

**Options for Strengthening  
Monitoring, Control and  
Surveillance of Human  
Activities in the Southeast  
Atlantic Region**

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# Acronyms

<b>Abuja MoU</b>	Memorandum of Understanding on Port State Control for West and Central Africa Region	<b>LME</b>	Large marine ecosystem
<b>ABNJ</b>	Areas beyond national jurisdiction	<b>MCS</b>	Monitoring, control and surveillance
<b>AIS</b>	Automatic Identification Systems	<b>MCSCC</b>	MCS Coordination Centre
<b>ATLAFCO</b>	The Ministerial Conference on fisheries cooperation among African States bordering the Atlantic Ocean	<b>MDA</b>	Maritime Domain Awareness
<b>AU</b>	African Union	<b>MMCC</b>	Maritime Multinational Coordination Centres
<b>BBNJ</b>	Marine biodiversity of areas beyond national jurisdiction	<b>MMSI</b>	Maritime Mobile Service Identity
<b>BCC</b>	Benguela Current Commission	<b>MOC</b>	Maritime Operational Centres
<b>BMU</b>	The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	<b>MoU</b>	Memorandum of Understanding
<b>CCAMLR</b>	Commission for the Conservation of Antarctic Marine Living Resources	<b>NAFO</b>	Northwest Atlantic Fisheries Organization
<b>CCSBT</b>	Commission for the Conservation of Southern Bluefin Tuna	<b>NEAFC</b>	North East Atlantic Fisheries Commission
<b>CECAF</b>	Fishery Committee for the Eastern Central Atlantic	<b>PENAF</b>	Ports Environmental Network Africa
<b>COP</b>	Conference of Parties	<b>PIRFO</b>	Pacific Islands Regional Fisheries Observer
<b>COREP</b>	Regional Fisheries Commission for the Gulf of Guinea	<b>PROG</b>	Partnership for Regional Ocean Governance
<b>CPPS</b>	Permanent Commission for the South Pacific	<b>PSM</b>	Port State Measures
<b>CRESMAC</b>	Regional Centre of Maritime Security in Central Africa	<b>PSMA</b>	Port State Measures Agreement
<b>CRESMAO</b>	Regional Maritime Security Centre for West Africa	<b>PTFG</b>	Port Task Force Ghana
<b>DRC</b>	Democratic Republic of Congo	<b>PTFG</b>	Port Task Force Ghana
<b>ECCAS</b>	Economic Community of Central African States	<b>REC</b>	Regional Economic Communities
<b>ECOWAS</b>	Economic Community of West African States	<b>REMP</b>	Regional environmental management plan
<b>EEZ</b>	Exclusive economic zone	<b>RFB</b>	Regional Fisheries Bodies
<b>EFCA</b>	European Fisheries Control Agency	<b>RFMO</b>	Regional Fisheries Management Organization
<b>EIA</b>	Environmental impact assessment	<b>RFSC</b>	Regional Fisheries Surveillance Centre
<b>EJF</b>	Environmental Justice Foundation	<b>RMCSS</b>	Regional Monitoring, Control and Surveillance Strategy
<b>EU</b>	European Union	<b>RPOA-IUU</b>	Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing
<b>FAO</b>	Food and Agriculture Organization of the United Nations	<b>SADC</b>	Southern African Development Community
<b>FCWC</b>	Fisheries Committee for the West Central Gulf of Guinea	<b>SEA</b>	Strategic environmental assessment
<b>FFA</b>	Pacific Islands Forum Fisheries Agency	<b>SEAFO</b>	South East Atlantic Fisheries Organisation
<b>GGC</b>	Gulf of Guinea Commission	<b>SFPA</b>	Sustainable fisheries partnership agreement
<b>IASS</b>	Institute for Advanced Sustainability Studies	<b>SIDS</b>	Small Island Developing States
<b>ICC</b>	Interregional Coordination Centre	<b>SIF</b>	Stop Illegal Fishing
<b>ICCAT</b>	International Commission for the Conservation of Atlantic Tuna	<b>SRFC</b>	Sub-Regional Fisheries Commission
<b>IDDRI</b>	Institute for Sustainable Development and International Relations	<b>STRONG</b>	Strengthening Regional Ocean Governance for the High Seas
<b>IKI</b>	International Climate Initiative	<b>TMT</b>	Trygg Mat Tracking
<b>ILO</b>	International Labour Organization of the United Nations	<b>UBO</b>	Ultimate beneficial ownership
<b>IMCS Network</b>	International Monitoring, Control and Surveillance Network	<b>UN</b>	United Nations
<b>IMO</b>	International Maritime Organization of the United Nations	<b>UNCLOS</b>	United Nations Convention on the Law of the Sea
<b>IPOA-IUU</b>	International Plan of Action to Prevent, Deter and Eliminate IUU Fishing	<b>UNEP</b>	United Nations Environment Programme
<b>ISA</b>	International Seabed Authority	<b>VLD</b>	Vessel Locating Device
<b>IUU fishing</b>	Illegal, unreported and unregulated fishing	<b>VME</b>	Vulnerable Marine Ecosystem
		<b>VMS</b>	Vessel Monitoring Systems
		<b>VTR</b>	Vessel trip report
		<b>WARFP</b>	West Africa Regional Fisheries Programme
		<b>WATF</b>	West Africa Task Force

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## Executive Summary

Effective monitoring, control and surveillance (MCS) of human activities is critical for the conservation and sustainable use of the ocean. This is particularly important in the Southeast Atlantic, where highly productive waters foster strong fishing pressure.

The STRONG High Seas project (“Strengthening Regional Ocean Governance for the High Seas”) explores ways to enhance the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (BBNJ) through enhanced regional governance, including the strengthening of MCS measures.

In this context, IDDRI and the Secretariat of the Abidjan Convention organised a two-day online experts’ workshop entitled “Monitoring, Control and Surveillance of Human Activities in Areas Beyond National Jurisdiction (ABNJ) in Western Africa” (5 and 6 May 2021). The workshop gathered around 40 MCS experts of the Southeast Atlantic region, with representatives from governments, regional organisations, NGOs and academia.

Based on the experts’ workshop, literature reviews and interviews with relevant stakeholders, this report explores the challenges of MCS in the Southeast Atlantic region, highlighting best practice examples, ongoing initiatives developed both at national and regional levels, and provides recommendations for decision-makers to strengthen MCS.

The report concludes that Southeast Atlantic States can strengthen MCS in the region through improving the collection and sharing of data, enhanced cooperation and coordination, the harmonization of legislation and deterrent sanctions, investing in capacity-building and through more involvement in global and regional processes.

# 1. Introduction

Human activities, such as fishing and shipping, and novel activities that are developing (e.g. bi-oprospecting<sup>1</sup> and seabed mining) are intensifying in marine areas beyond national jurisdiction (ABNJ) (Wright, *et al.* 2018). In order to ensure that the marine environment is used in an environmentally sustainable manner, States use monitoring, control and surveillance (MCS) tools to keep an eye on human activities and for compliance and enforcement actions. Strengthening MCS is a key way to assure the effective management of the deep and distant waters of ABNJ where it is harder to ensure compliance with rules set by international organisations (e.g. the Food and Agriculture Organization, the International Labour Organization and the International Maritime Organization), regional bodies (e.g. regional fisheries management organizations) and national authorities.

New technologies, such as vessel monitoring systems (VMS), are increasingly supplementing traditional approaches to MCS.<sup>2</sup> Most existing rules were developed in the context of fisheries management with early definitions of MCS focusing on monitoring of fishing effort and resource yields, controlling fishing activity with regulations, and conducting surveillance to ensure compliance with such regulations. However, MCS has a range of applications including (Cremers, Wright and Rochette 2020):

- **Monitoring of human activities** (e.g. in the form of data collection and reporting);
- **Control of human activities** and their impacts on marine biodiversity (e.g. through regulation, licensing, and controls on how, where and when activities in the ocean take place);
- **Surveillance of vessels** (e.g. through observer programmes and electronic surveillance systems);
- **Encouraging compliance** with regulations through transparency, sanctions and other measures (e.g. sustainability certification schemes);

- **Enforcement actions**, e.g. to tackle illegal, unreported and unregulated (IUU) fishing and transnational illegal activities, such as human trafficking, forced labour, and trafficking in arms, drugs and wildlife.

