) that will be required to comply.

In the Mauritania SFPA, it is specified that the catch declaration drawn up by each captain of a tuna vessel shall be processed and verified by the scientific institutes responsible for verifying tuna catch data in the Member States. These include institutes such as the IRD (Institut de recherche pour le développement), IEO (Instituto Español de Oceanografía), and INIAP (Instituto Nacional de Investigación Agrária e das Pescas). Copies of all fishing logbooks must be sent to the IMROP (Institut Mauritanien de Recherches Océanographiques et des Pêches).

For each tuna-fishing vessel, the European Union must draw up, on the basis of the catch reporting verified by the above scientific institutes, a final statement of fees owed by the vessel in respect of its annual season for the previous calendar year. The Union vessel must notify this final statement to Mauritania and to the shipowner before 30 June of the following year in which the catches were made.

#### ***4.5.2 Monitoring and control at sea***

The surveillance of maritime fisheries is undertaken by the Mauritanian Coast Guard (CMG). It was initially provided by the Fisheries Control Department and, after 1994, by the Fisheries Supervision and Sea Control Delegation (DSPCM), also responsible for the prevention of marine pollution and rescue and safety at sea.

The context of surveillance and control at sea has changed significantly in recent years: the Mauritanian authorities are increasingly concerned about illegal immigration, illegal traffic at sea, fraud and potential terrorist-related activities, and IUU fishing; the presence of gas and oil exploration platforms in Mauritanian waters represents a risk whose security is the responsibility of the State.

To consolidate the presence at sea, the Council of Ministers established the Mauritanian coast guard (GCM) in 2012 (Decree no 147/2012 of October 7, 2012). The coast guard is responsible for the monitoring, control, civilian surveillance of fishing activities, search and rescue at sea in waters under Mauritanian jurisdiction. As such, it is an integral part of the national security system and collaborates with the Maritime Gendarmerie and other law enforcement agencies. The Mauritanian coast guard is also responsible, where necessary in collaboration with the competent authorities, for: i) protection of the marine environment; ii) the fight against illegal migration at sea; iii) the fight against fraud, illicit traffic and terrorist activities at sea; iv) the safety of ports and off-shore facilities; v) the application of laws and regulations of the State at sea, and international conventions; vi) navigational aid; and, in general, vii) any mission entrusted to it by laws and regulations.

Measures have been taken by Mauritania to ensure that inspections at sea carried out on board European Union vessels under this Agreement:

- The control by Mauritanian coast guard concern all areas, equipment, fishing gear, catches, documents and records of transmissions which they consider to be necessary in order to verify compliance with this Agreement.
- Inspection report containing the result of the inspection. Mauritanian coast guard must provide a copy of the inspection report to the master of the European Union vessel before leaving the vessel. The copy of the inspection report must be sent to the European Union within a period of four days (inspections at sea) and 24 hours (inspections at port) following the inspection, irrespective of the outcome.
- The two parties have established a system for scientific observation on board European Union vessels. For each fishing category, the Parties designate at least two vessels per year which shall take on board a Mauritanian scientific observer, except for tuna seiners, which shall board observers at the request of the ministry. One scientific observer at a time per vessel is allowed. The EU is informed by the ministry of the names of designated scientific observers at least seven working days before the scheduled date of their embarkation.

#### ***4.5.3 Monitoring and control in port***

Inspections and control in port is carried out by the national inspection authorities. The national inspection officials have access to the vessels, premises and documents subject to inspection, in order to collect data (not containing named references) necessary for the accomplishment of their task. A report is submitted every four months detailing the inspections attended by the representatives to the competent authorities. The programme of control is implemented in European Union ports of landing and in Mauritanian ports.

#### ***4.5.4 By-catch and discard issues***

The authorised by-catches are specified in the Fishing Datasheets which are part of the Protocol. Any vessel exceeding the authorised by-catch rates shall be liable to penalties. By-catches is authorised for trawlers (25% fish) and longliners (50% fish when it is not authorized for Cephalopods and crustaceans). For other species, the Joint Committee determine by-catch rates. By-catches of cephalopods remains possible in category 1 (shrimp boats) with a maximum allowed rate of 8% of total catches.

By-catch rates for certain fishing categories have been reviewed; for example the by-catch rate for shrimp fishing category 1, which now allows for the associated capture of cephalopods. By-catch rates in category 7 "small pelagics" would be low and consistent with the protocol. However, given the

general effect of pelagic trawling with a high by-catch rate and the diversity of species encountered (more than 100 species), the Joint Scientific Committee suggested possible underreporting.

For category 1 'shrimp', by-catch rates are high and fisheries monitoring and control services suggest that some of the by-catch is discarded at sea to be in line with the maximum cephalopod level allowed. The IMROP and the Spanish Institute, the IEO, tested in 2011 in Mauritanian waters a grid coupled with the trawl to reduce by-catch but the results were not promising (reports of the Joint Scientific Committee).

#### ***4.5.5 IUU-fishing issues***

The IUU National Action Plan has been adopted in 2007. The plan contains specific recommendations on the measures to be taken to strengthen the fight against IUU fishing in Mauritania, in accordance with the provisions of the 2001 FAO IUU-Plan of Action.

It recommends in particular that the country ratify the UN Fish Stocks Agreement of 1995, the 1993 FAO Compliance Agreement and the ICCAT Convention. Mauritania has been a member of ICCAT since 2008, but has still not ratified the other two agreements. The plan also recommends the adoption of flag state fisheries control measures, namely the introduction of an authorization for Mauritanian vessels to fish on the high seas and the introduction of sanctions against unlicensed fishing by vessels flying the Mauritanian flag.

Other measures include the strengthening of the Mauritanian and foreign registration and register system to collect information on the history of ships. Combining the information with that of the Offenses Database will make it possible to know the IUU history of the vessels and to refuse the granting of a license or the entry to the port in case of suspicion of illegal activities. The implementation of an automated system of shared information is underway within the MPEM. This system should guarantee access to all relevant authorities to information on the current status of each fishing vessel operating in the Mauritanian EEZ.

## **4.6 Cooperation with EU institutions, flag states and vessels**

### ***4.6.1 Practice***

Mauritania remains an important EU partner in the fisheries sector. The last fisheries agreement, the FPA between the European Community and the Islamic Republic of Mauritania, dates from 1 August 2006 and is implemented, to date, by means of three Protocols successively. In addition, the EU contributes to better fisheries governance through regional development programs funded by the European Development Fund and national programs. Exports of fish products accounted for 22% (130

million euros) of products imported from Mauritania by the EU in 2012. Mauritania is the 28th largest exporter of fish products to Europe (DG Trade).

The two parties undertook cooperation on a scientific level to further sustainable fishing and economic development. The scientific cooperation includes the monitoring of the state of resources and fisheries in the Mauritanian fishing zone. The Independent Joint Scientific Committee meet at least once a year, alternately in Mauritania and in the European Union. The last one was held in Santa Cruz de Tenerife from October 3<sup>rd</sup> to 5<sup>th</sup> 2017. The Committee prepares annual scientific report.

Promoting cooperation among economic operators is also ensured by the Parties through the promotion of relations between their enterprises in the technical, economic and commercial spheres, by encouraging the establishment of an environment favourable to the development of business and investment. The cooperation between the economic operators related to the financial support, included development of the Nouadhibou Free Zone; development of protected marine areas (Banc d'Arguin and Diawling National Parks); port management; development of the fishing industry; promoting exchanges to improve vocational training, particularly in the fishing sector, fisheries management, aquaculture and inland fishing, shipyards and maritime surveillance; and the sale of fishery products.

The EU's development assistance to Mauritania comes mainly from the resources of the European Development Fund (EDF) and secondarily from other financing instruments (SYSMIN, STABEX, thematic programs). The operational framework for implementing this funding is the "National Indicative Program (NIP)", which respects the orientations of the Strategic Framework to Combat Poverty (PRSP). Financial instruments under the NIP include envelope A for programmable development operations and envelope B for short-term unforeseen needs and emergencies (decentralization, food security, humanitarian crisis, floods, etc.). In the field of fisheries, the most active EU Member States include Germany and Spain. For more than a decade, Germany has been particularly supportive of Mauritania's fisheries monitoring services through technical assistance, equipment and works, as well as the development of fisheries management plans.

## 4.7 Main achievements and challenges

### 4.7.1 Main achievements

Fisheries access in Mauritania is governed mainly by Law No. 2000-025 on the Fisheries Code (amended in 2007) and its implementing Decree No. 2002-073 (amended in 2010), in addition to the numerous regulations (decrees, orders and circulars) adopted for their implementation. The access of foreign fleets to Mauritanian coastal fishing zones is made possible through bilateral agreements, private arrangements with private companies or by the acquisition of private licenses.



Mauritanian legislation defines the delimitation of fishing zones with the following objectives: (i) the protection of areas of high biological productivity by the remoteness of trawling at shallow depths (less than 20 m); (ii) the reduction of interactions between artisanal, coastal and industrial fisheries through the establishment of an exclusive development zone for artisanal and coastal fisheries and the reduction of industrial fishing effort on cephalopods (octopus), for the benefit of artisanal and coastal fisheries. A new zoning was introduced in August 2012 in the same vein, but also to increase the geographical space reserved for the national segment and limit the level of bycatch. The zoning introduced incorporates the provisions of the EU fisheries agreement protocol, which specifies areas for small pelagic fisheries and shrimp fisheries in particular.

Technical conservation and management measures, as laid down in Mauritanian legislation, include minimum mesh sizes for nets and trawls, minimum sizes and / or weight of species, restrictions on bycatch, closure periods of the restricted or reserved areas, the limitation or prohibition of certain types of As we have said, international agreements must be ratified by law, and so may, by the will of Parliament, derogate from the legislation in force. However, where nothing is planned, Mauritanian legislation applies. The technical measures<sup>10</sup> are therefore applicable to foreign vessels only if they are included in the access agreements with the flag States concerned, or in case of silence of these agreements.

Mauritania has also developed an important institutional arrangement. The competent Mauritanian authority for fisheries is the Ministry of Fisheries and Maritime Economy (MFME, MPEM in French). The Mauritanian Institute for Oceanographic and Fisheries Research (MIOFR, IMROP in French) is in charge of the scientific monitoring of fisheries activity in Mauritania. It submits its recommendations to the management of MFME.

The Directorate of Industrial Fishing (DIF, DPI in French) is in turn responsible for granting licenses and monitoring payments for access rights. The Directorate for the Management of Oceanic Resources (DMOR, DARO in French) is responsible for the planning, collection and processing of statistical fisheries data and their transmission to the Office of National Statistics (ONS).

The surveillance of maritime fisheries, under the Mauritanian Coast Guard (CMG) since five years already, was initially provided by the Fisheries Control Department and, after 1994, by the Fisheries Supervision and Sea Control Delegation. (DSPCM), also responsible for the prevention of marine pollution and rescue and safety at sea.

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<sup>10</sup> In general, the EU Protocol defines conservation and management measures with sustainability objectives higher than national standards.

The DSPCM has shown leadership in the field of marine surveillance in West African countries: it has intensified surveillance, extended it to artisanal and coastal fishing, generalized the use of SSN and obtained a rapid decrease in serious infringements since 2006. However, the context of surveillance and control at sea has evolved considerably since years: the Mauritanian authorities are increasingly concerned about illegal immigration, smuggling at sea, fraud and potential terrorist-related activities, and IUU fishing; the presence of gas and oil exploration platforms in Mauritanian waters represents a risk whose security is the responsibility of the State.

To consolidate the presence at sea of the State, the Council of Ministers fixed the attributions of the GCM by the Decree n ° 147/2012 of October 7, 2012, creating the Mauritanian coastguard. The CMG is responsible for the monitoring, control, civilian surveillance of fishing activities, search and rescue at sea in waters under Mauritanian jurisdiction. As such, it is an integral part of the national security system and collaborates with the Maritime Gendarmerie and other law enforcement agencies. The Mauritanian Coast Guard is also responsible, where necessary in collaboration with the competent authorities, for: (i) protection of the environment in the marine environment; (ii) the fight against illegal migration at sea; (iii) the fight against fraud, illicit traffic and terrorist activities at sea; (iv) the safety of ports and off-shore facilities; (v) the application of the laws and regulations of the State at sea, and international conventions; (vi) navigational aid; and, in general, (vii) any mission entrusted to it by laws and regulations.

With regard research, epicenter of the development of the halieutic sector, Mauritania has its workforce made of 150 scientists of whom about twenty graduates of grandes écoles, mainly French. Around 20 other employees benefit from continuous training, alternately in France, Morocco and Senegal. In terms of logistics, IMROP has four locations, including two in Nouadhibou, one in Nouakchott and the fourth in Kaédi, on the Senegal River, for monitoring inland fisheries. With its 7 scientific laboratories, including three aboard its two large research vessels, it monitors the state of the resource and its environment.

Mauritania remains an important EU partner in the fisheries sector. The first fisheries agreement, the Fisheries Partnership Agreement (FPA) between the European Community and the Islamic Republic of Mauritania, dates from 1 August 2006 and is implemented, to date, by means of three Protocols successively. In addition, the EU contributes to better fisheries governance through regional development programs funded by the European Development Fund and national programs.

The current four-year Protocol (2015-2019) to the Fisheries Partnership Agreement (FPA) entered into force on 16 November 2015. The country has some of the world's most fish-abundant waters due to its strong upwelling coastal currents and a large continental shelf favouring the development of

fisheries resources. A part of Mauritania's waters has been designated a marine protected area (the Banc d'Arguin National Park is one of Africa's most important marine protected areas).

Certain terms of the 2015-2019 Protocol have been approved by the European Commission, Decision (EU) 2017/451 of 14 March 2017. This decision follows a meeting of the Joint Committee in Nouakchott on 15 and 16 November 2016 in extraordinary session, to adopt the modification of the fishing opportunities and the conditions for fishing applicable as well as the financial contribution, taking into account the Union's request to create a new fishing category for freezer trawlers targeting black hake. The protocol defines fishing opportunities for the eight categories listed in the Table below.