MCS in ABNJ encompasses a wide range of tools, technologies and policies that aim to promote compliance and ensure the conservation and sustainable use of marine resources.

The STRONG High Seas (“Strengthening Regional Ocean Governance for the High Seas”) project aims to strengthen regional governance of marine biodiversity in areas beyond national jurisdiction (BBNJ), including by strengthening MCS. This five-year project works together with key science and policy actors in the Southeast Pacific and Southeast Atlantic regions to improve regional coordination and provides new lessons and approaches for high seas governance.

As part of the STRONG High Seas project, the Institute for Sustainable Development and International Relations (IDDRI) has published two reports on “[Strengthening Monitoring, Control and Surveillance in Areas Beyond National Jurisdiction](#)” and on “[Options for Strengthening Monitoring, Control and Surveillance of Human Activities in the Southeast Pacific Region](#)”.

This report aims to provide insights into how MCS can be strengthened in the Southeast Atlantic region based on a two-day interactive virtual workshop that IDDRI and the Secretariat of the Abidjan Convention organised on 5 and 6 May 2021, literature reviews and interviews with relevant stakeholders. The following section presents a brief overview of the ecological and socio-economic landscape of ABNJ in the Southeast Atlantic. Section 3 presents an overview and assessment of existing initiatives to strengthen MCS in the Southeast Atlantic. Section 4 provides detailed information on the potential role of Port State Measures in strengthening MCS. Finally, section 5 builds on this analysis and provides concrete recommendations to strengthen MCS in the region.

1 The search for such genes and the development of commercial products from them.

2 For example, onboard observers, logbooks and surveillance planes.

## 2. Overview of the Southeast Atlantic

This section provides an overview of the ecology (2.1), human activities and pressures on the marine environment (2.2), regional cooperation and governance (2.3) and shared challenges (2.4) of Southeast Atlantic coastal States to provide some background information on the context in which they are conducting their MCS activities.

### 2.1. Ecology

The study area of the Southeast Atlantic region is defined as the Eastern side of the South Atlantic Ocean, between Mauritania and South Africa (Figure 1) (Durussel, *et al.* 2018). The Southeast Atlantic region is characterised by high primary production and therefore strong fishing pressure.

Waters around Western Africa are highly productive, because of upwelling processes from the Canary Current Large Marine Ecosystem (LME) ranging from Morocco to the Western Sahara, the Guinea Current LME (Togo to Angola) and the Benguela Current LME at the south of the continent, considered global hot-spots for marine biodiversity (Bos 2012). The region hosts a range of marine ecosystems. There are relatively few endemic marine species in the region, but a significant number of them are endangered (Leurs, *et al.* 2021).

In the Southeast Atlantic region's ABNJ, an important seamount chain runs along the mid-Atlantic Ridge, the Guinea Rise and the Walvis Ridge (Bergstad, *et al.* 2019). The seamounts consistently show high levels of marine biodiversity and have been classified as vulnerable marine ecosystems (VME) by the South East Atlantic Fisheries Organisation (SEAFO), to protect them from destructive impacts of bottom trawling. SEAFO is one of the three regional fisheries management organizations (RFMOs) in this region.

Climate change is predicted to have strong adverse impacts on coastal and marine ecosystems of the region, through rising sea

temperatures and ocean acidification, which in return will affect livelihoods of local communities (Diop, *et al.* 2011).

**Figure 1. Focal region of the STRONG High Seas project in the Southeast Atlantic**



### 2.2. Human activities and pressures on the marine environment

In the national waters off the coast of the Southeast Atlantic, the lack of cross-sectoral coordination has led to pressures on resources and conflicts between different users of the marine space. Most States in the region have limited capacity and investment means (vessels, fuel and equipment) to access and explore ABNJ adjacent to their EEZ, effective governance of ABNJ is therefore crucial as coastal livelihoods are affected by activities taking place in the high seas (Spiteri, *et al.* 2021).<sup>3</sup>

Fishing is the most important human activity in the region, supported by the rich and productive waters that result from upwelling processes. Coastal communities rely

<sup>3</sup> Five of the 22 States in the Abidjan Convention region are active in ABNJ (generating 1.2% of global revenues from ABNJ fisheries) with most fishing resources being caught by European (France and Spain) and Asian (Japan and Taiwan) vessels, which heavily rely on subsidies to sustain an otherwise non-profitable economic activity.

on marine resources for both sustenance and livelihoods (Polidoro, *et al.* 2017); with artisanal fisheries forming a significant part of the employment market (Denton and Harris 2019). In the region's EEZs, distant-water fishing fleets have a strong presence, with an estimated 700 vessels operating under bilateral fishing agreements (Ndiaye 2011). The number of such agreements have drastically increased in recent years (Denton and Harris 2019, Belhabib, Sumaila, *et al.* 2015).<sup>4</sup> The principal foreign players operating under fishing agreements are the EU and China (Belhabib, Sumaila, *et al.* 2015). Other foreign fleets (e.g. those flagged to Russia, South Korea and Turkey) operate mostly in the waters off the coast of Northwest Africa (Failler 2015). In the region's ABNJ, the main target species include alfonsino, orange roughy caught by mid and bottom trawl fisheries, deep-sea red crabs (*Geryon* spp.) caught with pots and Patagonian toothfish (*Dissostichus eleginoides*) caught using bottom longlines.<sup>5</sup> Other significant fisheries in the region include bigeye, yellowfin, Southern bluefin and albacore tuna as well as sharks.<sup>6</sup>

Fishing pressure in the region is an extremely important issue requiring attention (Leurs, *et al.* 2021). There are a number of industrial vessels creating strong fishing pressure and leading to the depletion or collapse of the majority of fish stocks in many areas, with significant decreases in fish biomass over the last ten to fifteen years (Polidoro, *et al.* 2017). IUU fishing is also a major concern in the region, accounting for about 65% of the legal reported catches (Doubouya, *et al.* 2017). It is motivated by increasing global market demand for valuable species, such as tuna, that allow for a lucrative business in the absence of strong MCS activities and enforcement measures and therefore a low chance of detection as well as less punitive penalties upon arrests (Spiteri, *et al.* 2021). The economic losses of weak MCS frameworks are estimated at 2.3 billion USD annually, with only 13 million USD recovered through effective MCS (Doubouya, *et al.* 2017). In recent

years, there has been an increase in clashes between industrial and artisanal fishers that both target the same marine resources. There are various approaches to address this issue in the region, for example, Nigeria has established a committee that receives reports from artisanal fishers that include the time and location of the incident and requests industrial vessel operators to provide their logbooks to crosscheck the evidence.<sup>7</sup>

Oil exploration, drilling and production activities have been singled out as activities contributing the most to the degradation of marine ecosystems, and of mangroves in particular (Polidoro, *et al.* 2017).<sup>8</sup> Coastal development fuelled by population growth as well as domestic and industrial pollution discharged at sea (due to improper wastewater treatment systems) impacts the health of both ecosystems and coastal communities (Polidoro, *et al.* 2017). In the region's ABNJ, there is no commercial exploitation of mineral resources from the deep seabed yet, but this might take place in the future as the International Seabed Authority (ISA) is currently developing a regional environmental management plan (REMP) for the Area of the northern Mid-Atlantic Ridge.<sup>9</sup>

In addition, the region suffers from "blue crime" threats with piracy and related attacks at sea (Denton and Harris 2019) as well as the trafficking of weapons, drugs, humans (i.e. forced labour) and exotic animals (Spiteri, *et al.* 2021). The use of MCS tools are therefore not only relevant in relation to fishing activities, but also for getting to grips with other types of crimes happening in the region.

### 2.3. Regional cooperation and governance

The Abidjan Convention, established under the United Nations Environment Programme (UNEP) in 1981, provides a framework for regional cooperation, collaboration and joint actions for the conservation and sustainable use of marine ecosystems. The mandate of the

4 From 36 in the 1960s to 302 in the 2000s.

5 <http://www.fao.org/3/i1116e/i1116e02c.pdf>

6 <https://www.iccat.int/en/assess.html>

7 West Africa Task Force: (2019) Record of the 9th West Africa Task Force Meeting. West Africa Task Force.

8 In the Niger Delta alone, more than 2,000 oil spills incidents were recorded from 1997 to 2001.

9 <https://www.isa.org/jm/minerals/environmental-management-plan-clarion-clipperton-zone>

Abidjan Convention is limited to EEZs, but its Conference of Parties (COP) has established a working group focusing on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (BBNJ) to strengthen marine scientific research and decision-making capacity at the national and subregional levels.<sup>10</sup>

Three RFMOs have a mandate to manage high seas fisheries in the Southeast Atlantic, namely the International Commission for the Conservation of Atlantic Tuna (ICCAT),<sup>11</sup> the South East Atlantic Fisheries Organisation (SEAFO)<sup>12</sup> and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT)<sup>13</sup>.

Besides RFMOs that have a management mandate, there are also Regional Fisheries Bodies (RFBs) that have an advisory mandate (but cannot adopt fisheries conservation and management measures legally binding on their member States) which play a significant role in strengthening MCS in the Southeast Atlantic region, e.g. the Fishery Committee for the Eastern Central Atlantic (CECAF), the Sub-Regional Fisheries Commission (SRFC), the Fisheries Committee for the West Central Gulf of Guinea (FCWC)<sup>14</sup> and the Regional Fisheries Commission for the Gulf of Guinea (COREP)<sup>15</sup> (Figure 2).

States in the region are signatories and parties to a range of international and regional agreements relevant to MCS (Annex 1).

## 2.4. Shared MCS challenges

Southeast Atlantic States share similar challenges to MCS in their ABNJ, the first being **limited awareness and understanding** of the impacts of illegal human activities, such as IUU fishing, taking place in ABNJ. National and regional authorities focus predominantly on their EEZs, and ABNJ is considered remote and a lower priority for national and regional management bodies. The national authorities are more interested in mastering MCS activities in their own EEZ before keeping an eye on ABNJ.

ABNJ are characterised by a fragmented governance framework: a wide variety of sector-specific international organisations and conventions often manage the same area, yet governance gaps remain as not all regions and activities are regulated. There has been **limited cross-sectoral cooperation and coordination** in the Southeast Atlantic region. This is a missed opportunity because cooperation and coordination at a cross-sectoral level could strengthen MCS by sharing knowledge, intelligence, data, capacity and best practices.

10 [http://highseas-abidjanconvention.org/sites/default/files/fact-sheets/Factsheet%201\\_%20The%20Abidjan%20Convention%20and%20COP%20Decisions%20on%20ABNJ.PDF](http://highseas-abidjanconvention.org/sites/default/files/fact-sheets/Factsheet%201_%20The%20Abidjan%20Convention%20and%20COP%20Decisions%20on%20ABNJ.PDF)

11 ICCAT was established by the Convention for the Conservation of Atlantic Tunas in 1966 and is responsible for the management and conservation of tuna and tuna-like species in the Atlantic Ocean and adjacent seas. It has the following Contracting Parties: the United States, Japan, South Africa, Ghana, Canada, France (St-Pierre et Miquelon), Brazil, Morocco, Republic of Korea, Côte d'Ivoire, Angola, Russia, Gabon, Cabo Verde, Uruguay, São Tomé-et-Príncipe, Venezuela, Equatorial Guinea, Republic of Guinea, Libya, China, EU, Tunisia, Panama, Trinidad & Tobago, Namibia, Barbados, Honduras, Algeria, Mexico, Iceland, Turkey, Philippines, Norway, Nicaragua, Guatemala, Senegal, Belize, Syria, St. Vincent & the Grenadines, Nigeria, Egypt, Albania, Sierra Leone, Mauritania, Curaçao, Liberia, El Salvador, Republic of Guinea-Bissau, Republic of Grenada, the Gambia and the United Kingdom. See: <https://www.iccat.int/en/>

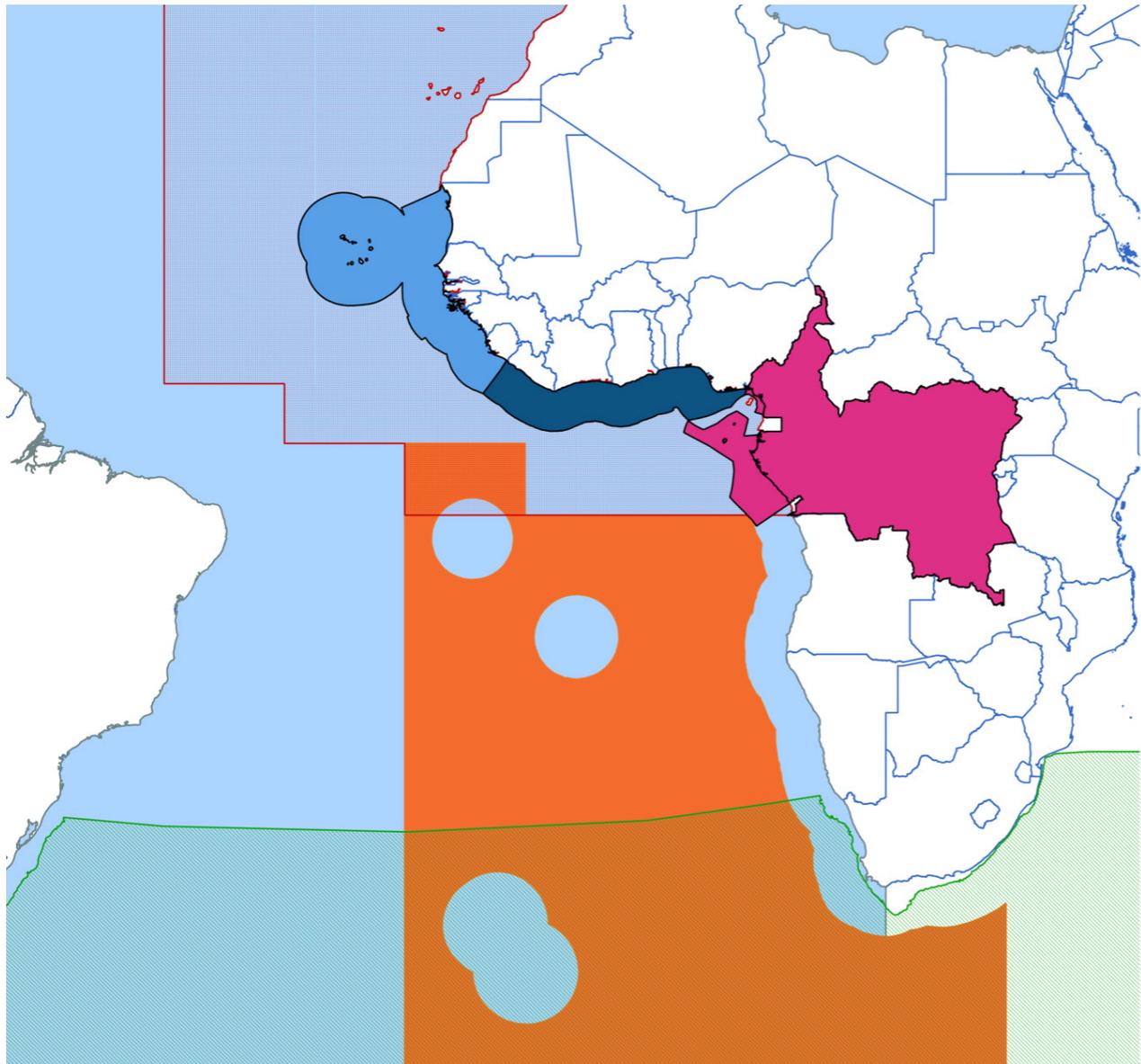
12 SEAFO was established in 2003 by the Convention on the Conservation and Management of Fishery Resources in the South East Atlantic Ocean to ensure the long-term conservation and sustainable use of the fishery resources in the region. It has the following Contracting Parties: Angola, the EU, Japan, Republic of Korea, Namibia, Norway and South Africa. The Convention Area of SEAFO includes all of FAO Area 47 and a small part of FAO Area 34, and excludes the EEZs of all national jurisdictions (Angola, Namibia, South Africa and the UK). See: <http://www.seafo.org/About/Contracting-Parties>