The most active EU Member States include Germany and Spain. For more than a decade, Germany has been particularly supportive of Mauritania's fisheries monitoring services through technical assistance, equipment and works, as well as the development of fisheries management plans.

The protocol remains consistent with the EU's Common Fisheries Policy: 1) it aims to protect the resource, 2) to exploit only available surpluses taking into account the activities of other foreign and national fleets; and 3) contribute to fisheries governance in the ZEEM. The consistency of this protocol with the Mauritanian fisheries policy can hardly be assessed as, to date, it has not been defined within a renewed national strategy to date.

The current protocol has been revised to consider request from Union vessels to get access to Black hake. Given the status of the black hake stock in the sub region, the increase in effort and catch would be difficult to be considered in the fisheries developed on this resource in Mauritania.

To facilitate the implementation of the technical management measures for fisheries in the Mauritanian EEZ (first capture sizes, mesh size, biological stoppage, zoning, etc.), the government tries to involve the actors in the preparation of the development plans, by defining partnership actions so that the new measures are well perceived and accepted by all the actors, who then share clear and prioritized objectives. In terms of data exchange, it is reported that MPEM has recently implemented the Fisheries Information System (Fishery Information System), a fisheries statistical information system managed by DARO, and that the CMG has a database on fishing offenses.

#### ***4.7.2 Challenges and key priorities***

Despite management efforts, there is often a lack of effectiveness of technical management measures for fisheries in the Mauritanian EEZ (first capture sizes, mesh size, biological stoppage, zoning, etc.). To strengthen the management system and ensure its implementation, the country will have to fill the gaps in terms of supervision, support and organization of operators, as well as monitoring, control and surveillance of fisheries



With regard to the implementation of the SFPA agreement, specifically the MSC, reception difficulties at the Fisheries Monitoring Center of Mauritania are sometimes noted. The EU and Mauritania encourage the use of electronic fishing logs to transmit catch data. Mauritania plans to make this monitoring mechanism mandatory for all industrial fleets (all flags combined). This would be a positive step forward in strengthening the MSC. There is also a need of a close monitoring of the pelagic fishery (at-sea observations and sampling of landings) in order to specify its impact on black hake stocks, whose catches are much higher than those of the hake fleet.

As regards the mixing of the two black hake species in landings and catches, the development and implementation of a sampling protocol to discriminate catches of the two species of black hake, will be needed to allow a separate evaluation for each of the two stocks.

From the authorization of a new Category -2bis (in the second half of 2017) for freezer trawlers targeting black hake with a derogation for cephalopod fishing, but with the same fishing area and mesh size as trawlers at cool, the derogation for possible by-catches could be generalized to the entire fleet of black hake trawlers. This would amount to redefining category 2 to encompass 2bis.

Research will remain a key component to ensure better monitoring of the SFPA. The priority could be conducting in-depth analyzes of the influence of environmental variability on the abundance of black hake resource in Mauritanian waters and in the sub region. Possible improvements in collection methods could be, frequency sampling and the nature of the sci data fishing equipment used for stock assessment of the Mauritanian fishing zone, including stocks overlapping and segments currently not covered. The Joint Committee will need to improve its communication and facilitate the submission of recommendations.

## 5 Senegal

The current SFPA between the EU and Senegal covers the period 20 November 2014 – 19 November 2019, and is tacitly renewed for 5-year periods. The Protocol offers fishing possibilities for tuna and includes a limited access to black hake, a deep demersal resource. The allocation among EU Member States are set under Council Regulation 2014/1118/EU of 8.10.2014 (OJ L 304 of 23.10.2014).

### 5.1 Requirements of the SFPA

*Table 4 Source: European Commission - Senegal FPA<sup>11</sup>*

<b>Senegal Fisheries Partnership Agreement</b>	
<b>Duration of Agreement</b>	5 years renewable (20.11.2014—19.11.2019)
<b>Duration of Protocol</b>	5 years (20.11.2014—19.11.2019)
<b>Initialisation</b>	25 April 2014
<b>Nature of the FPA</b>	Tuna Fishery Agreement with a limited demersal component
<b>Financial contribution</b>	Decreasing: 1 808 000 to 1 668 000 €/year, including 750 000 €/year to the support of the fisheries sector
<b>Fee for ship owners</b>	Tuna: increasing: 55 – 70 € per tonne caught Hake: 90 € per tonne caught
<b>Reference tonnage</b>	14 000t./year – tuna 2 000t/year - hake
<b>No. of vessels</b>	Tuna seiners (28) Spain (16) France (12) Pole-and-liners (08) Spain (07) France (01) Trawlers (02) Spain (02)

Measures relating to reporting and monitoring of fishing activity are specified in the Annex (Conditions governing fishing activities by European Union vessels in the Senegalese fishing zone) to the 2014 Protocol, Chapter IV (Control, Monitoring and Surveillance).

Entering and leaving Senegalese waters for Union fishing vessels operating under this Protocol must be notified to the competent Senegalese authorities, at least six hours in advance, of their intention to enter or leave Senegalese waters. The notification includes the date/time, position and the catches already held on board.

<sup>11</sup> <https://ec.europa.eu/fisheries/cfp/international/agreements/senegal>

Transshipment and landings must be notified to the competent Senegalese authorities, at least 72 hours in advance. These operations are considered as an exit from Senegalese waters and the information to be notified to the competent authorities concern the name of the fishing vessels involved in the transshipment or landing, the name of the cargo vessel or of the port of landing, the tonnage by species to be transhipped or landed, the day of transshipment or landing and the destination of the transhipped or landed catches.

All EU vessels fishing under the Agreement must be equipped with a satellite monitoring system (Vessel Monitoring System — VMS) to enable automatic and continuous communication of their position, every two hours, to the fishing control centre (Fisheries Monitoring Centre — FMC) of their flag State. The position message must report the vessel identification; the most recent geographical position of the vessel (longitude, latitude), with a position error of less than 500 metres, and with a confidence interval of 99%; the date and time the position recorded as well as the speed and the course of the vessel.

The vessels must also keep a logbook, completed by the vessels master for each day while in the Senegalese fishing zone. The logbook must record the quantity of each species, caught and kept on board, expressed in kilograms of live weight or, where necessary, the number of individual fishes. For each main species, the master shall also include the by-catch.

The logbooks must be submitted to the appropriate authority for the period of its presence in the Senegalese fishing zones. The transmission of the logbooks must be done in the following ways: When passing through a Senegalese port, the transmission of the original logbooks must be submitted to the local representative of Senegal, who shall confirm receipt thereof in writing. If the vessel leaves the Senegalese fishing zones without first passing through a Senegalese port, the original of each fishing logbook must be sent in scanned form by e-mail, to the address given by Senegal. In exceptional cases, the logbook must be transmitted within 14 days of arriving in port, and in any case within 45 days of leaving the Senegalese zone, by post sent to Senegal.

The copy of all the fishing logbooks must also be sent to the EU. For tuna vessels, the master also has to send a copy of all the fishing logbooks to one of the following scientific institutes: IRD (Institut de recherche pour le développement); IEO (Instituto Español de Oceanografía); or INIAP (Instituto Nacional de Investigação Agrária e das Pescas); as well as to CRODT (Centre de Recherche Océanographique de Dakar Thiaroye). Chapter IV, Section 1 specifies that the two parties have to ensure a transition to an electronic system for declaring catches based on the technical characteristics laid down in Appendix 6.

## 5.2 Requirements under ICCAT

Senegal is one of 52 contracting parties to the International Commission for the Conservation of Atlantic Tunas (ICCAT). Senegal has been a member of the Commission from to 25/08/1971 to 31/12/1988 and rejoined the Commission on 21/12/2004. Senegal is member of three panels: tropical tuna (Yellowfin tuna, Bigeye, and Skipjack), Southern moderate tunas (Albacore and Southern Bluefin) and other species (Swordfish, Billfish and small tunas).

Senegal takes regularly part in all ICCAT Commission plenary meetings and in all the meetings of the Standing Committee for Research and Statistics (SCRS). The Executive secretariat is managed since 2017 by a Senegal citizen, who was the former Director of fisheries in Senegal. Senegal has also complied with its obligation of submitting the annual reports and statistical data to the ICCAT Commission, which are key requirements in terms of compliance.

Management of the key stocks covered by the SFPAs, which are highly migratory species, is coordinated through ICCAT. The results, advice and recommendations for these stocks is conducted by the Scientific Committee of ICCAT. The stock includes tropical tunas, yellowfin tuna, bigeye and skipjack as well as associated species which are exploited by EU vessels. The latest assessments of the bigeye tuna and skipjack have led to advice on stock status and management recommendations detailed in the report of ICCAT (CSC, 2016).

## 5.3 Senegalese legal framework for sustainable fisheries – rules and regulations

Fishing regulations in Senegal are based on two main texts, Law No. 98-32 of 14 April 1998 on the Maritime Fishery Code (well-known as "the Code of 1998") and Decree no. 98-432 of 10 June 1998 laying down the detailed rules for the application of the law on the maritime fishing code. A new Maritime Fisheries Code was adopted in 2015. The text comprises 138 articles divided into 10 titles. The main objective of the new Code is to increase penalties against IUU fishing, to organize co-management of fisheries, and to ban the manufacture and import of monofilament and multifilament nets. For foreign vessels which do not respect Senegal fishing rules, the minimum of penalty is fixed to 500 million CFA francs up to one billion CFA francs for the maximum. The Senegalese Fisheries Code establishes the principle for the conservation, management and monitoring measures of the various fisheries, through the establishment of fisheries management plans.

In connection with the reform, Senegal initiated the development of management plans for different fisheries (in particular fisheries octopus and deep-water shrimp). The octopus fishery (*Octopus vulgaris*), including a small-scale segment and a national industrial segment whose area of activity covers small coast and extends to Kayar north of the peninsula of Cabo Verde. The approach developed for the management of octopus is innovative in Senegal since it plans to entrust management from

the fishery Authorities to a fishery management organisation bringing together all users through a concession contract and introducing a system of individual transferable quotas.

A new Letter of Sectoral Policy for Fisheries and Aquaculture Development (LPSDPA) for the period 2016-2023 has been adopted in 2016. Its objective is to enable the sector to contribute to the strengthening of food security, economic growth and local development in accordance with the guidelines of the National Strategy for Economic Development and the Senegal Emergent Plan.

However, it has been stated that the implementation of the LPSDPA requires the revision of the mandates, the re-organisation and the rationalization of the public institutions of administration concerned by the fisheries sector such DPM, DPC, DITP, CRI, DPSP (see next section).

## 5.4 Senegalese enforcement institutions

### 5.4.1 *Institutions and mandates*

The management of the fisheries sector is under the responsibility of the Ministry of Fisheries and Maritime Affairs (MPAM). Among other things, it is responsible for implementing government policy in the areas of marine and continental fisheries. To do this, it is assisted by several operational structures, in particular: the Directorate of Maritime Fisheries (DPM) whose main mission is the design and implementation of state policy on marine fisheries (industrial and artisanal fisheries); the Directorate of Fisheries Processing Industries (DITP) to implement the State's industrial transformation policy; the Directorate of Fisheries Protection and Surveillance (DPSP), whose mission is to ensure the fisheries police and ensure compliance with the regulations in force in the Senegalese EEZ and inland waters; the study and planning unit (PIU) responsible, inter alia, for prospective and strategic studies, the assessment of the impact of the State's macroeconomic policies on the sector, and the preparation of programs and budgets for public investment; the National Maritime Training School (ENFM) whose task is to train seafarers, including captains and officers; the National Training Center for Fisheries and Aquaculture Technicians (CNFTPA), which trains technical officers and senior technicians in fisheries and aquaculture; and the National Agency for Maritime Affairs (ANAM), which is responsible for implementing the State's maritime transport policy. In this capacity, she is responsible for the administration and management of the vessel register, the registration and the naturalization of vessels (Senegalese flag award).

The fisheries research is supported by the Oceanographic Research Center Dakar-Thiaroye (CRODT), which depends on the Senegalese Institute of Agricultural Research (ISRA), a structure that reports to the Ministry of Agriculture. The CRODT has the mandate of monitoring the resource and the exploitation systems and, consequently, has vocation to support the MPAM in the management of the fisheries. According to a recent study funded by the French Development Agency (AFD) for the supervisory ministry in charge of CRODT, fisheries research activities fall under the responsibility of

too many actors (including NGOs and donors). CRODT suffers from loss of technical skills (loss of "brains"), weaknesses in programming and funds. The ADUPES project financed by EU provided technical and financial support to CRODT through financing research campaign of sea shrimp and cephalopods.

Finally, there is a long tradition with involvement of economic actors in Senegal. In the fisheries sector, stakeholders include unions, associations and collectives representing each sector (armament, processing, marketing) for both industrial fishing and small-scale fishing.

### ***5.4.2 Capabilities***

#### **Physical and technical resources**

In Senegal, the Directorate of Fisheries Protection and Surveillance (DPSP) is the main authority responsible for coordinating the implementation of MCS activities in the fisheries sector. In addition to the DPSP, other structures within the Ministry of Fisheries such as DPM, DITP and ANAM are involved in the implementation of MCS activities. Senegalese Customs is also involved in the national MCS system.

The DPSP is responsible for implementing the government's policy on the surveillance of marine and inland fisheries, as well as in the area of artisanal fishing safety. Its mandate includes: the Maritime and Continental Fisheries Police in Senegal, in relation with the other structures of the Ministry of the Maritime Economy and the security forces; Planning and coordination of Fisheries operations and monitoring activities; the safety of boats, fishermen and artisanal fishing activities, to participate in maritime safety; the fight against pollution and search and rescue at sea in collaboration with other relevant state structures; the investigation of the boarding cases of industrial fishing vessels and artisanal canoes; certification of the legal origin of products caught in waters under Senegalese jurisdiction, destined for the European Union market; the development and implementation of the Projects / Program for monitoring, control and surveillance of fisheries.