13 The CCSBT was established by the Convention for the Conservation of Southern Bluefin Tuna in 1984 and aims to ensure the conservation and optimum utilisation of southern bluefin tuna. The Commission comprises Australia, the EU, the Fishing Entity of Taiwan, Indonesia, Japan, Republic of Korea, New Zealand and South Africa. See: <https://www.ccsbt.org/>

14 The FCWC is a regional fisheries organization established in 2007 by six States bordering the Gulf of Guinea (Liberia, Côte d'Ivoire, Ghana, Togo, Benin and Nigeria) to address regional fisheries development issues. See: <https://fcwc-fish.org/about-us/background-structure>

15 COREP is an intergovernmental organisation and specialised organisation of the Economic Community of Central African States (ECCAS) responsible for coordinating and promoting aquaculture and the development of the exploitation of fisheries in national and inland waters of its member States. It has six member States: Angola, Cameroon, Gabon, the Democratic Republic of Congo, the Republic of Congo and São Tomé and Príncipe with Equatorial Guinea as an observer. See: <http://www.fao.org/fishery/rfb/corep/en>

**Figure 2. Overview of RFMO and RFB convention areas in the Southeast Atlantic**



**Legend**

- COREP
- FCWC
- SRFC
- CECAF
- CCSBT
- SEAFO
- ICCAT

(Source: authors, FAO database).

In the region's ABNJ, as pertains globally, flag States are responsible for controlling the vessels flying their flag.<sup>16</sup> However, they are not always willing or able to conduct MCS activities. Southeast Atlantic States are known to have **limited MCS capacity**, such as operational means (e.g. patrol boats and communication equipment), and also a lack of political will to intervene in ABNJ. The same is valid for flag States of vessels operating in ABNJ in the Southeast Atlantic, which are not Southeast Atlantic coastal States. The distance, coupled with a lack of capacity to have sufficient oversight of large fleets could exacerbate the situation and place more pressure on the States in the region. There is also a shortage of qualified human resources with expertise in the MCS domain and a lack of resources to analyse data. There is a strong need for ongoing support to maintain and improve existing MCS systems and develop new ones. Those working with MCS tools on the ground also require training opportunities to be able to use the newest technologies. Corruption also impairs efficient management of ABNJ. The lack of MCS capacity in the region makes it challenging for Southeast Atlantic States to carry out their flag State responsibility.

**Poor governance** is an important obstacle to effective MCS. National institutions are sometimes weak in certain Southeast Atlantic States and cooperation and coordination between national institutions is often limited. There is a need to harmonise legislation to develop effective monitoring mechanisms and sanctions at a national level as well as across the region. This is important, because weak governance mechanisms can facilitate IUU fishing. There is also a lack of effective implementation of MCS protocols as well as port control and inspection measures.

There are many **unresolved overlapping claims of jurisdiction** (Ndjambou, Lembe and Ndong 2019)<sup>17</sup> in the region that can lead to tensions between neighbouring States and make it challenging to conduct joint actions around disputed borders.<sup>18</sup>

More can be done to improve **data collection and sharing** in the region. The focus of data collection and sharing lies mostly on EEZs as well as on fishing activities. States find it challenging to maintain a good overview of human activities happening in their ABNJ and there is a lack of regional coordination. This is partly due to the fact that different government departments are responsible for monitoring different human activities, such as fishing (Ministry of Fisheries) and maritime safety (Ministry of Defence or Transport) without sufficient communication structures in place to share the collected data. Practical challenges such as language barriers, poor internet connection and data confidentiality also need to be addressed to make data collection and sharing more efficient. There are also sovereignty concerns that play a role as some national authorities perceive all data as intelligence of national concern rather than as information that would be helpful to share with others.

The **global COVID-19 pandemic** affected MCS operations as in some areas on-board observer programmes, and in-port and at-sea inspections were halted due to public health measures (OECD 2021).<sup>19</sup> This in turn fostered an increase in IUU fishing and other illegal activities (Phua, *et al.* 2021). This trend was also visible in the region during the Ebola crisis through a 3-fold increase in illegal catches in Guinea and a 4-fold increase in Sierra Leone (Doubouya, *et al.* 2017).

16 Vessels in ABNJ are subject to the exclusive jurisdiction of their flag State and the United Nations Convention on the Law of the Sea (UNCLOS) requires them to "effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag" (commonly referred to as "flag State responsibility"). See United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3., Article 94.

17 For example, Cameroon aims to extend the limits of its continental shelf, but Equatorial Guinea and Cameroon have not yet finalised negotiations on the establishment of an official maritime boundary between them. There are also maritime border disputes between the DRC and Angola as well as between Gabon and its neighbours Equatorial Guinea and Congo.

18 West Africa Task Force: (2019) Record of the 9th West Africa Task Force Meeting. West Africa Task Force.

19 Moreover, the internet connection of representatives of several West African members of ICCAT was unreliable limiting their ability to participate in virtual meetings.

### 3. MCS efforts in the Southeast Atlantic

There are several initiatives at different scales in the Southeast Atlantic that aim to strengthen MCS in the region. Most of these initiatives focus on the EEZ instead of ABNJ and on one specific area of the Southeast Atlantic, but not the entire area adjacent to the Abidjan Convention area, which is the scope of this report. Moreover, most projects focus on the IUU fishing dimension of MCS (e.g. domestic versus foreign fleets). As part of the African Union's efforts to reform

fisheries policy, there is an increasing interest in governance, transparency and MCS. It is also important to note that international funders (e.g. the World Bank) focus mostly on providing technical assistance, but do not always address the governance perspective (e.g. sanction system) of MCS.

There are a variety of MCS tools used in the Southeast Atlantic region. (Table 1).