At the organisational level, the DPSP comprises three divisions, five attached offices and ten coast monitoring stations. The DPSP has ten coastal surveillance stations located in the maritime regions (St-Louis, Lompoul, Fass-Boye, Kayar, Yoff, Mbour, Joal, Djiffere, Kafountine and Cap-Skiring). The DPSP SCS system consists of various tools and mechanisms developed below through the various activities carried out in the area of fisheries MCS. The MCS activities, coordinated by the DPSP, are carried out through dockside inspections, maritime patrols, air patrols, VMS, boarding of observers on board fishing vessels and certification of catches. The DPSP annual need budget is estimated to 700 million FCFA in order to operate at full capacity, when its actual budget is around 330 million FCFA.



The nautical facilities include 2 speedboats of 20m (30 knots speed and 4 days autonomy), 4 speed boats of 12m (30 knots speed and 2 days autonomy), 10 boats equipped with 25 horsepower outboard engines and based on at stations for sea inspections.

The air assets include one maritime patrol aircraft and operational support from the French Forces of Cabo Verde based in Dakar. The detection means are summarized in 10 radars of medium and high power (5 of 55 KW and 5 of 25 KW) installed in the Coast Stations.

Senegal has benefited and participated in several joint monitoring operations as part of the project to strengthen sub-regional cooperation for the MCS of fishing activities in the EU-funded area of the SRFC. In order to improve the monitoring of fishing activities, it is envisaged to create a coordination structure for fisheries surveillance operations involving the DPSP, the port authorities, the national navy and the customs services.

#### **Human resources**

The DPSP has a total staff of 134 civilian and military personnel including observers (contract agents). The staff is made of 17 Inspectors (6 at the Central Management, 11 at the coast stations), 17 Navy soldiers including 2 Senior Officers (the Director and his deputy), 3 fishery engineers, 9 police officers, 2 administrative officers, 49 observers, 38 contractors and 8 community security officers.

## **5.5 Implementation in Senegal**

### ***5.5.1 Monitoring of catch data***

In 2013, Senegal adopted a draft strategy against IUU fishing. The main objective of this strategy is to eradicate IUU fishing in the Senegalese EEZ by strengthening the means of fisheries surveillance and better coordination of interventions and actions at national, regional and international levels.

Catch reporting requirements are, as described in section 5.1, defined in the SFPA Protocol (Chapter IV, Section 1), where the masters of EU vessels shall keep a fishing logbook, for each day the vessel is present in Senegalese waters and record the quantity of each species, caught and kept on board. The logbook should be submitted to the Senegal authorities in original within 14 days after leaving the Senegalese zone fishing zones without first passing through a Senegalese port, sending copies to the relevant Member State and to the research institutes concerned. However, the last Report of the annual meeting of the Joint Scientific Committee on the Fisheries Agreement between Senegal and the European Union has raised the lack of transmission of the observer report to IEO and CRODT.

Provisions are made for the establishment and operation of an electronic logbook and a system for electronic reporting of catch data (ERS), and guidelines for its operation were set out with the aim of making it operational from 1 September 2015. However, even if the EU and Senegal have agreed to ensure a transition to an electronic system for declaring catches based on the technical characteristics and to have the system fully operational, the transmission of the observer report to EU parties continue to be operated through paper report and not in Excel.

### ***5.5.2 Monitoring and control at sea***

Monitoring and control at sea in the Senegalese fishing zones is carried out by Senegalese vessels and inspectors who are clearly identified as being assigned to carry out fishing controls. Before going on board, the Senegalese inspectors must warn the EU vessel of their decision to carry out an inspection. The inspection is carried out by a maximum of two inspectors, who must provide proof of their identity and official position as an inspector before carrying out the inspection.

Air patrol missions depend on the French Elements flight program in Senegal (EFS). They consist of flying over, photographing and identifying the boats that are present in waters under Senegalese jurisdiction. This is to check if the vessels are fishing in the authorized areas taking into account the option of the fishing license they hold.

Regarding VMS, the DPSP has an operations coordination room (Radio-Radar-Satellite Center) equipped with communication, detection and location equipment for fishing vessels. The VMS system (satellite tracking system) has been mandatory since 2006.

Thus, fishing activity in waters under Senegalese jurisdiction is subject to the acquisition of equipment on board that allows the vessel to be monitored by the VMS system. This makes it possible to receive a report on the position of all vessels fishing in Senegalese waters, in order to verify their areas of activity.

According to Article 57 of the Decree Implementing the Senegalese Maritime Fishery Code, observers are agents recruited by the Ministry of Marine Fisheries and have the general function of observing fishing activities in the light of obligations subscribed by the holder of the license and relating, in particular, to gear, fishing zones, the quantity and nature of the species caught and to report to the competent authorities.

Observers are not authorized to record fishing offenses within the meaning of Article 48 of Law No. 98-32 of 14 April 1998 on the Code of Marine Fisheries. However, their observations and reports can be used as simple evidence in the context of fishing penalty procedures. Currently, observers board only foreign vessels fishing under EU agreement.



### ***5.5.3 Monitoring and control in port***

This activity concerns boats landing in a Senegalese port. The inspection team is made of one fisheries inspector, two observers, and one element of the judicial police and a driver of the vehicle used in the port for monitoring. The fisheries inspector (sworn agent) is designated as team leader. He is responsible for signing the inspection reports and the minutes in case of infringement.

The inspection equipment is made up of a pressure gauge to control the mesh size of fishing trawls, an ichthyometer for the measurement of species, a balance and a list of authorized vessels.

The inspections and controls are conducted as follows:

- a) The documentation is checked: It consists in verifying the option and the validity of the fishing license issued by the DPM, the fishing logbook (the fishing positions and the catches made during the tide).
- b) Control of catches: Catch control is performed on a randomly selected lot of cardboard. Then, a verification of the species caught in relation to the option of the license is carried out. In addition, the size or weight of the species can also be controlled.
- c) Control of fishing gear: It consists in controlling the mesh size of the net defined by the fishing option (make the measurement of twenty-five consecutive meshes at the level of the pocket and establish the arithmetic mean). This allows the inspectors to define the mesh of the net. Also, certain critical points such as the mounting of the protective apron must be checked.
- d) Inspection report: The results of the inspections and the control are notified to the captain of the ship through a well completed report signed by the team leader. In case of non-compliance of the results with the standards in force, the team leader develops a report of the offense which will be notified to the commander of the ship.

### ***5.5.4 By-catch and discard issues***

The Protocol 2014-2018 in its Appendix 2 stipulates the by-catch limitation (7% cephalopods, 7% crustaceans and 15% other deep demersal fish) and the EU and ICCAT elasmobranch protection measures. The above percentages of by-catches are calculated at the end of each trip, based on the total catch weight, in accordance with Senegalese regulations. The retention on board, transshipment, landing, storage and sale of all or some of the elasmobranches protected by the EU Plan of Action for the Conservation and Management of Sharks and by the RFMO and RFO regulation (ICCAT and SRFC) are prohibited. This includes oceanic whitetip shark (*Carcharhinus longimanus*), silky shark (*Carcharhinus falciformis*), white shark (*Carcharodon carcharias*), basking shark (*Cetorhinus maximus*), porbeagle (*Lamna nasus*), bigeye thresher shark (*Alopias superciliosus*), angel shark (*Squatina squatina*), giant manta ray (*Manta birostris*) and hammerhead shark species (*Sphyrnidae*).

In the same case as Cabo-Verde, the by-catch of shark species and collection of data on discards was of the topics in relation to the SFPA. A National Plan of Action (NPOA) for the conservation and management of sharks in the EEZ of Senegal has been adopted in 2005 with the support of FAO. In 2007, the implementation of the NPOA Sharks was reviewed, resulting in several recommendations regarding the improvement of capacity building, data collection and assessments, and regional cooperation.

### ***5.5.5 IUU-fishing issues***

According to Ministerial Decree no. 1975 dated March 5, 2010, a catch certificate (CC) is set up. The certificate is used for the conformity of fishery products intended for export to the EU, and based on the EU regulation to prevent, deter and eliminate IUU fishing. The catch certificate is issued after the inspection of the landing. The issuance of the certificate of origin and salubrity by the services of the DITP is subject to the presentation by the applicant of a catch certificate.

In June 2013, Senegal adopted a draft strategy against IUU fishing. The main objective of this strategy is to eradicate IUU fishing in the Senegalese EEZ by strengthening the means of fisheries surveillance and better coordination of interventions and actions at national, regional and international levels. It focuses on several areas: (a) reform of the fisheries legal framework, (b) consolidation of the institutional framework, (c) strengthening of the operational framework and resources, (d) promotion of good governance, (e) implementation of national and international trade measures, (f) training of human resources involved in MCS (inspectors, observers, fishery officers), (g) sharing of information with all stakeholders, and (h) promoting regional cooperation (notably through ICCAT and the SRFC). As part of this strategy, an action plan against IUU fishing has been developed but not yet validated and the prospect of its adoption by decree is still distant.

Although difficult to quantify, IUU fishing continues to be a reality in West Africa in general and in Senegalese waters. During the last protocol, the EU supported to strengthening the control and monitoring of fishing activities in the Senegalese EEZ. The Senegalese government has placed the fight against IUU fishing at the center of its concerns and has developed a strategy and a national action plan to combat IUU fishing that requires external support in order to be implemented. Also, a sectoral support component could be devoted to the implementation of certain aspects of this strategy and plan.

Despite investments made by Senegal in the last three decades in the area of MCS, it still does not have an effective monitoring system for fishing activities throughout the Senegalese EEZ to fight against IUU-fishing. Virtually no control of the activities of Senegalese artisanal fishermen fishing outside waters under Senegalese jurisdiction is carried out. Legal reform, which began several years ago, has not yet led to the adoption of a new framework law to modernize the legal framework for fisheries.

## 5.6 Cooperation with EU institutions, flag states and vessels

As provided for in Article 7, n.º 1 of the SFP, a Joint Committee was set up to monitor the performance, interpretation and application of the SFP, in particular, the definition of the annual and multiannual programming referred to in Article 6(2) and evaluation of its implementation.

This forum provides also the necessary liaison for matters of mutual interest relating to fisheries; the settlement of any disputes regarding the interpretation or application of the SFP, and reassessing, where necessary, the level of fishing opportunities and the corresponding financial contributions.

The Joint Committee meets at least once a year, alternately in Senegal and in the Union, or in another mutually-agreed location, and can hold a special meeting at the request of either Party. The Joint Committee is constituted by representatives of the Commission and Senegal.

## 5.7 Main achievements and challenges

### 5.7.1 Main achievements

A new Maritime Fisheries Code was adopted in 2015. The Senegalese Fisheries Code establishes the principle that the conservation, management and monitoring measures of the various fisheries are defined through the establishment of fisheries management plans. The text comprises 138 articles divided into 10 titles. The main objective of the new Code is to increase penalties against IUU fishing, to organize co-management of fisheries, and to ban the manufacture and import of monofilament and multifilament nets. For foreign vessels not respecting Senegalese fishing rules, the minimum penalty is fixed to 500 million CFA francs up to one billion CFA francs for the maximum.

As part of the reforms of the fisheries management system management plans for different fisheries is being developed. The approach developed for the management of octopus, including a small-scale segment and a national industrial segment, is innovative in Senegal since it plans to entrust management from the fishery Authorities to a fishery management organization bringing together all users through a concession contract and introducing a system of individual transferable quotas.

A new Letter of Sectoral Policy for Fisheries and Aquaculture Development (LPSDPA) for the period 2016-2023 have been adopted. Its objective is to enable the sector to contribute to the strengthening of food security, economic growth and local development in accordance with the guidelines of the National Strategy for Economic Development and the Senegal Emergent Plan. In 2013, Senegal adopted a draft strategy against IUU fishing. The main objective of this strategy is to eradicate IUU fishing in the Senegalese EEZ by strengthening the means of fisheries surveillance and better coordination of interventions and actions at national, regional and international levels.

Senegal developed also an active cooperation in fisheries as well at regional levels and with international partners. In that case, the country has benefited and participated in several joint monitoring operations as part of the project to strengthen sub regional cooperation for the monitoring, control and surveillance of fishing activities in the EU-funded area of the SRFC. In order to improve the monitoring of fishing activities, Senegal envisaged to create a coordination structure for fisheries surveillance operations involving the DPSP, the port authorities, the national navy and the customs services.

The SFPA agreement concluded between Senegal and the EU covers the period November 2014 – November 2019 and is tacitly renewed for 5-year periods. The Protocol offers fishing possibilities for tuna and includes a limited access to black hake, a deep demersal resource. The allocation among EU Member States are set under Council Regulation 2014/1118/EU of 8.10.2014 (OJ L 304 of 23.10.2014). Measures relating to reporting and monitoring of fishing activity are specified in the Annex (Conditions governing fishing activities by European Union vessels in the Senegalese fishing zone) to the 2014 Protocol, CHAPTER IV (Control, Monitoring and Surveillance).

Senegal makes regular follow up of this agreement through the Mixed Commission made of both parties and responsible for monitoring the implementation of the Agreement notably the state of the fish stocks concerned on the basis of the best information available for the sustainable management of fisheries resources in Senegal's fishing zone.

With regard to ICCAT, Senegal was one of the pioneers as contracting party of that RFMO, since 25/08/1971<sup>12</sup>. Senegal is member of 3 panels: tropical tuna (Yellowfin tuna, Bigeye, and Skipjack), Southern moderate tunas (Albacore and Southern Bluefin) and other species (Swordfish, Billfish and small tunas). Senegal takes part regularly to all ICCAT Commission plenary meetings and in all the meetings of the Standing Committee for Research and Statistics (SCRS). The Executive secretariat is managed since 2017 by Senegal citizen, who was the former Director of fisheries in Senegal. Senegal has also complied with its obligation of submitting the annual reports and statistical data to the ICCAT Commission, which are key requirements in terms of compliance.