**Table 1. Examples of MCS tools used in the Southeast Atlantic region<sup>20</sup>**

MCS tool	Characteristics	Advantage(s)	Limitation(s)
Logbook, vessel trip reports (VTRs)	Paper-based record of fishing activity. Generally includes: vessel identity, date/time/location, gear used, fishing activity (e.g., tow length, number of hooks or trips), catch/bycatch) (National Research Council 2000).	Cheap. Can be used on any vessel and in any language.	Complex/time-consuming. Self-reported - risk of misreporting, incomplete/late logs, shifts in reporting dates, non-reporting (Chang and Yuan 2014). Data often digitised without verification, double entry. Data is often considered confidential (National Research Council 2000).
Automatic Identification Systems (AIS)	Autonomous and continuous vessel identification and monitoring that allows vessels to exchange with nearby ships and coastal authorities (vessel identification data, position, course, speed) to facilitate traffic management and avoid collisions. <sup>21</sup>	AIS signals are more frequently emitted than VMS signals: AIS has a quasi-continuous monitoring function (Delfour-Samama and Leboeuf 2014). AIS is publicly broadcast (cf. VMS data which is generally proprietary with access often limited to the flag State) (Natale, <i>et al.</i> 2015, Kroodsma, <i>et al.</i> 2018) Improves safety and the management of maritime traffic. Can be used to identify ships that pollute (oil spills), tranship, conduct IUU fishing and violate MPA rules. Least expensive vessel monitoring system that can monitor in coastal areas as well as the high seas (Stop Illegal Fishing 2018).	Tampering (e.g. reporting fake vessel names or identification numbers, or turning it off). Vessel identifier data that is transmitted is set by vessel captains or owners and is therefore frequently limited or incorrect. More than one vessel can use the same Maritime Mobile Service Identity (MMSI), making analysis of the tracks difficult. Confidentiality and safety concerns (e.g. may reveal commercial information or be used by terrorists). <sup>22</sup> Data generally only available to nearby receivers. <sup>23</sup> Satellite transmission now possible (so-called S-AIS), but there is no global coverage yet. Use of data for MCS purposes requires relevant software and analytical capacity (Stop Illegal Fishing 2018). Flag States often do not sanction non-compliance with AIS obligations or impose low fines (Stop Illegal Fishing 2018). RFMOs do not require AIS (partly because they often already have a VMS requirement in place). <sup>24</sup>

<sup>20</sup> Information adapted and updated based on Table 1 (p. 17-22) in (Cremers, Wright and Rochette 2019).

<sup>21</sup> The IMO requires ships over 300 metric tonnes to install AIS systems. See: <http://www.imo.org/en/OurWork/Safety/Navigation/Pages/AIS.aspx> Some flag and coastal States also require fishing vessels to use AIS and many fishing vessels use AIS voluntarily for navigation and safety purposes. See: (Stop Illegal Fishing 2018).

<sup>22</sup> <http://www.fao.org/3/a-a0959e.pdf>.

<sup>23</sup> Ibid.

<sup>24</sup> An exception is the Pacific Islands Forum (PIF) Fisheries Agency (FFA), which requires foreign vessels to have both VMS and AIS.

<b>Vessel Monitoring Systems (VMS)</b>	Automatically transmits principally positional (GPS) information by satellite.	Required by some flag States and most RFMOs. Provides safety guarantees (Del-four-Samama and Leboeuf 2014). Tamper-evident system compared to AIS. VMS data is admissible evidence in several courts. Reporting can be tailored to any type of fishing activity.	Lack of a uniform global regulation or standard (Detsis, <i>et al.</i> 2012). Data is often reported every 1-4 hours (depends on gear, data storage and management capacity of the regulatory body). Vessels without VMS equipment cannot be monitored. Provides limited information, so requires integration with other MCS tools to be effective. <sup>25</sup> Costly tool, especially for the small-scale fleet. Capacity for technical maintenance and IT support can be limited in some countries. Access to data subject to legal and confidentiality constraints; information received by flag State not always shared with RFMOs or made public (Ewell, <i>et al.</i> 2017).
<b>Satellite-based remote sensing</b> E.g. Synthetic Aperture Radar; visible infrared imaging radiometer suite	"The derivation of information by analysing radiation received by a sensor" (Kachelriess, <i>et al.</i> 2014).	Wide range of potential applications. <sup>26</sup> Can allow for detection of vessels that are not using or transmitting AIS/VMS. <sup>27</sup> Can be used during all-weather types.	Can only be used for the upper layer of the ocean (max 27 m depth) (Kachelriess, <i>et al.</i> 2014). Requires significant financial and human resources as well as capacity for data storage and analysis. "May take several days to access the data, there are generally fees associated with the data access and global coverage is not currently available on a daily basis". <sup>28</sup>
<b>Observer programmes</b>	Observers record information about the vessel they are on, and this information can be used for compliance purposes.	Can monitor all activities of a vessel.	Only 'viable' on larger vessels. Effectiveness varies depending upon a range of factors. Observers may be subject to harassment and bribery, especially on the high seas. Observers have no mandate to enforce compliance.

### 3.1. Regional-led initiatives

#### *RFMOs and RFBs*

MCS has been strengthened at a regional level through regional fisheries management organisations (RFMOs), which are in a unique position to develop MCS standards for fisheries, guide the development of efficient and effective MCS systems, and facilitate coordinated efforts to ensure effective implementation of conservation and management measures (Hutniczak, Delpeuch and Leroy 2019). RFMOs have developed various measures to enhance MCS efforts of their members and to encourage compliance with their rules, e.g. (Cremers, Wright and Rochette, 2019):

- The implementation of mandatory VMS, observer programmes, electronic reporting and monitoring systems;
- The adoption of regional MCS schemes for Port State Measures;
- The development of vessel lists for authorised fishing vessels as well as those reported as engaging in IUU fishing activities. Several RFMOs have a special procedure for cross-listing IUU vessels from other organisations;
- Requiring members to meet minimum standards (Hutniczak, Delpeuch and Leroy 2019).

25 Though VMS data does not provide any information on whether a vessel is fishing, steaming or inactive (Gerritsen and Lordan 2011), this can be inferred from the data.

26 Connectivity, the impact of climate change, for the designation, mapping, monitoring and management of MPAs for biodiversity protection, to assess the impacts of anthropogenic threats (e.g. oil spills, marine litter) (Kachelriess, *et al.* 2014).

27 <https://globalfishingwatch.org/research/viirs/>

28 Ibid.

Fisheries management bodies in the region have developed coordinated MCS measures for ABNJ (Table 2). Both ICCAT and SEAFO have established a system of vessel recording and regularly update their list of IUU fishing vessels, made public on their website.<sup>29</sup> A regional observer programme for tuna species is ongoing to ensure compliance with ICCAT's regulations. In 2015, SEAFO developed a system of observation, inspection, compliance and enforcement for all fishing vessels operating in its convention area, with the goal of deterring IUU fishing.

Besides RFMOs, RFBs such as the SRFC and FCWC have also come up with a variety of initiatives to strengthen MCS at a regional level.

The SRFC<sup>30</sup> has established a Department for coordinating MCS activities, based in The Gambia.<sup>31</sup> The Department organises and monitors sub-regional surveillance operations, provides capacity building to Member States in the area of surveillance and develops regional fisheries surveillance tools, such as a sub-regional register of fishing vessels operating in the Commission area.<sup>32</sup> It also launches joint surveillance operations in the region supported by the EU funded PESCAO project. One example is operation "STINGRAY" held in April and May 2021 in partnership with the European Fisheries Control Agency (EFCA) to strengthen sub-regional operational cooperation in order to detect fishing activities that do not comply with the conservation and management rules in force in the EEZs of SRFC member States (Guinea Bissau, Guinea and Sierra Leone).<sup>33</sup> The Gambia, Senegal, Cabo Verde and Mauritania have also participated in similar joint operations. However, due to limited capacity and legal constraints, these joint operations do not extend to the high seas.

In its Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing (RPOA-IUU), FCWC Member States agreed to strengthen MCS at a national level by:

1. Recruiting adequate personnel and procuring equipment and logistics for MCS activities;
2. Developing a MCS Operational Manual for all institutions involved in MCS activities;
3. Implementing VMS and AIS systems to be harmonised by the FCWC Secretariat;
4. Ensuring that all their national flagged vessels and foreign vessels under access arrangement are fitted with transponders and transmit data to the National Fisheries Control Centres at regular intervals;
5. Implementing at sea observer programs that cover at least 50% of national vessels and 100% of foreign vessels and
6. Appointing a focal person on MCS activities who will submit a summary report of MCS activities to the FCWC Secretariat.<sup>34</sup>

In 2014, FCWC Ministers adopted the Convention on the Pooling and Sharing of Information and Data of the Area of the Fisheries Committee for the West Central Gulf of Guinea. FCWC also developed a regional record of authorised industrial fishing vessels operating in its member States.

The launch of the West Africa Task Force (WATF) in 2015,<sup>35</sup> as a subsidiary body of the FCWC, shows the growing dynamism of the region in terms of MCS of human activities in Western African coastal waters. The aim of the WATF is to address IUU fishing in West Africa, through

29 <https://www.iccat.int/en/IUUlist.html>; <http://www.seafo.org/Management>

30 An intergovernmental fisheries cooperation gathering Cabo Verde, the Gambia, Guinea, Guinea-Bissau, Senegal, Mauritania and Sierra Leone, aiming to sustainably govern marine resources in the region.

31 <https://spcsrp.org/en/monitoring-control-and-surveillance-fisheries-development-mcsd>

32 Ibid.

33 <http://spcsrp.org/en/%E2%80%9Cstingray%E2%80%9D-joint-fishery-monitoring-operation;>  
<https://www.efca.europa.eu/en/content/pressroom/efca-supports-operation-%E2%80%9Cstingray%E2%80%9D-organised-sub-regional-fisheries-commission>

34 Section 3.2.1.7., Monitoring, Control and Surveillance of the FCWC ( 2018) Regional Plan Of Action To Prevent, Deter And Eliminate Illegal, Unreported And Unregulated (IUU) Fishing In The Fisheries Committee For The West Central Gulf Of Guinea (FCWC) Member Countries.

35 <https://fcwc-fish.org/projects/watf>

strengthened regional information sharing and collaboration. The WATF acts as the MCS arm of FCWC and works based on a collaboration between FCWC member States and a technical team made of two foreign NGOs: Trygg Mat Tracking (TMT) and Stop Illegal Fishing (SIF). National working groups have been created to foster inter-agency cooperation regarding MCS operations, and the technical team led by TMT supports intelligence gathering, analysis and enforcement actions. Building on the WATF, the FCWC launched in 2021 a regional MCS centre at the headquarters in Tema (Ghana) funded by the EU PESCAO project and with technical support of EFCA to build regional capacity for addressing IUU fishing and to support on-the-ground cooperation.<sup>36</sup> The centre will develop the following MCS measures at the regional level: a VMS system, a regional record of authorised vessels, at-sea joint patrols, a regional observer programme and training and capacity building. This will improve knowledge sharing, communication, cooperation and coordination amongst national and regional authorities, and in turn enhance transparency and accountability in fisheries. This type of regional cooperation also helps to fill any capacity gaps at the national level.

FCWC member States share MCS intelligence and information through the communications platform WATF “Basecamp”.<sup>37</sup> This platform facilitated the arrest of ten hijackers of the Hai Lu Feng 11 vessel in May 2020, thereby rescuing 18 crewmembers.<sup>38</sup> The in Côte d’Ivoire registered vessel disappeared from the radar for two days and using the Basecamp platform, the FCWC notified all member States and based on a joint analysis of the vessel’s VMS, government authorities suspected the vessel was heading towards the Nigerian EEZ. The FCWC alerted the Nigerian authorities; the Nigerian Navy intercepted the ship and arrested the pirates.

The Regional Fisheries Commission of the Gulf of Guinea (COREP) has defined a regional MCS strategy that is meant to establish a MCS Regional Coordination Unit within the secretariat to work with the Regional Centre of Maritime Security in Central Africa (CRESMAC) and its Maritime Multinational Coordination Centers (MMCCs).<sup>39</sup> However, there seem to be no recent further developments on MCS based on desk research.

### *Other intergovernmental organisations*

In 2012, the African Union (AU) developed the 2050 Africa’s Integrated Maritime Strategy to “foster increased wealth creation from Africa’s oceans and seas by developing a sustainable thriving blue economy in a secure and environmentally sustainable manner”.<sup>40</sup> In the Strategy, the AU States are urged to tackle IUU fishing by, for example, taking various MCS measures including: “(i) Effective licensing and control of vessels allowed to fish by Flag States; (ii) Real-time positional reporting by licensed vessels via VMS; (iii) Surveillance and interception of irresponsible fishing by on-water patrols; (iv) Implementation of technical regulations for the safety of non-convention fishing vessels; and (v) Promotion of effective Flag State implementation in a broader context through the enforcement of RFMO measures, such as ‘white’ or ‘black lists’ to identify ‘bad actors’”.<sup>41</sup>

The Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic (ATLAFCO) is an intergovernmental organisation founded in 1989 with member States from Morocco until Namibia.<sup>42</sup> Following the ATLAFCO MCS workshop organised in Marrakech in 2015,<sup>43</sup> there are ongoing efforts to set up a regional on-board observer programme and a harmonised regional port

36 <https://www.seafoodsource.com/news/environment-sustainability/new-monitoring-center-boosts-war-against-iuu-in-gulf-of-guinea>

<https://www.tm-tracking.org/post/regional-monitoring-control-and-surveillance-centre-launches-in-west-africa>

<https://stopillegalfishing.com/events/launch-of-the-fcwc-regional-monitoring-control-and-surveillance-centre-rmcsc/>

37 <https://fcwc-fish.org/what-we-do/capacity-building>

38 <https://fcwc-fish.org/our-news/fcwc-regions-interagency-cooperation-leads-to-arrest-of-vessel-hijackers>

39 <http://www.corep-se.org/blog/atelier-de-validation-du-cadre-detablissement-dune-cellule-de-coordination-regionale-de-suivi-controle-et-surveillance-des-peches-scs-dans-la-zone-corep-ainsi-que-des-protocoles-y-afferents-2/>

40 [https://cggtps.com/wp-content/uploads/2050-AIM-Strategy\\_EN.pdf](https://cggtps.com/wp-content/uploads/2050-AIM-Strategy_EN.pdf)

41 Ibid, para 38.

42 <https://www.comhafat.org/en/presentation.php>

43 <https://www.atlafco.org/fr/actualites.php?id=20>

**Table 2. A comparison of a selection of MCS standards established by Southeast Atlantic RFMOs**

Type of MCS measure	ICCAT	SEAFO	CCSBT
Record of vessels / List of authorized vessels	Has a recording system for vessels larger than 20m, carrier vessels for transshipment of tuna and for vessels authorized to fish particular species. Any ship not entered in the Record (publicly available on its website) are not authorized to fish in the Convention Area.	Has a list of authorized vessels made public on its website.	Has a list of authorized vessels made public on its website.
IUU vessel list	Has a public list of IUU fishing vessels on its website.	Has a public list of IUU fishing vessels on its website that incorporates vessels found on the North East Atlantic Fisheries Commission (NEAFC), Northwest Atlantic Fisheries Organization (NAFO) and Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) IUU lists.	Adopted a resolution to establish a list of vessels presumed to have engaged in IUU fishing in 2019; list made public on its website, cross-listed with other organisations.
Catch reporting	The use of the ICCAT Bluefin Tuna Catch Documentation Scheme is required to determine the origin of tuna.  Contracting Parties are required to send weekly catch reports by gear to the Secretariat and report monthly catches of bluefin tuna.	Operating fishing vessels are required to report catches to its flag State, which then transfers the information to the Secretariat.	Catch Documentation Scheme in place for tracking products.
VMS	Required for vessels larger than 15m authorized to fish in the Convention Area.	VMS required and with a Vessel Locating Device able to automatically transmit VMS data to the flag State allowing for a continuous tracking of the position of the vessel.	Members and Cooperating Non-Members are required to oblige vessels flying their flag to use VMS dependent on where these vessels are fishing and based on the requirements of other RFMOs.* CCSBT does not have a formal Convention Area like other RFMOs, because it is species-based.  VMS required for all fishing vessels operating in the Convention Area.  There is no centralised VMS and the Secretariat has no access to any VMS.
Observers and inspection programmes	Observers are required for all purse seiners authorized to fish for bluefin tuna; during all transfers and cagings of bluefin tuna and during all harvesting of bluefin tuna from farms.  Developed an Observer Programme for transshipments.  Developed a Scheme of Joint International Inspection that allows inspection of foreign-flagged vessels on the high seas.	System of Observation, Inspection, Compliance and Enforcement that applies to all fishing vessels and fishing research vessels operating in the Convention Area. Currently, no sea inspection programme at SEAFO level, left at the discretion of Contracting Parties.	Adopted a scheme for minimal standards for inspection in ports.
Transshipment monitoring	All transshipments of ICCAT species are required to take place in port unless they are monitored under the ICCAT Regional Observer Programme for transshipment.	Transshipment at sea is forbidden in the Convention Area, only authorized in specific ports.	CCSBT program for monitoring transshipment at sea since 2009, harmonized with ICCAT's.  CCSBT is subject to the transshipment CMMS of ICCAT and IOTC, but it has MoUs with both where transshipments of SBT are specifically documented and reported to CCSBT.