Management of the key stocks covered by the SFPA, which are highly migratory species, is coordinated through ICCAT. The results, advice and recommendations the most recent of these stocks is conducted by the Scientific Committee of ICCAT. The stock includes tropical tunas, yellowfin tuna, bigeye and skipjack as well as associated species which are exploited by EU vessels. The latest assessments of the bigeye tuna skipjack have led advice on stock status and management recommendations detailed in the report of ICCAT (CSC, 2016).

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<sup>12</sup> However, it's membership to ICCAT has been interrupted from 31/12/1988 to 21/12/2004

### ***5.7.2 Challenges and key priorities***

Despite investments made by Senegal in the last three decades in the area of MCS, it still does not have an effective monitoring system for fishing activities throughout the Senegalese EEZ to fight against IUU fishing. Virtually no control of the activities of Senegalese artisanal fishermen fishing outside waters under Senegalese jurisdiction is carried out. Legal reform, which began several years ago, has not yet led to the adoption of a new framework law to modernize the legal framework for fisheries.

Challenges are observed also in the level to ensure a transition to an electronic system for declaring catches based on the technical characteristics and to have the system fully operational. The transmission of the observer report to EU parties continues to be operated through paper report and not in Excel. Air patrol missions depend on the French Elements flight program in Senegal (EFS). They consist of flying over, photographing and identifying the boats that are present in waters under Senegalese jurisdiction. This is to check if the vessels are fishing in the authorized areas taking into account the option of the fishing license they hold.

With regard to the SFPA agreement between Senegal and the EU, it appears clearly that there are difficulties in implementing the obligations under the Agreement. This concerns collecting, sharing and analyzing scientific observations data aboard union vessels. This is particularly the case of EU hake middlemen, which make infrequent fishing access in Senegalese waters and complicates the logistics and deployment of European observers to ensure a sufficient coverage program by following the conditions of the protocol.

The application of the Protocol faces also some difficulties in terms of communicating catch and effort data from Union purse seiners vessels to the Scientific institute CRODT. Possible options would be that CRODT may have access to or receive the fishing logs and reports of observers on board EU purse seiners during their presence in Senegal's fishing zone.

Furthermore, support for research and expertise in Senegal remains a key element to ensure effective monitoring of the Protocol ensuring the monitoring and sustainable management of this Agreement. Support can be provided for research and / or expertise initiatives that focus on developing the ecosystem approach to fisheries management in the West African region.

## 6 Seychelles

The first FPA between the EU and the Seychelles was signed in 1987, meaning that this mutually beneficial partnership has been running now for over three decades. The current agreement protocol in place was originally concluded in 2006 for a duration of 6 years, and the revised protocol in place now covers the period 2014 to 2020. The agreement covers tuna and tuna-like species and gives the EU fleet access to 50 thousand reference tonnage for 40 tuna seiners and 6 longliners. The EU countries included in the agreement are Spain, France, Portugal and Italy.

### 6.1 Requirements of the SFPA

Table 5 Source: European Commission - Seychelles FPA<sup>13</sup>

Seychelles Fisheries Partnership Agreement	
Duration of Agreement	2.11.2013 – 1.11.2019
Duration of Protocol	18.1.2014 – 17.1.2020
Fishery	Tuna
Financial contribution	1 <sup>st</sup> - 2 <sup>nd</sup> year = €5.530.000/year (€2.600.000 dedicated to fisheries sector support) 3 <sup>rd</sup> - 6 <sup>th</sup> year = €5.000.000/year (€2.500.000 dedicated to fisheries sector support)
Reference tonnage	50.000t./year
No. of vessels	Tuna seiners (40) Spain (22) France (16) Italy (2) Surface longliners (6) Spain (2) France (2) Portugal (2)

Article 5 of the Fisheries Partnership Agreement specifies that fishing activities governed by the Agreement are "*subject to laws and regulations in force in Seychelles*" (Art. 5-2), and that the Seychelles shall "*assume responsibility for the effective application of the fisheries monitoring provision in the Protocol*" (Art. 5-3).

Provisions for monitoring fishing activities are specified in the 2014 Protocol, Chapter III, sections 1-5, covering 1) catch recording, 2) catch communication upon entering/leaving Seychelles' waters, 3) landing, 4) transshipment, and 5) VMS. Chapter III along with the accompanying appendixes specifies the procedures in which fishing vessels are required to report to the Seychelles authorities on their

<sup>13</sup> [https://ec.europa.eu/fisheries/cfp/international/agreements/seychelles\\_en](https://ec.europa.eu/fisheries/cfp/international/agreements/seychelles_en)

activities, including the required information, the format for reporting, and the individual responsibilities of the involved parties.

EU vessels must send both entry- and exit reports a minimum of six hours before entering- or leaving the Seychelles EEZ, detailing their identification, position of entry/exit, and the volume and species kept onboard. While in the Seychelles EEZ, vessels are required to report their activities every three days. They must report on their destination, vessel identification, time and date, and quantity and species on board.

Further, EU vessels must fill out and report to Seychelles authorities a statement of catch form daily. The format of the report differs depending on whether the vessel in question is a seiner or longliner. Regardless, vessels must report their vessel identification, position, estimated catch volume and species. Longliners must also report on their gear configuration. These forms must be submitted to Seychelles authorities within five days of arrival if in Port Victoria, or within fourteen days if in any port other than Victoria. Copies of the statement of catch forms must also be sent to the European Commission. Upon landing in a Seychelles port, vessels must report to the Seychelles authorities at least 24 hours in advance on the designated port of landing, vessel identification, time and date, estimated quantity and product form. These provisions apply up until the point in time in which an Electronic Recording and Reporting System (ERS) has been implemented. When implemented, EU vessels must report daily the required information to the Fishing Monitoring Centre (FMC) of its flag state, which in turn forwards the information to the Seychelles FMC.

Provisions for control and enforcement are specified in Chapter VII and VIII, respectively. Regarding control, vessels must take onboard observers appointed by the appropriate Seychelles' authorities, as per the IOTC Regional Observer Programme. These observers are tasked with verifying the vessel position, noting the gear used, and verifying the veracity of the catch data. Observers shall report weekly on catch data. Further, the EU must keep a list of all vessels with a license to fish under the SFPA, and make this available for the Seychelles authorities. Likewise, the Seychelles authorities must make available to the EU a list of all inspection platforms used.

As per Article 9 of the Agreement, a joint committee comprised of representatives of both parties is set up, and are meeting annually. The committee is tasked with monitoring the performance, interpretation and application of the Agreement, acting as a forum for settling disputes, and reassessing both the financial contribution and the fishing opportunities laid down in the Agreement. The accompanying Protocol further specifies that the Joint Committee establishes the multi-annual sectoral programme and rules for its implementation.

In order to ensure sustainable and responsible use of fishing resources, both parties shall cooperate on statistical and scientific issues. A joint scientific meeting shall be held annually, monitoring resources in the Seychelles fishing zone, as per Article 4 in the Agreement. This, along with other available scientific data and any relevant recommendations made within the IOTC shall form the basis for the decision made in the Joint Committee.

The 2013 ex-post- and ex-ante evaluation of the Seychelles SFPAs states that the provisions in the Agreement and Protocol regarding the Joint committee has been met by both parties (NFDS, MRAG, COFREPECHE and POSEIDON, 2013). The evaluation marks that the Joint Committee "*appears to function as an effective forum for discussion and resolution of issues of concern to the parties*", and that annual meetings between the parties have been held. The same goes for ensuring sustainable and responsible fishing as well as congruency with IOTC recommendations, though the evaluation notes that with regards to the latter, while the parties endeavour to do so, they "*fall sort [sic] in certain respects*".

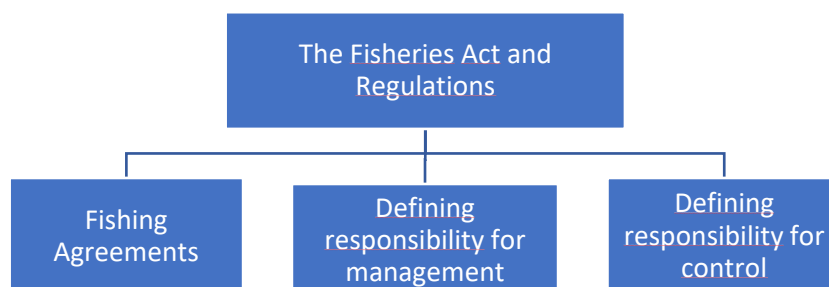
## 6.2 Requirements under IOTC

The Seychelles is one of 32 contracting parties to IOTC. Seychelles has been a member of IOTC since 1995 and has taken an active role in strengthening both the mandate and performance of the organisation. Seychelles comply with its obligations of submitting annual reports and statistical data to IOTC, which are the key requirements in terms of compliance. Management of the tuna-stocks covered by the SFPAs is coordinated through IOTC, implying that Seychelles has to comply with all relevant conservation and management measures adopted by IOTC, including fishing capacity and catch limits, area and seasonal restrictions, gear and use of FADs. The Seychelles has also been an advocate for more coordination of MCS activities and the establishment of the IOTC Regional Observer Programme.

## 6.3 Seychelles legal framework for sustainable fisheries – rules and regulations

Fishing activities within the Seychelles are primarily governed by the Seychelles Fisheries Act of 2014 and the accompanying Fisheries Regulations of 1987. The Fisheries Act and associated Regulations specifies provisions for management measures, licensing requirements, enforcement measures, and sanctions. Originally enacted in 1986, and later amended, the Act shall "*provide for efficient and effective management and sustainable development of fisheries in accordance with international norms, standards and best practice and an ecosystem approach to fisheries; to provide for the licensing of fishing vessel, to regulate sport fishing, fishing activities; to provide for offences and penalties and to repeal the Fisheries Act, 1986 and to provide for matters connected therewith or incidental thereto*".





**Figure 3** *Seychelles fisheries legislation*

Other relevant national legislations include:

- National Parks and Nature Conservancy Act (1969)
- Seychelles Fishing Authority (Establishment) Act (1984)
- Export of Fisheries Products Act (1996)
- Maritime Zone Act (1999)
- Agriculture and Fisheries Incentives Act (2005) and Regulations (2007)
- Export of Fishery Sanitary Act Regulations (2006)
- Merchant Shipping Act 1995
- International Business Companies Act 2016

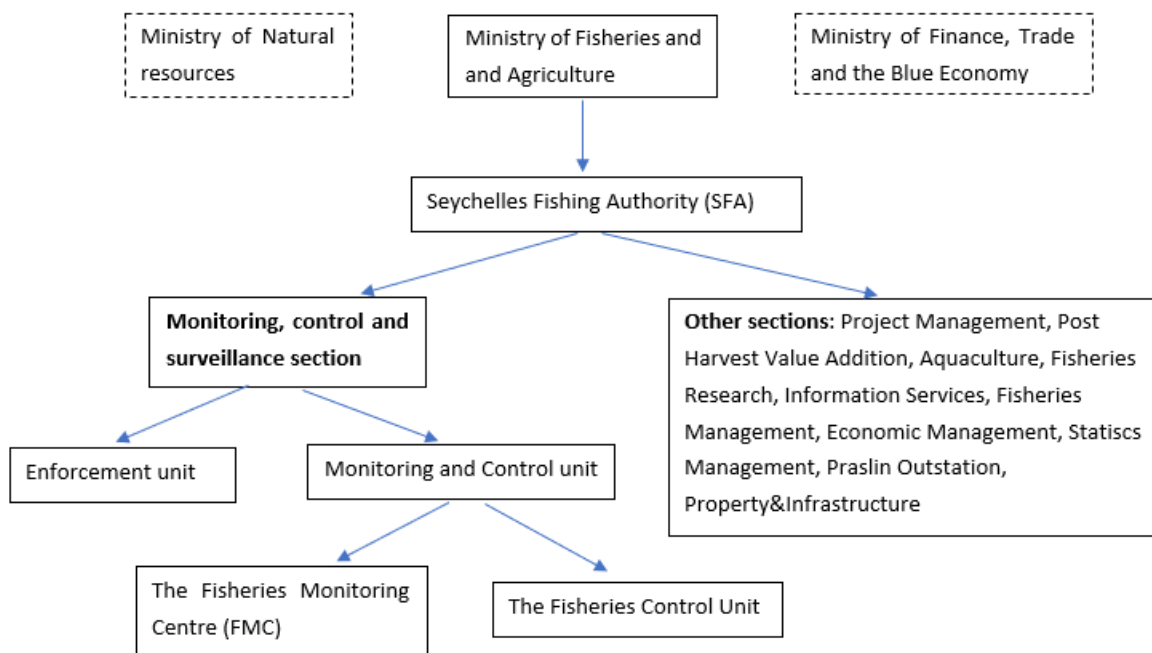
## 6.4 Seychelles MCS institutions

### 6.4.1 Institutions and mandates

The Ministry of Fisheries and Agriculture (MFAg) is responsible for providing policy directions for the fisheries sector. The Seychelles Fishing Authority (SFA), a line agency of MFAg, is the executive arm of government for fisheries. The functions of SFA according to Section 5 of the 1984 Establishment Act are:

- (a) To promote, organize and develop fishing, fishing industries and fishing resources in Seychelles.
- (b) To assist in the formulation of the national policy with respect to fishing, fishing industries and fishing resources and in the implementation of that policy.
- (c) To conduct negotiations, or engage in meetings, seminars or discussions, with regard to fishing or fisheries or the establishment or operation of fishing industries, whether at a national or international level, on behalf of the Republic or otherwise.
- (d) To identify the manpower training requirements of Seychelles with regard to fishing and fishing industries.

With that said, it has been announced that the SFA will be an autonomous institution by January 2019. This means that SFA will move from being a government budget dependent parental organization to one that is both financially and administratively autonomous. The SFA will still undertake MCS responsibilities. The new autonomy status will allow the SFA to build more capacity and dedicate more resources to the MCS, and the whole of SFA to be more efficient and effective at implementing its mandate, including fisheries management and MCS. The SFA consists of 11 divisions covering the different responsibilities. In this report, we focus on the Monitoring Control and Surveillance (MCS) Division. The Monitoring, Control and surveillance (MCS) Division is comprised of two sub-units: the Monitoring and Control Section, and the Enforcement Section. The Monitoring and Control Section is further comprised of two separate units: the Fisheries Monitoring Centre (FMC), responsible for ensuring "compliance of all fishing vessels reporting requirements, VMS and validation of statistical documents for ICCAT, IOTC, EU and Non-EU catch certificates", and the Fisheries Control unit, responsible for the processing and issuing of fishing licenses (AU-IBAR 2016:20).



**Figure 4 Structure of the Seychelles Fishing Authority (SFA)**

The Fisheries Monitoring Centre (FMC) deals with the compliance of all fishing vessel’s reporting requirements, Vessel Monitoring System (VMS), validation of statistical documents for ICCAT, IOTC, EU and non-EU catch certificates. The Control Unit is responsible for the processing and fishing licenses. The MCS division also provides support and information to other national law enforcement agencies involved in the maritime domain. Such includes the Seychelles People Defence Forces

(Seychelles Coast Guard and the Seychelles Air Force), The Seychelles Police (Maritime Police and the Anti Narcotics Bureau), and to a lesser extent the Seychelles Maritime Safety Administration and the Seychelles Ports Authority.

The SFA is required to maintain active fisheries management plans. While many of the fisheries are regulated in terms of licensing and technical measures, operational management plans developed and implemented in accordance with international best practices, are currently lacking. To address this, SFA have collaborated with stakeholders to draft the Praslin Artisanal Trap and Line Fishery Co-Management Plan 2013 (revised in 2015) and the Mahé Plateau Trap and Line Fishery Co-Management Plan. Measures that will be introduced by the plans in early phases include the development of a fishery-specific licensing framework, with the ultimate objective of ending open access, as well as minimum size limits for key species and recreational fishery bag limits (The Ministry of Finance, Trade and Economic Planning, 2017). Both plans are aiming at local and near shore fisheries, and do not relate to fisheries taking place under bi- and multilateral agreements like the SFPA.

Although the SFA is the main quarter for monitoring and controlling the fisheries in Seychelles, there are also some other relevant authorities. Together with the Seychelles Air Force, The Seychelles Coast Guard (SCG) is the maritime arm of the Seychelles People's Defence Forces. The coast guard is tasked with search and rescue, deter maritime offences, environment protection, prevention of maritime pollution, ensure navigational safety, defence of territorial waters and development of regional cooperative strategies to deal with illegal activities, including piracy which is a major issue. The Fish Inspection and Quality Control Unit (FIQCU) is part of the Seychelles Bureau of Standards, that is an executive arm of the Ministry of National Development. The unit is officially authorized to certify the fishery products from Seychelles. It also undertakes factory audits and spot check inspections of all approved establishments and all fishing vessels supplying products for EU exports to ensure compliance to the requirements of the Export of Fishery Product Act and other EU relevant Regulations (Seychelles Bureau of Standards, 2018). The Seychelles Maritime Safety Administration (SMSA) and the Seychelles Ports Authority (SPA) are other relevant authorities, even if they are not directly involved in controlling the fisheries. The SMSA's primary objective is to provide and ensure that all mariners, including the fishing vessels, use and enjoy the sea in a safe and lawful manner (SMSA, 2018). The vision of the SPA is to keep Port Victoria an attractive and competitive port in the region (SPA, 2018). By being the preferred port, Seychelles might be able to control even more of the Western Indian Ocean fisheries through their port and landing controls (PSMA).

## 6.4.2 Capabilities

### Physical and technical resources

All EU fishing vessels fishing, or intending to fish, in the fishing areas within the Seychelles EEZ shall be equipped with an Electronic catch reporting System (ERS) and Vessel Monitoring System (VMS). However, there are some challenges in implementing the ERS, even if the Seychelles ERS installation has been successfully connected since March 2016 (SFA, 2016) and the SFA still receives printed logbooks. There are ongoing projects to implement the ERS across all industrial Seychelles Flagged vessel, and to improve the ERS on EU vessels to eliminate the use of Paper logbook. If successful, this may be replicated on other foreign fleets (SFA, 2018 <http://www.sfa.sc/index.php/news/336-decade-old-eu-seychelles-accord-gets-new-lease>). For fisheries targeting tuna and tuna like species, the logbook system is collecting catch and effort and other relevant data, such as by-catch, environmental data etc. VMS reports are being automatically transmitted to the Fisheries Monitoring Centre (FMS) at SFA on an hourly basis and the information collected are used to validate logbook data. However, this is done by the Statistic Division that is reported to have extremely limited time available to spend on data analysis (FarFish, 2018). A programme to increase VMS coverage on vessels of less than 24 meters is currently ongoing (IOTC, 2017 and key informant, 2018).

SFA has good infrastructure with facilities conducive to carry MCS operations. Office space is adequate, computer and internet available. Inspectors are uniformed and the offices are placed ideally in the harbour close to the fishing industry where landings, transshipments and processing takes place. One limitation is equipment. SFA has to lease larger patrol vessels to monitor the tuna fleet and at times there is difficulty in maintaining equipment, getting supplies and spare parts. The patrol capacity declined in the period around 2010. In 2011, 50 days of sea patrol took place, while in 2012 there was no patrols to monitor the tuna fleet. This was reportedly due to equipment break down (DG Mare, 2013) and can serve as an example of the vulnerability in their equipment resources. There also seems to be some technical challenges. While the FarFish team was visiting the SFA, the VMS system was down due to technical issues and they were told that the system had been down for several days (FarFish, 2018). This has been a challenge, but several improvements are being done to the system, including a back-up server that will reduce downtime to the VMS system (key informant, SFA 2018).

The Seychelles' Coast Guard has a fleet of 15 boats, including four ships for patrol over 40 metres in length, three between 20 to 30 metres in length and eight for fast response. Three of the vessels have been donated by India, which is a strategic military partner of Seychelles (Seychelles News Agency, 2016).

### Human resources

One of the main challenges of SFA, which hopefully will be addressed as it moves to an autonomous organization, is the lack of human resources. Over time, a lot of work has been placed under the



purview of SFA. An outside expert told the FarFish team visiting the SFA that it is not that they have volunteered to take on such a wide range of tasks, but rather that tasks have been directed to them as the most logical place to be handled. Further, all research leaders the team spoke with at SFA mentioned the difficulty the institution has recruiting and keeping qualified, well-educated staff (FarFish, 2018). The challenge regarding human resources also seems to be relevant for the Coast Guard. In a news story published in May 2018, the Seychelles Coast Guard is unable to react to a report about illegal activity in the Seychelles' water because they were unable to deploy anyone at sea at that late hour (Blue Economy Knowledge Centre, 2018).

All personnel in the MCS department are trained through national and regional training programmes and perform their job to an adequate or higher standard (DG MARE, 2013). In the framework of the regional fisheries surveillance programme, SFA inspectors have had training in the field of inspection at sea, radio telecommunication, and procedures for safety at sea. Compliance observer training and port state inspections are areas that have been targeted for future training (SFA, 2018). Inspectors are usually in office between 8-4, but there is always a pool of 3-4 inspectors/ officers that are on 24/7 standby to respond to any event that may occur after hours. There are currently nine inspectors at the SFA, with more being recruited (key informant SFA, 2018).

SFA:

- MCS (2018): 22 people; nine inspectors, five Monitoring officers, three licensing Administrators officers and two VMS Technicians (key informant SFA, 2018)
- Fisheries Research division (2018): four scientists and five technicians
- Statistics division: 35 people, primary data collectors/enumerators
- Economics Division: Three persons

In order to improve the monitoring of industrial fishing activities, Seychelles is implementing a National Observer Programme (NOP) in phases. The capacity building phase was in 2012-2014 (IOTC, 2017). During this period the programme contributed to a total of 45 trained observers (IOTC, 2015). At sea, deployment started during the last quarter of 2014, while it continued to 2017 when the SFA was working on phase three of the programme which is focusing on data validation, generating and disseminating reports to relevant stakeholders (IOTC, 2017). The programme worked rather well in the beginning, as initially the focus was on the Seychelles fleet, but the SFA has indicated that as the programme expanded to cover other fleets, there were some problems with data validation and reporting (FarFish, 2018). Complex logistics is hampering the extension of the programme to cover the longline fleet and the Authority is looking towards EMS (Key informant, SFA 2018).

### **6.4.3 Monitoring of catch data**

The SFA routinely collects catch and effort data from logbooks of the EU purse seine vessels in compliance with IOTC mandatory requirements (IOTC, 2012). They also collect length-frequency data for yellowfin, bigeye and skipjack tuna through port sampling, and supplies data to the IOTC sampling programmes (ibid.). All vessels targeting tunas have operational VMS, but this is not mandatory for local vessels. However, since 2003, one of the prerequisites for any Seychelles registered vessel to be authorized to target tuna in the Western Indian Ocean is to have VMS. Also, a programme to increase VMS coverage on vessels of less than 24 meters is currently implemented. To date, 285 of such vessels are equipped with VMS and are actively monitored. This represents over 80% of VMS coverage on such fishing vessels, i.e. under 24m with autonomous power supply (key informant SFA, 2018). The VMS data is used for both compliance and scientific purposes and is also linked to the logbook data. Further, VMS is used as a monitoring tool for ensuring compliance to restricted zones, such as closure for shallow water to industrial vessels (DG Mare, 2013; IOTC, 2017). VMS reports are as mentioned automatically transmitted to the FMC at SFA on an hourly basis.

The logbooks are collected by SFA enforcement officers during port visits or sent by Agents if the vessel does not return to Port Victoria. As there are very limited independent observer coverage, data on catches by the industrial sector provided by the SFA is reliant on reports sent by the fishing vessels. For the EU vessels, these reports are used to finalize invoices for license fee payments, meaning that the reporting is 100% (Standing, 2016). For the industrial longliners the annual coverage of catch data has been around 89% in the more recent years, while the annual coverage for the industrial seiners has been 95-100% (IOTC, 2015). Monitoring of transshipment and landings has been difficult for the distant water industrial longliners as they do not land in Port Victoria. This makes it difficult to obtain good logbook coverage of this part of the fishery. However, a self-sampling programme is being implemented, whereby size and frequency data are recorded by the crew and transmitted to the SFA (IOTC, 2017).

### **6.4.4 Monitoring and control at sea**

Even though there have been major improvements in terms of sea patrol and port state control, fisheries surveillance is an area that is lacking in both manpower and equipment (SFA, 2018). At the moment, Fisheries specific patrols are planned by the SFA, providing objectives and area of operation. This is submitted in the form of a tasking order to the SPDF (SCG). The mission is then conducted with one or two Authorized Fishery officer on board. Notwithstanding this, the Seychelles Coast Guard can board, and interdict fishing vessels suspected to be undertaking illegal activities, even in the absence of any authorized fishery officer (Key informant, SFA 2018). In 2014 a total of 18 deployments were completed on Seychelles Purse seiners, covering a total of 744 observation days (FarFish, 2017).

Seychelles also takes part in the Regional Observer Programme to monitor transshipment at sea (ROP). Observers are placed on carrier vessels to monitor at sea transshipment by Longliners.

2017 was the first year a quota was allocated for yellowfin tuna in the Indian Ocean by IOTC. This new management tool has created challenges for managers in Seychelles. SFA experts told the FarFish team visiting Seychelles, that monitoring of the yellowfin catches near real time is extremely difficult and require additional human resource capacity (FarFish, 2018).

Somali piracy has been a problem in the region since the 1990's, with serious impacts for the Seychelles. This also limits the ability of the SFA to monitor its fishery as the national resources tend to become dedicated to combating piracy. In 2013, the at-sea observer programme was notably set back by the pirate attacks (DG MARE, 2013). Whilst the risk of a pirate attacks still exist in the WIO, it has been significantly reduced (Key informant, SFA 2018).

#### 6.4.5 Monitoring and control in port

Port state control has been one of the strong points of Seychelles, also before the creation of the MCS Division, but still needs to be improved (SFA, 2018). Port sampling is a routine and ongoing activity for the purse seine and small-scale longline fleet. Collection of transshipment and landing forms from fish processing companies for these vessels has a coverage of 95-100% (FarFish, 2017). In 2009, the overall approach to port state control was reviewed, concentrating on an investigative rather than an informative approach. The results of this approach have proven to be positive since several infractions have been detected since then (SFA, 2018).

**Table 6** Number of vessels by country and type inspected in Port Victoria in 2013 (FarFish, 2017)

Flag	Purse Seiner	Longliner	Supply Vessel
France	75		
Korea	7		
Seychelles	43	2	12
Spain	106		17
Taiwan		5	
<b>Total</b>	<b>231</b>	<b>7</b>	<b>29</b>

Many of the longliners do not land in Seychelles, and even if a self-sampling programme reporting catch and size frequency data is implemented, the Seychelles Authorities are not able to comprehensively validate the catch data from this fleet. However, these vessels are mainly from the Asian fleet (Taiwanese and Japanese vessels). Since the EU-fleet, mostly consisting of purse seiners, mainly land their catch in Port Victoria, it is easier for the Seychelles to control the catch from this fleet.



#### **6.4.6 *By-catch and discard issues***

By-catch issues and other potential secondary fishery effects – such as the impact on sea birds, are ongoing concerns. The by-catch issues are mainly related to sea turtles and sharks. For the EU vessels operating in the Indian Ocean, no information on by-catch and discards was found in the ex-post evaluation of the last SFPA agreement (DG Mare, 2011). The joint committee meetings from the current agreement has, as mentioned, not been made available, so the current status is unknown.