\*[https://www.ccsbt.org/sites/default/files/userfiles/file/docs\\_english/operational\\_resolutions/Resolution\\_VMS.pdf](https://www.ccsbt.org/sites/default/files/userfiles/file/docs_english/operational_resolutions/Resolution_VMS.pdf)

inspection programme.<sup>44</sup> Within the ATLAFCO region, there are already several mandatory or voluntary observer programmes in force in both national waters and the high seas, such as Fisheries Observer Programmes implemented under ICCAT.<sup>45</sup> A study from 2016 commissioned by ATLAFCO concluded that the implementation of a Regional Fisheries Observer Programme in the ATLAFCO region is useful and possible in case there is sufficient political will.<sup>46</sup> A 2018 study on the potential to develop a harmonised regional port inspection programme proposed regional and sub-regional mechanisms through five pillars of PSMA implementation: 1) upgrading national regulations, 2) coordinating between different national agencies, 3) training of inspectors, 4) providing operational support for inspection procedures, including the exchange of information and 5) prosecuting offenders.<sup>47</sup>

In June 2013, leaders of the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS) and the Gulf of Guinea Commission (GGC) gathered in Yaoundé, Cameroon, to develop a common regional strategy to prevent and prosecute illicit activities in the waters of the Gulf of Guinea. This summit led to the creation of a Yaoundé Code of Conduct, the Heads of States Declaration and the Memorandum of Understanding between regional organisations. It also inspired the Yaoundé architecture (Figure 3) comprising the Interregional Coordination Centre (ICC) in Yaoundé, the coordination and information-sharing structure which connects the Regional Centre of Maritime Security in Central Africa (CRESMAC) in Pointe Noire and the Regional Maritime Security Centre for West Africa (CRESMAO) in Abidjan. The coastal space in the region is divided into five

operational maritime zones, each coordinated by Maritime Multinational Coordination Centres (MMCC). Maritime Operational Centres (MOC) at a national level bring together stakeholders and State experts from different sectors (maritime police, navy, customs, fisheries and environment).

Angola, Namibia, and South Africa are member States of two intergovernmental organisations: the Southern African Development Community (SADC)<sup>48</sup> and the Benguela Current Commission (BCC),<sup>49</sup> that both play a role in strengthening MCS at a regional level. Already two decades ago (2001-2006), all SADC coastal States benefitted from the SADC Regional MCS Project for Marine Fisheries that provided MCS capacity building in the region funded by the EU (SADC 2021). In 2017, the Charter establishing the SADC Regional MCS Coordination Centre (MCSCC) was finalised to coordinate measures related to the MCS of fishing activities at a regional level. However, the operationalisation of the MCSCC has been delayed, because there have not been enough SADC States that have ratified the Charter due to economic and political factors.<sup>50</sup> Nonetheless, preparations are ongoing to establish the MCSCC in Mozambique and a recent report provides a comprehensive overview of the role it can play in strengthening MCS in the region (SADC 2021). One of the main functions of the BCC is the promotion of collaboration on MCS, including joint activities in the SADC region.<sup>51</sup>

Since 2010, the World Bank has conducted several projects in nine countries of the region through the West Africa Regional Fisheries Programme (WARFP). The WARFP's objective is to better manage coastal fisheries, by strengthening governance, addressing IUU fishing—through robust MCS systems—and

44 [https://www.idac.eu/images/CR\\_r%C3%A9union\\_LDAC-Comhafat\\_VENG.pdf](https://www.idac.eu/images/CR_r%C3%A9union_LDAC-Comhafat_VENG.pdf),  
[https://www.idac.eu/images/Final-Report\\_LDAC\\_ATLAFCO\\_Annual\\_Mtg\\_11Feb\\_2021.pdf](https://www.idac.eu/images/Final-Report_LDAC_ATLAFCO_Annual_Mtg_11Feb_2021.pdf)

45 [https://www.comhafat.org/en/files/publications/doc\\_publication\\_162.pdf](https://www.comhafat.org/en/files/publications/doc_publication_162.pdf)

46 Ibid.

47 [https://www.comhafat.org/en/files/actualites/doc\\_actualite\\_513\\_2063.pdf](https://www.comhafat.org/en/files/actualites/doc_actualite_513_2063.pdf)

48 A Regional Economic Community comprising 16 Member States committed to Regional Integration and poverty eradication within Southern Africa: <https://www.sadc.int/about-sadc/>

49 A multi-sectoral intergovernmental organisation to manage the sustainable development of the Benguela Current Large Marine Ecosystem: <https://www.benguelacc.org/index.php/en/about/what-is-the-bcc>

50 <https://www.seafoodsource.com/news/environment-sustainability/sadc-states-developing-joint-strategy-to-combat-iuu>  
Angola, Eswatini, Lesotho, Mozambique, Namibia, South Africa, United Republic of Tanzania, and Zambia have ratified the proposal for the establishment of a MCSCC, but eleven countries need to ratify the Charter for it to become operationalised.

51 <https://cer.org.za/wp-content/uploads/2016/08/Benguela-Current-Convention.pdf>

increasing the net value generated by fish resources. Cabo Verde, Liberia, Senegal and Sierra Leone were the first beneficiaries of the programme, with Guinea-Bissau and Ghana joining in 2011 and 2012 respectively.<sup>52</sup>

The European Union (EU) is also involved in strengthening MCS in the Southeast Atlantic through various initiatives. Firstly, it has concluded two types of sustainable fisheries partnership agreements (SFPAs) with Southeast Atlantic States: tuna agreements (Cabo Verde, Liberia, Ivory Coast, Sao Tomé e Príncipe, Senegal and The Gambia) and mixed agreements (Mauritania and Guinea-Bissau).<sup>53</sup> The financial compensation and technical support that these States receive for providing EU vessels with access to their EEZ is partly devoted to scientific research and enhancing their MCS capacity.<sup>54</sup> Secondly, through its catch certification scheme, the EU issues warnings (yellow cards) to exporting States in case they do not effectively combat IUU fishing that can lead to import bans to the EU (red cards).<sup>55</sup> Four Southeast Atlantic States are currently 'carded', namely Cameroon,<sup>56</sup> Ghana,<sup>57</sup> Liberia<sup>58</sup> and Sierra Leone.<sup>59</sup>

The EU is also strengthening MCS in the region through the "improved regional fisheries governance in western Africa project" (PESCAO project, 2018-2022).<sup>60</sup> ECOWAS

coordinates the project and FCWC, SRFC and EFCA implement it in thirteen target countries: Benin, Cabo Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Nigeria, Senegal, Sierra Leone and Togo. There are three main expected results of the project:

- 1) A Western African fisheries and aquaculture policy is developed and coordination of regional stakeholders is improved;
- 2) The prevention of and responses to IUU fishing are strengthened through improved regional MCS;
- 3) Marine resources management at the regional level is improved and resilience of marine and coastal ecosystems to perturbations is enhanced.