While there is sparse information on the level of turtle by-catch, IOTC have reported that leatherback turtles are the most common species caught in the gear with lesser amounts of loggerhead, hawksbill and green turtles (IOTC, 2011). In the Seychelles, several marine turtle monitoring programmes are coordinated by a number of different non-governmental organizations (NGOs). Data on interaction with the purse seine fleet will be collected via the SFA's sea observer programme. The logbook introduced in July 2017 for the industrial longline fleet also cater for reporting of interaction with marine turtles (IOTC, 2017), but this only apply for the domestic fleet (Key informant, SFA 2018).

At least ten different by-catch sharks have been recorded in the Indian Ocean (Huang and Lui, 2010). The low fecundity and slow growth of shark species mean that they have low resilience to fishing effort. The scarcity of data on the shark fisheries make it necessary to adopt precautionary measures such as IOTC resolution on thresher sharks prohibiting the onboard retention and obliging vessels to release them alive if possible (DG Mare, 2013). The SFA has reviewed its National Plan of Action for the Conservation and management of sharks 2007-2011. The main finding in the review was that the plan was not given sufficient priority in the Fisheries Portfolio and that the functioning was weak. A new plan was developed for the period 2016-2019 where these shortcomings are addressed. The implementation of the plan was expected to begin in January 2018 (IOTC, 2017), but was delayed to 2019 because of human resource capacity limitation (Key informant, SFA 2018).

In the tuna fisheries, FADs (fish aggregating devices) are widely used to attract the fish. There is a concern about the use of FADs related to the number of small tuna and nontarget species captured and entangled in the devices. Of highest concern are effects on sharks and small bigeye tuna (ISSF, 2018). The issue of by-catch and overfishing associated with FADs has led to a focus in the region, both within IOTC and other organisations, including measures on decreasing the number of FADs used in the tuna fishery outside Seychelles.

#### **6.4.7 *IUU-fishing issues***

In the artisanal fishery, the main IUU activities relates to fishing during closed seasons (mainly for spiny lobster and to a lesser extent to sea cucumber), in marine protected areas or use of unlicensed fishing gear. For the licensed EU-vessels, the excess catch in the SFPA gives incentive to underreport as the payment will increase at the end of the year if there are excess catch within the EEZ. It is therefore a risk that the vessels report catches from the Seychelles EEZ elsewhere, like High Seas (Key informant,



SFA 2018). It is however possible that the new quota allocation for yellowfin tuna might increase the risk of misreporting. As an example, key informants in FarFish said that it is difficult to differ between yellowfin and bigeye tuna when individuals are young, and that they suspect that there is some misreporting going on in these fisheries as they target the small individuals to a larger degree than earlier.

Within the tuna fisheries, poaching by foreign unlicensed vessels has been a longstanding problem. In 2010 four Iranian vessels illegally fishing were spotted in the Seychelles EEZ by legal vessels and reported to SFA (DG Mare, 2011). This also happened in 2015 when a Sri Lankan was spotted and reported by fishermen (Blue Economy Knowledge Centre, Seychelles, 2015). In 2017, two Sri Lankan vessels were spotted by the Seychelles Coast Guard and arrested on suspicion of illegal fishing (SFA, 2017). Even if the EU-vessels have not been involved in IUU-fishing in this area, several of them, under the FPA, or else their sister vessels, have been implicated in IUU-fishing in other African countries. In the ex post/ex ante evaluation of the last agreement this is pointed out as a matter that should be of concerns to both the Seychelles and EU (DG Mare, 2011).

In the fight against the IUU-fishing, Seychelles interacts with other countries and actively takes the lead in promoting cooperation at international fora, such as the UN Committee on Fisheries (COFI) (Dg Mare, 2011). The IOTC's Regional Plan for Fisheries Surveillance project (PRSP) is a major regional MCS Programme that aims to co-ordinate fisheries enforcement to make regional surveillance more effective through pooling resources and expertise. The aim is that this will act as deterrence to the illegal fishing fleet and, if necessary, puts an end to any serious offence (ibid).

All third-party countries importing marine fishery products into the EU are required to implement the EU IUU Catch Certificate Scheme (CCS). This certificate intends to provide assurance that fishery products are compliant with all existing international, regional and national conservation and management measures and are therefore not obtained through IUU activities. In Seychelles, the CCS is implemented through the FMC. In 2011 no fraudulent certificates had been detected (Ibid).

The SFA is also a leading partner in a project called FishGuard, where the fishing activities in Seychelles will be surveilled by drones. The drone project will be integrated into the fisheries patrol routines of Seychelles Air Force and the Seychelles Coast Guard (AllAfrica, 2018), allowing the coverage of a much wider area and also less easy to spot for the vessels. This could therefore become a very effective instrument in the fight against IUU fishing.

## 6.5 Main achievements and challenges

### 6.5.1 Main achievements

The SFPA between EU and Seychelles covers tuna and tuna-like species and provides for an annual financial contribution to Seychelles of around EUR 500,000. The EU-countries included in the agreement are Spain, France, Portugal and Italy.

All EU-vessels are subject to detailed reporting routines like entering and leaving the EEZ, volume and species kept on board, vessel identification, position, catch volume and species. Regarding control, vessels must take onboard observers appointed by the appropriate Seychelles' authorities, as per the IOTC Regional Observer Programme. These observers are tasked with verifying the vessel position, noting the gear used, and verifying the veracity of the catch data. The EU-vessels fishing, or intending to fish, in the EEZ shall be equipped with and ERS and VMS.

The Seychelles Fishing Authority (SFA), is the executive arm of government for fisheries. The functions of SFA range from promote, organize and develop the fisheries to training activities with regard to fishing and fishing industries. The SFA is the main quarter for monitoring and controlling the fisheries in Seychelles, but there are also other relevant authorities. Together with the Seychelles Air Force, The Seychelles Coast Guard (SCG) is the maritime arm of the Seychelles People's Defence Forces. The Seychelles institution and legal framework is well established, but it is not yet posted how the ongoing reorganization of the SFA will affect the MCS of the EU fishing fleet. However, the new structure might lead to an increased enforcement capacity if they manage to limit their mandate.

Port state control has been one of the strong points of Seychelles (SFA, 2018). Port sampling is a routine and ongoing activity for the purse seine and small-scale longline fleet. Seychelles have managed to make Port Victoria attractive also for foreign vessels, and the catch report coverage from the EU-fleet is very good as the catches also is part of the landing statistics. For the EU vessels the reporting is 100% (Standing, 2016). For the industrial longliners the annual coverage of catch data has been around 89% in the more recent years, while the annual coverage for the industrial seiners has been 95-100% (IOTC, 2015).

### 6.5.2 Challenges and key priorities

Lack of resources, both human and technical, is in general a big challenge. Resources are spread over a wide range of areas, and fisheries are not always given priority. Somali piracy has been a problem in the region since the 1990's, with serious impacts for the Seychelles. This also limits the ability of the SFA to monitor its fishery as the national resources tend to become dedicated to combating piracy.



Fisheries surveillance is an area lacking in both manpower and equipment and the control at sea is limited. Monitoring of transshipment and landings has been especially difficult for the distant water industrial longliners as they do not land in Port Victoria and there independent observer coverage is very limited. This makes it difficult to obtain good logbook coverage of this part of the fishery. However, a self-sampling programme is being implemented, whereby size and frequency data are recorded by the crew and transmitted to the SFA (IOTC, 2017).

The lack of resources is also shown in the struggle to implement ERS. Even if the Seychelles ERS installation has been successfully connected since March 2016 (SFA, 2016), the SFA still receives printed logbooks.

Seychelles works actively to strengthen fisheries MCS, both nationally and regionally (through IOTC). Among others, they are implementing a national observer programme and they actively take part in the fight against IUU-fishing.

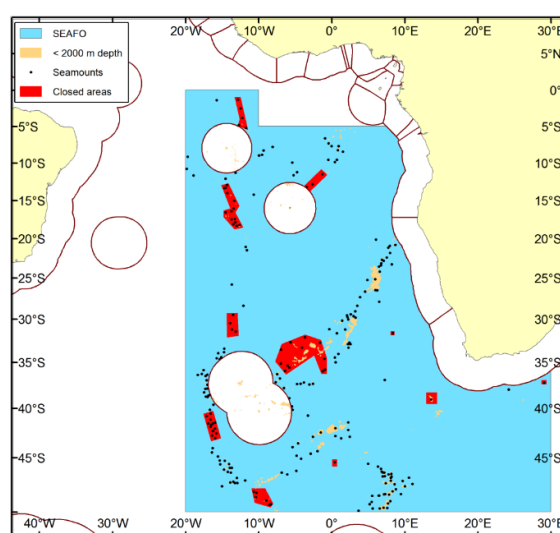


## High seas fisheries



## 7 South East Atlantic – SEAFO area

The FAO statistical area 47, South East Atlantic, covers a surface of 18.3 million km<sup>2</sup> off the east coast of South East Africa, from the northern border of Angola to the south-east coast of South-Africa (See Figure 5). The non-tuna fisheries in the high seas area is managed by the South East Atlantic Fisheries Organisation (SEAFO), of which the EU is a Contracting Party. Coastal states are Angola, Namibia and South-Africa, in addition to the United Kingdom on behalf of St. Helena and its dependencies, Tristan da Cunha and Ascension Island which are not party to SEAFO (their EEZs are marked with circles in Figure 5). There are currently seven contracting parties to SEAFO: Angola, the European Union, Japan, Namibia, Norway, South Africa and South Korea. The Secretariat is based in Swakopmund, Namibia, with a staff of two, an executive secretary and a data and administrative office manager.



**Figure 5** The SEAFO Convention Area (blue) showing seamounts and subareas shallower than 2000m (black dots & orange areas) and the subareas closed to fishing (red polygons) at the time of the cruise (IMR, 2015).

Most of the SEAFO convention area is deep ocean (i.e. deeper than 2000 meters). Fishing occurs on or around seamounts, which are estimated to cover less than 0.3% of the total convention area, see Figure 5. Target species in the SEAFO convention area include alfonsino, horse mackerel, mackerel, orange roughy, skates, sharks, deep-sea crab, hake, and toothfish (FarFish, 2017). Today there is very little fishing in the area. In the first eight months of 2018, only two vessels have conducted any fishing. Targeted species are Patagonian toothfish and deep-sea red crab and the catches are below the set TAC (see Figure 6). In 2017, four vessels, from Japan and Namibia, were active in the area. Vessels flagged in EU member states have not been involved in any fishing the last years.

Figure 6 TAC and catches in SEAFO area (source: <http://www.seafo.org/Management/TACs>)

Stock	TAC 2018 (Tonnes)	Remaining TAC	Vessels	Date Last Updated
Patagonian Toothfish - Sub-area D	266	208	1	21/08/2018
Orange Roughy - Outside Division B1	50	50	0	21/08/2018
Alfonsino - Division B1	132	132	0	21/08/2018
Alfonsino - SEAFO CA (Includes B1 Catches)	200	200	0	21/08/2018
Deep-Sea Red Crab - Division B1	180	6	1	21/08/2018
Deep-Sea Red Crab - Remainder of the CA	200	200	0	21/08/2018
Southern Boarfish/Pelagic Armourhead	135	135	0	21/08/2018

## 7.1 MCS in SEAFO

SEAFO is a relatively young RFMO, with the Convention entering into force in 2003. It is one of the first RFMOs modelled on the UN Fish Stocks Agreement, including general principles for good fishing management like the precautionary and ecosystem approaches. SEAFO has developed a comprehensive strategy to monitor, control and surveillance (MCS) of the fisheries in the SEAFO convention area. These are integrated into the so called SEAFO System – the System of observation, inspection, compliance and enforcement, which are handled by the Compliance Committee. The organisational structure of SEAFO is illustrated in Figure 6.

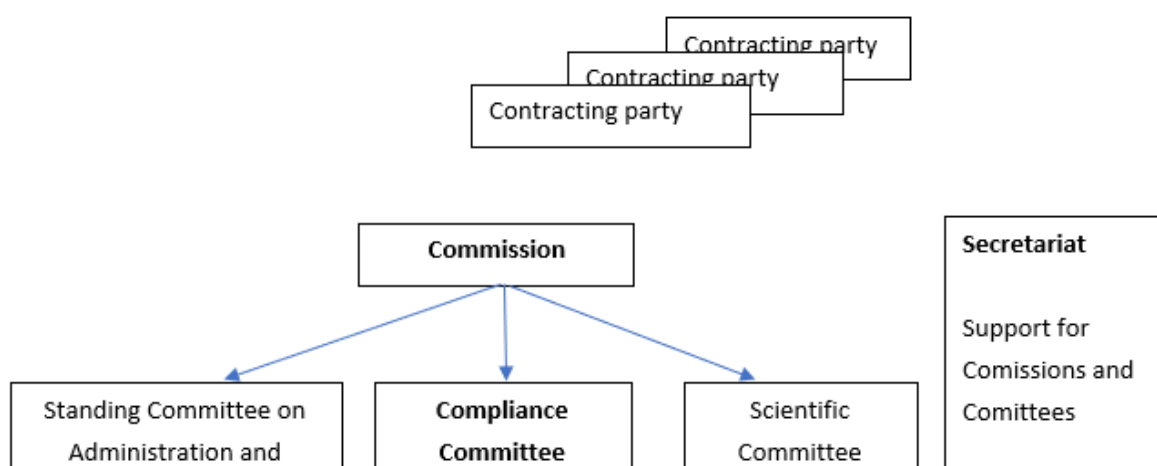


Figure 7 Structure of SEAFO

The Compliance Committee provide the Commission – the main decision-making body of SEAFO - with information, advice and recommendations on the implementation of and compliance with conservation and management measures undertaken by SEAFO or contracting parties on behalf of

SEAFO. SEAFO has been reviewed twice, the last time in 2016, and was found to be “well run and well-structured to deal with current and potential fishing activities in its waters” (SEAFO 2016a).

The System contains all the SEAFO measures to ensure compliance with SEAFO regulations, including requirements for inspection at sea and in port, for monitoring and reporting requirements, and how to handle infringements. It is a living document, in terms of being reviewed and improved on a regular basis. Below is a list of the main MCS measures of SEAFO.

**Table 7** *Main MCS measures in SEAFO (source: System of Observation, Inspection, Compliance and Enforcement, 2017).*

Management measure	Report	Reporting date and frequency	Report to
<i>Control</i>	Authorized vessel list	Annually	Secretariat
	IUU vessel list	Annually	
<i>Monitoring</i>	Logbook	Within 30 days of leaving CA	Secretariat
	Entry Report	6 hours in advance of entry	Secretariat
	5-day catch	After every 5 days of catch	Secretariat
	Exit Report	6 hours in advance of exit	Secretariat
	Quarterly aggregated catch	30 days after quarter	Secretariat
	VMS positions	No later than 24 hours after receipts, every 2 hours	Secretariat
	Notification of transshipments in port	24 hours before transshipment	To port state
<i>At sea</i>	Transshipments	Annually	Secretariat
	Sited illegal vessel	Without delay	Secretariat
	Scientific observers Observer reports	Within 30 days of leaving CA	Secretariat
	Inspections	30 days prior and 15 days after	Secretariat
	Prohibition of transshipment at sea		
<i>Port state control</i>	Labelling requirements of frozen products		
	Designated ports of entry		Secretariat
	Advance request for port entry	48 hours before entering port	Port authority, secretariat
	Inspection information, and report on IUU fishing activities and actions	14 days following inspection, promptly if apparent infringement	Secretariat, Flag state, Coastal state

All vessels intending to fish in the SEAFO convention area must register. At present 18 vessels are authorized to fish, including 6 Spanish flagged vessels (in addition to 9 from Namibia, 2 from Japan and 2 from South Africa)<sup>14</sup>. Historically also Portugal, Poland and Cyprus have fished in the area.

When fishing, all vessels are required to keep a fishing logbook and to have a scientific observer onboard. The vessel must send entry reports, exit reports and catch reports every 5 days, including retained by-catch species and discarded TAC and non-TAC species, in addition to submitting VMS data every 2 hours. Transshipment at sea is prohibited, and can only take place in designated ports and in accordance with established port inspection procedures. The port state measures apply to all vessels, both those of contracting parties and foreign vessels that have been engaged in fishing or fishing related activities in the convention area (with exceptions related to container ships) seeking entry to port of a contracting party. In addition to port state controls, SEAFO has procedures for at sea inspection. There is however no set level of inspections, neither in port or at sea. For comparison, the EU IUU Regulation requires that inspection be carried out on at least 5% of all landings and transshipments by non-EU vessels (EC No. 1005/2008, Chapter II).

The Compliance Committee produces annual compliance reviews to verify and ensure that contracting parties fulfil their flag state obligation as laid down in the System, including providing catch and sampling data, scientific observer reports, port inspection reports and VMS data. In general, flag states comply with the requirements. There is however no information on the level or number of controls at sea or in port.

Regarding MCS and compliance, the performance review of 2016 notes that SEAFO still lacks an observer programme with compliance purposes (SEAFO 2016a). Given the limited fisheries and the MCS provision of the System including port state measures, a scientific observer programme, VMS monitoring and an inspection programme at sea, the first review panel concluded that establishing an observer programme at this time does not seem worthwhile. The second review however suggested to continue examining it to address compliance shortcomings, and suggests considering permitting observers from other contracting parties. It is also suggested to establish an annual country-by-country compliance review, in addition to the performance review undertaken by the Compliance Committee on the compliance of all the measures in place. So far, this is not in place.

SEAFO also lacks procedures to follow-up detected infringements. Today this is up to the individual contracting party. The EU has presented a proposal to amend the System to incorporate follow up

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<sup>14</sup> <http://www.seafo.org/Management/Authorized-Vessel-List>



mechanisms on Port State infringements. The proposal was forwarded to the Commission for further discussions (SEFAO 2016b), but so far no new measures have been adopted.

As for human resources, coastal state contracting parties highlights the need for training in the area of port state inspection and related compliance matters (SEAFO 2016b). The Commission in 2010 established a Special Requirements Fund (in accordance of Article 21 of the Convention) to assist developing states with financial assistance, assistance relating to human resources development, technical assistance and transfer of technology. Assistance can be provided for activities directed at stock assessment and scientific research and for collection, reporting, verification, exchange and analysis of fisheries data. In addition, funding can be applied to support monitoring, control, surveillance, compliance and enforcement, including training and capacity-building at the local level, development and funding of national and regional observer programmes and access to technology and equipment (SEAFO, 2018b). To this end, the secretariat of SEAFO and the Southern Indian Ocean Fisheries Agreement (SIOFA) cooperated with the Area Beyond National Jurisdiction Deep Seas Project on a workshop on MCS in March 2018 in La Reunion (SEAFO, 2017c).

### ***7.1.1 SEAFO and by-catch and discard***

SEAFO have by-catch measures in place related to seabirds (since 2012), sea turtles (since 2009) and sharks (since 2006). These are detailed mitigative measures directed at gears and procedures for longliners and trawlers. Vessels fishing in the area are as mentioned obliged to report both by-catch and discard, of both targeted and non-targeted species.

### ***7.1.2 SEAFO measures to combat IUU fishing***

Like many other RFMOs, SEAFO have established measures to combat IUU fishing. These include monitoring by reporting requirements, port state measures, a scientific observer programme and VMS monitoring. In addition, SEAFO have establish a listing of vessels presumed to have carried out IUU fishing activities. The scheme contains procedures for listing and delisting, measures to be taken against listed vessels and recognition of IUU vessels listed by three other RFMOs; CCAMLR, NAFO and NEAFC. SIOFA, the sister organisation to the east of SEAFO, has just recently established an IUU vessel list. The issue was discussed by the SEFAO Compliance Committee in 2016 (SEAFO 2016b), and it is expected that SEAFO will include also the SIOFA IUU vessel list to that of SEAFO. This means that vessels found to have been engaged in IUU fishing activities in CCAMLR, NAFO, NEAFC and in the future also

SIOFA and which are placed on their IUU vessel list, will be denied entry to port of the contracting parties and access to fish in the SEAFO convention area.<sup>15</sup>

As of June 2018, 25 vessels are listed, one of which were listed by SEAFO in 2017. This was a Bolivian flagged vessel that had been engaged in IUU fishing activities in the SEAFO convention area in 2016. Bolivia is not a contracting party to SEAFO, consequently no Bolivian vessels are authorized to fish in the SEAFO convention area and the flag state do not hold any right to the allocated TAC. The vessel was reported by Ecuador, a non-member cooperating party to the neighbouring RFMO, CCAMLR, when the vessel was requesting to transship four containers with frozen toothfish in an Ecuadorian port. To comply with the conservation measures of CCAMLR, a catch certificate from CCAMLR was requested. Based on the following investigation it was found evidence that the vessel had a catch of 101 tons of Patagonian toothfish and that it had been fishing in the SEAFO convention area. The flag state refused to take the required action against the vessel, arguing that Bolivian flagged vessels area allowed to fish in the high seas, including the Atlantic Ocean and adjacent areas. After a lengthy process the vessel were therefore placed on the SEAFO IUU vessel list (SEAFO, 2017a;b).

The need for a *catch documentation scheme* for Patagonian toothfish caught in SEAFO convention area has been discussed but found not to be needed at this point due to the limited fishery and that most of the contracting parties are bound by the CCAMLR catch documentation scheme. Such a scheme allows tracking of landings and trade flows of the Patagonian toothfish, and the denial of port access/landings if not being able to declare that they have not been engaged in IUU fishing. Such a scheme involves increased flag stat responsibility and new duties on port states.

The port state measures adopted by SEAFO is an important part of the measures to deter and prevent IUU fishing. These measures require that vessels send advance notification before access or denial of access to port is granted. SEAFO contracting parties are also obliged to report any sighting of fishing vessels flying the flag of a non-contracting party operating in the convention area. Many fishing vessels in the convention area are fishing for species that are not under the SEAFO mandate, notably tuna managed by ICCAT, IOTC and CCSBT. These vessels are to be monitored by ICCAT and IOTC. The performance review panel suggests that MCS and compliance in the area could be strengthened by the establishment of a formal cooperation between compliance staff in ICCAT, IOTC and CCSBT (SEAFO

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<sup>15</sup> *A more detailed list of consequences of being placed on the IUU vessel list is that contracting parties and cooperating contracting parties to SEAFO, as well as NEAFC, NAFO and CCAMLR, shall (if necessary) withdraw the registration of the fishing licenses of the vessels, ensure that vessels flying their flag do not support, re-supply or are engaged in transshipment with a vessel on the IUU vessel list, deny landing, transshipment, refuel or resupply of the vessel and inspect the ship upon entry, prohibit chartering or flagging of the vessel, prohibit commercial transactions, imports, landings and/or transshipment of fisheries resources covered by the Convention from the vessel, encourage traders, importers, transporter and other to refrain from transactions in and transshipment of fishery resources covered by the SEAFO Convention.*

2016a). There have not been any reports of observation of fishing activities by non-parties to SEAFO in the convention area the last years.

The Compliance Review Report of 2017 (SEAFO 2017a) discusses the challenges of discrepancies of catch reporting of different reporting sources, notably between the 5 day catch reports, scientific observer, port inspection and quarterly reports, by two vessels fishing for Deep sea Red Crab. In one of the cases the port inspection reports show a much lower volume of catches than the reports from the vessel. Inquiry reveal that because the crab is processed on board not all of the crab is landed, and this can explain the discrepancies. The conversion factor is 2.63, implying that 1 kg of landed crab equals 2.63 live crab. When using conversion factors there will also be seasonal variation in the actual yield of the crab or fish. This is a general challenge in monitoring and control, and should not be considered misreporting per se, but the Compliance review of SEAFO provides a forum for making inquiries on and taking measures to prevent these issues. In this case, the flag state assures that relevant authorities will closely monitor future catch reporting in order to make the reporting from different sources more consistent (SEAFO 2017a). In another case, a vessel of a contracting party was found to misreport and to fish in an area closed to fishing. The issue was discussed at the compliance committee meeting, and the flag state had to reply to questions from the committee members. Based on their explanation the infringements were based on miscommunication between the national authorities and the vessel master/owner. The outcome of the meeting was that the contracting party will take “remedial measures” in the future to avoid this happening again, including more stringent VMS monitoring and training of staff tasked to control vessel activities in the convention area, and also to ensure better communication with the vessels licensed to operate in the area. This example shows the usefulness of annual reviews of compliance of measures and performance of contracting parties.

## 7.2 Practice of managing the EU fleet

As mentioned, there has been no fishing activity of vessels flagged by EU member states the last years. It is the responsibility of the flag state to ensure that measures adopted by SEAFO are being adhered to by vessels flying their flag, and any fishing activity in the SEAFO convention area shall be monitored and controlled in line with SEAFO requirements and the general requirements of EU external fleet, as described in chapter 2.

## 7.3 Identified good practices and identified challenges

SEAFO at its annual meeting in 2016 approved to enter into a formal Memorandum of Understanding (MoU) with Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) relating

to the management of the Patagonian toothfish, as the (limited) fisheries in SEAFO convention area is an extension of the fisheries in CCAMLR. In addition to the joint listing agreement with NEAFC, NAFO and CCAMLR, such cooperation on management and enforcement strengthens the sustainable governance of fisheries on the high seas. SEAFO also have an ambition to strengthen cooperation and build relationships between compliance staff of other RFMOs.

The review panels (in 2010 and 2016) recommended that SEAFO consider extending its mandate to cover non-tuna fisheries in the broader Atlantic, if fishing does not increase in volume in the SEAFO convention area. Despite the immediate appeal of taking advantage of the governance structure developed under SEAFO, such an extension will make the question of new contracting and cooperating partners relevant, and also the role of the existing coastal states in SEAFO in such an extended geographical coverage.

Should the fishing pressures in the SEAFO area increase, the need to address identified shortcomings like lack of sufficient MCS capacity, including inspection in port and at sea and procedures to follow-up detected infringements, would need to be addressed. Considering the current level of fishing in the SEAFO area, SEAFO stand out as a modern and well-functioning RFMO.



## 8 South West Atlantic – FAO area 41

The FAO statistical area 41, South West Atlantic, covers a total surface of 17.65 million km<sup>2</sup> off the east coast of South America (Vasconcellos & Csirke, 2016), from northern Brazil to southern Argentina (See Figure 8). It includes a shelf area of 1.96 km<sup>2</sup>. Several EU fleets operate in the area, which mainly target hake, squid, rock-cod and southern cod. Spain is the dominant EU fleet, with about 20 vessels fishing in the area. Spain’s catches have increased substantially over the last decade from 18,000 tonnes in 2008 to 200,000 tonnes in 2014 (Eurostat, 2018). Preliminary data shows that total EU catches in the area in 2017 were 132,000 tonnes, and that Spain accounted for 92% of these catches. Other EU fleets operating in the area are Portugal, UK and France. The area is also targeted by the coastal states Argentina, Brazil and Uruguay, and other distant water fleets, most notably China, Taiwan and South Korea (FarFish, 2017)

In the northern area (along Brazil) the continental shelf is rather narrow, rocky and coralline and mostly unsuitable for trawling. Closer to the southern extent of Area 41, it widens and becomes more suitable for trawling. The best and largest trawling areas are found in the River Plate area and over the Patagonian shelf and the Falkland/Malvinas area, where the shelf extends well beyond the 200-nm limit (more than 370 km) off the continental coastline, turning this into the largest shelf area in the southern hemisphere (FarFish, 2017). The high seas fishing mainly takes place on a shallow bank (<300m) beyond the EEZ of Argentina and outside the Falkland/Malvinas conservation Zones (FICZ and FOCZ). The fleet operating in the SW Atlantic mainly works in FAO sub-areas 3.1 and 3.2 (see Figure 8).

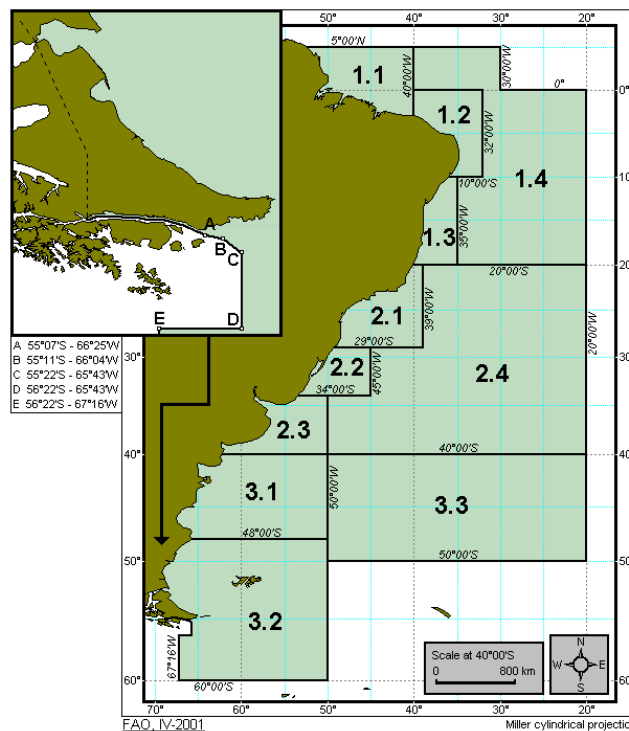


Figure 8 FAO major fishing area 41 and subareas

## 8.1 History of management in the area

Until the early 1980s, area 41 was among the few major fishing regions in the world with a large potential for expansion. At that time, valuable fishery resources were still underexploited (Vasconcellos and Csirke 2016). Now the fisheries in the area are either considered fully exploited or overexploited.

There is no RFMO in place for the area with the legal competence to regulate demersal or deep water fisheries, although the area falls under the convention area of ICCAT and CCBT (Commission for the Conservation of Southern Bluefin Tuna (FarFish, 2017)). There is no direct fishery for Bluefin tuna in the area, although some tuna is caught as by-catch from other fisheries (Vasconcellos and Csirke 2016).

In the absence of a non-tuna RFMO, research, stock assessment and management activities are mostly dealt with through bilateral agreements. Argentina and Uruguay cooperate through the Joint Technical Commission for the River Plate Maritime Front. During the period 1990 – 2005, the South Atlantic Fisheries Commission (SAFC) contributed to a constructive bilateral arrangement between Argentina and Britain, together with the Falkland Islands/Malvinas. The SAFC facilitated the exchange of fisheries data, joint research cruises, joint scientific analysis, and recommended coordinated conservation advice to respective governments. However, Argentina withdrew from the cooperation in 2005 (ibid.).

As the absence of a competent fisheries body does not exempt states from their obligations to adopt conservation measures in areas beyond national jurisdiction, the EU passed a regulation in 2008 requiring the Member states to identify VMEs in high seas regions where their fishing vessels operate and implement fisheries closures with respect to their vessels (FarFish, 2017). Following UN General assembly resolutions on sustainable fisheries and the FAO deep water guidelines, the Spanish institute of oceanography initiated a series of research surveys to identify vulnerable marine ecosystems (VMEs) in the international waters of the SW Atlantic (FarFish, 2017). This resulted in a seafloor and VME mapping of an area of 59 thousand km<sup>2</sup>, and resulted in a closure of nine areas to bottom fishing in 2011 to protect existing VMEs (Vasconcellos & Csirke 2016; Durán Muñoz et al. 2012). This was accepted by the European industry, although fishing fleets from other countries have not been following these conservation measures. This means that there is currently an uneven playing field and the objectives of the area closure will not be achieved.

This issue has been flagged by The Long-Distance Advisory Council (LDAC) in May 2016 to DG Mare, requesting the EU to “demand at the relevant international fora (UN, FAO), as well as in commercial negotiations and bilateral fishing agreements that it might reach with affected third countries, that the implementation of UNGA Resolution 61/105 be extended to all fleets fishing in the South West Atlantic in order to promote good international governance of oceans and seas and ensure a level playing field for EU fleets and foreign fleets alike” (LDAC, 2016).

## 8.2 Current practice of managing the EU fleet

The EU is obliged to ensure sustainable utilization of the fisheries' resources to which EU fleets have access to in the high seas or through bilateral agreements, by cooperating with the RFMOs and national authorities in partnership countries to improve knowledge and make management more effective. All vessels flagged to EU countries are subject to reporting requirements and monitoring, including some level of observer coverage as well as licensing arrangements.

In December 2017, the EU passed a new regulation (2017/2403) on the sustainable management of external fishing fleets, which entered into force on 17 January 2018. The regulation contains new rules for managing the EU external fishing fleet (The European Parliament and the Council of the European Union 2017). Prior to the adoption of the new Regulation 2017/2403, EU vessels fishing in waters beyond the national jurisdiction of EU Member States, as well as third-country vessels operating in EU waters, were subject to an authorisation procedure defined by the Fishing Authorisation Regulation (FAR) 1006/2008. This regulation provided the legal framework for issuing and managing fishing authorisations and was part of the control system of the Common Fisheries Policy, along with the Control Regulation 1224/2009 and the IUU Regulation 1005/2008 (Popescu, 2017).

After the 2013 reform of the CFP, the new Basic Regulation 1380/2013 introduced the objective that EU fishing activities outside European waters had to follow the same principles and standards as within EU waters. In particular, the Basic Regulation requests that efforts are made to monitor EU vessels fishing in non-EU waters outside the framework of bilateral agreements of the EU with third countries (termed 'Sustainable Fisheries Partnership Agreements' – SFPAs). Member States are also expected to collect detailed and accurate documentation of all fishing activities of their vessels outside EU waters. Finally, the Basic Regulation requests that Member States ensure that vessels reflagging to a third country and subsequently returning to the EU fleet operated in a way consistent with EU standards (Popescu, 2017).

The main principle is that any vessel fishing outside EU waters, whatever the area and the framework in which it operates, should be authorised and monitored by its flag Member State. The regulation defines common eligibility criteria for all fishing activities outside of EU waters, which the Member States must follow when issuing fishing authorisations. These criteria are, amongst others, that all vessels i) must have a valid fishing license, ii) must provide the information specified in the annexes of the proposal and among these criteria, all fishing vessels must provide the information specified in the annexes to the proposal, iii) they must have not been found guilty of serious infringements during the year prior to the authorisation application, and iv) all fishing and support vessels must have a IMO number granted by the International Maritime Organisation, intended to ensure the traceability of the vessel throughout its lifespan (The European Parliament and the Council of the European Union 2017).

In order to prevent abusive practices which undermine the conservation and management measures in place, the proposal also contains specific provisions on EU vessels reflagging to a third country and return to an EU flag within two years (Popescu, 2017; The European Parliament and the Council of the European Union, 2017).

### **8.3 Challenges and key priorities**

The lack of a multilateral agreement to manage the high seas fisheries in FAO area 41 represents a threat to the sustainability of the fisheries resources in the area. Because there are no scientific or other kind of cooperation between the coastal states and relevant distant water fishing nations (most notably the EU/Spain, China, Taiwan and South Korea) the knowledge about the fishing pressures and the status of different stocks are limited. In the absence of a competent fisheries body and common regulations, a first step to improve the knowledge about this fishery could be to exchange catch and scientific data. The unilateral measures in place by the EU to avoid harmful impact on identified VMEs also creates an uneven playing field, and a common approach to this issue should be established to ensure both necessary protection of the marine environment and a level playing field for the actors involved in fisheries in the area.





## 9 Discussion – achievements and challenges

### 9.1 SFPA cases

Despite the improved MCS of the EU distant water fishing fleet in recent years, the EU and its Member States have limited capacity to actually control this fleet. They are to a very high degree dependent on the fleets' commitment to and compliance with established rules and regulation and the credibility of their self-reporting. In addition, they are also dependent on the MCS capacity of the SFPA partners and instruments of relevant RFMOs.

The SFPAs and accompanying protocol and annexes provide detailed rules and procedures for implementation of the agreements. This includes aspects of the licensing of EU vessels, catch reporting, technical measures, monitoring and control. In some cases, there has been a need for renegotiation (e.g. fishing opportunities and economic contribution in Mauritania) or new issues to be included when negotiating new agreements (e.g. the inclusion of sharks in Cabo Verde). In all the case study countries, institutions and legal framework for MCS of the national and foreign fishing fleets are established. The legislation is improving, where for instance Senegal adopted a new Maritime Fisheries Code in 2015 with the main objective being to increase penalties against IUU fishing. Several of the SFPA countries are undergoing administrative reforms and how this will affect the monitoring and control of the fisheries of the foreign fleets remains to be seen.

There is a lack of resources in all case studies, both with regards to manpower and technical resources and infrastructure. The coastal states capacity with regards to technical resources are limited either by lack of proper equipment or lack of funding to maintain it properly. For instance, Cabo Verde have several patrol vessels and aircrafts, but limited capacity to operate and keep them in operational condition. Several of these vessels have therefore been out of commission for long periods. There is also a general lack of resources to analyse catch data received from the EU fleet.

VMS is required in all the protocols, but are not necessarily easily implemented. E.g., the VMS of the EU vessels is not compatible with the VMS in Cabo Verde. ERS is also required, but in all the cases, the flag states struggle with the implementation. Therefore, the catch reporting still relies on manual logbooks. In general, the systems for both catch and positioning reporting are in place. In the cases where the vessels land their catch in ports in the coastal state, instead of bringing it to other ports, the MCS is improved by the SFPA country. In all the cases, more competence and resources are needed to analyse and verify the data collected. All cases with the exception of Cabo Verde takes part in an observer programme, either nationally or regionally.

Common for all the cases is that it is difficult to collect data on frequency of inspections and the control coverage. It has also been difficult to distinguish any possible differences between systems in place to

monitor and control the national fishing fleet and those related to the foreign fleet through the documents. For this reason, it is difficult for us to assess whether the controls are adequate or not. In general, there seems to be a lack of resources regarding the controls and they are mainly focused on the national fishing fleet. Expanding the MCS functions to also cover the EU fleet or other foreign vessels is a significant drain on resources, thus complicating the matter of ensuring apt controls. The potential for ensuring adequate controls in the coastal states is considerable better if the catches are either landed or transhipped in a port of the said coastal state.

IUU fishing is an area of concern for all SFPAs, though the specific issues differ. Whereas in the case of Senegal, the lack of control of artisanal fishing outside of Senegalese waters is highlighted, Seychelles emphasizes risks of misreporting linked to the yellowfin quota. All four coastal states have adopted national strategies and plans of actions to combat IUU fishing, either as national initiatives or through regional and/or international cooperation with bodies such as the EU, World Bank or FAO. Examples include ratification of regulations such as PSMA or through participation in various bodies, such as the SRFC in the cases of Cabo Verde, Senegal and Mauritania. IUU touches on several different aspects, and in many instances, controls also have to cover issues such as illegal migration, terrorism and piracy as well, further putting a strain on resources.

## 9.2 High seas cases

The high seas fisheries in FAO areas 41 and 47 represents two very different fisheries. While the non-tuna high seas fisheries in FAO area 47 in the South East Atlantic is managed by SEAFO, there is no bi- or multilateral arrangement in place to manage the non-tuna fisheries in the South West Atlantic. Paradoxically, the fisheries are very limited in the SEAFO area and rather extensive in the South West Atlantic. The SEAFO is considered to be a well-run and well-structured RFMO, based on modern management principles and with a comprehensive system for MCS. SEAFO has contracting parties that includes the relevant distant water fishing nations and coastal states (except the UK on behalf of their territories in the area). SEAFO to and increasing degree cooperate with relevant RFMOs in the area in the fight against IUU fishing and management and enforcement in general. As such, it can function as a model for the situation in the South West Atlantic. In the South West Atlantic, the scientific cooperation between Argentina, Britain and the Falkland/Iceland/Malvinas broke down in 2005, and today there are no scientific or other kind of cooperation between the coastal states and distant water fishing nations of which vessels fish in the area (most notably the EU/Spain, China, Taiwan and South Korea). In this situation, relevant flag state should adopt individual management measures for their vessels to ensure the sustainability of the targeted fish stocks and protection of VMEs, in line with international obligations. While all vessels are presumed to report their catches to their flag state, the lack of cooperation on the fisheries in this area and the unilateral measures in place by the EU creates an uneven playing field. In the absence of a competent fisheries body and common regulations, a first step to improve the knowledge about this fishery could be to exchange catch and scientific data.

As stated in the introduction, this report synthesizes existing information and will act as a primer for future work. The report is a part of the first iteration loop in the spiral development model and delivers context information about the different case studies and will feed into WP4 and the development of the management recommendations (MRs) and provide background information necessary to consider different outcome targets (OTs). The report describes the status of MCS in the six case study areas, it highlights some of the main achievements, and identifies possible barriers to the implementation of a successful MCS regime. Further studies in this task will seek to analyse certain aspects of these achievements and challenges as seen from the coastal state, the EU, and the EU fishing fleet, and identified in this report and based on the defined OTs for the different case studies. In particular, focus will be on the communication and coordination between national agencies in the SFPAs countries, as well between the SFPAs countries, EU institutions and Member states/flag states. This report therefore functions as a primer for further studies within the FarFish project into issues not yet covered in adequate detail of the governance structure of the EU fisheries outside Europe.



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