In the framework of the PESCAO project, EFCA and FCWC organised three national trainings for fisheries inspectors from Guinea, Nigeria and The Gambia.<sup>61</sup> Moreover, they organised two sub-regional trainings in 2019 for officials from the Fisheries Monitoring Centres of Cabo Verde and Guinea-Bissau<sup>62</sup> as well as for officials from Senegal, Guinea, Mauritania, Cote d'Ivoire, Benin and Togo to strengthen knowledge and usability of VMS, AIS and other satellite imagery.<sup>63</sup> In December

52 <https://documents1.worldbank.org/curated/en/384881468004845455/pdf/PAD2610PAD0P12010Box385415B00OUO090.pdf>

53 The EU also has "dormant" agreements with Gabon and Equatorial Guinea, which means there is a fisheries partnership agreement in place, but no implementing protocol and therefore EU vessels are not allowed to fish in these waters.

[https://ec.europa.eu/oceans-and-fisheries/fisheries/international-agreements/sustainable-fisheries-partnership-agreements-sfpas\\_en](https://ec.europa.eu/oceans-and-fisheries/fisheries/international-agreements/sustainable-fisheries-partnership-agreements-sfpas_en)

54 <https://marketac.eu/wp-content/uploads/2020/10/DG-MARE-Publication-EU-Sustainable-Fisheries-Partnership-Agreements.pdf>  
<https://onlinelibrary.wiley.com/doi/full/10.1111/faf.12533?af=R>

55 [https://ec.europa.eu/oceans-and-fisheries/fisheries/rules/illegal-fishing\\_en](https://ec.europa.eu/oceans-and-fisheries/fisheries/rules/illegal-fishing_en)

56 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2021:0591:FULL>

57 [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_2745](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_2745)

58 <https://ec.europa.eu/newsroom/mare/items/65987/en>

59 [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_16\\_1457](https://ec.europa.eu/commission/presscorner/detail/en/IP_16_1457); Guinea received a red card in November 2013 which was lifted in July 2016: <https://ec.europa.eu/newsroom/mare/items/33123/en>; Togo received a red card in November 2012 which was lifted in October 2014: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_14\\_1132](https://ec.europa.eu/commission/presscorner/detail/en/IP_14_1132)

60 <https://www.efca.europa.eu/en/content/pescao>; [https://eeas.europa.eu/headquarters/headquarters-homepage/52490/eu-maritime-security-factsheet-guinea\\_en](https://eeas.europa.eu/headquarters/headquarters-homepage/52490/eu-maritime-security-factsheet-guinea_en)

61 <https://www.efca.europa.eu/en/content/pressroom/abuja-hosts-pescao-training-session-fisheries-control-and-inspection-techniques>;

<https://www.efca.europa.eu/en/content/pressroom/sub-regional-fisheries-commission-srfc-organises-training-course-gambian-fisheries>;

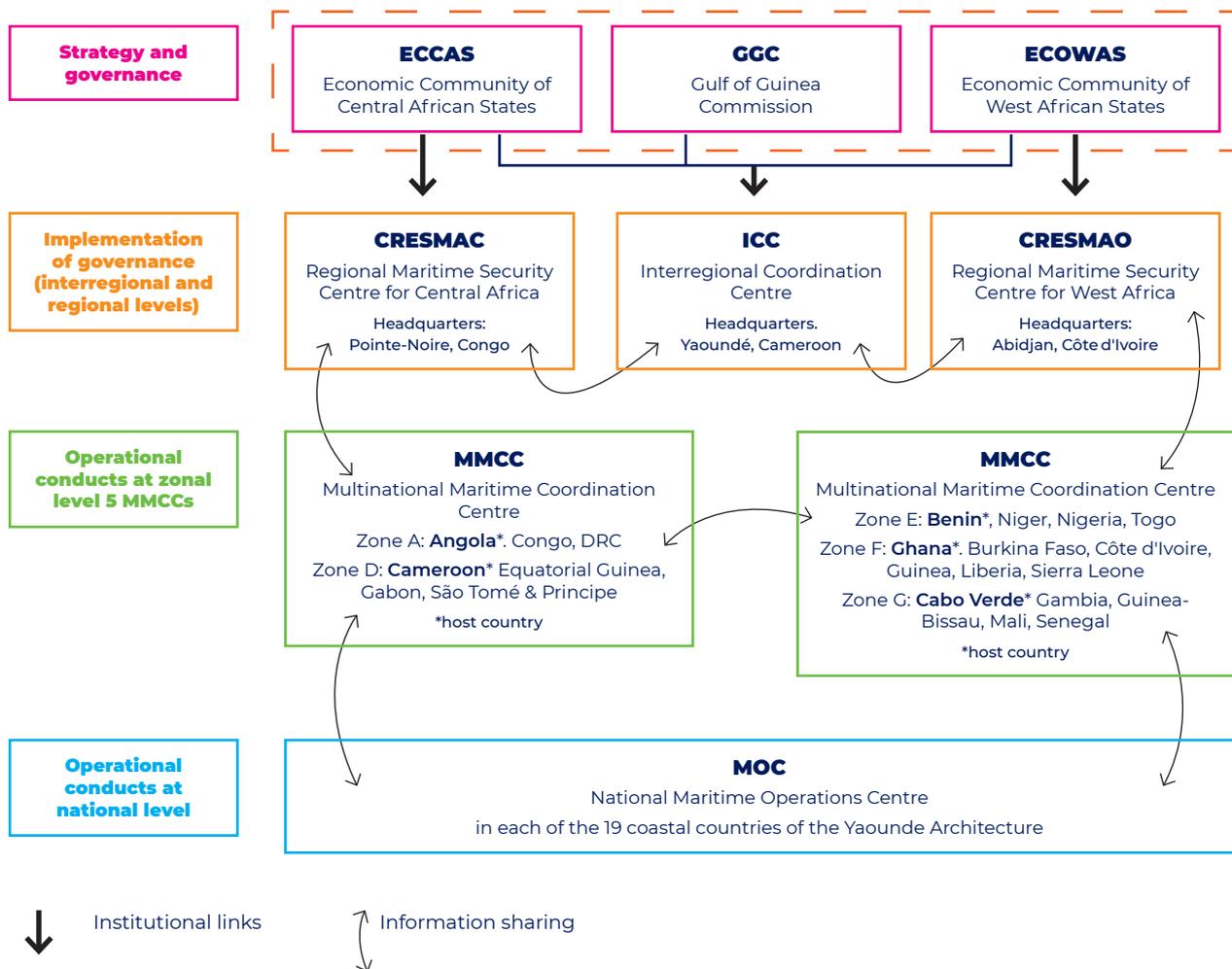
[https://marketac.eu/wp-content/uploads/2020/05/AB-Decision-20-W-1-Annual-Report-2019.pdf\\_compressed.pdf](https://marketac.eu/wp-content/uploads/2020/05/AB-Decision-20-W-1-Annual-Report-2019.pdf_compressed.pdf)

62 <https://www.efca.europa.eu/en/content/pressroom/sub-regional-training-under-pescao-project-operators-fmc-fisheries-monitoring>

63 [https://marketac.eu/wp-content/uploads/2020/05/AB-Decision-20-W-1-Annual-Report-2019.pdf\\_compressed.pdf](https://marketac.eu/wp-content/uploads/2020/05/AB-Decision-20-W-1-Annual-Report-2019.pdf_compressed.pdf);

<https://news.abidjan.net/articles/666128/peche-18-operateurs-se-forment-a-lutilisation-des-systeme-de-surveillance-vms-ais>

**Figure 3. Maritime safety and security architecture in the Gulf of Guinea (Yaoundé Architecture)\***



\*<https://www.gogin.eu/en/about/yaounde-architecture/>

2020, EFCA, in cooperation with the SRFC, organised a 3.5 days' training session for Sierra Leonean fishery inspectors.<sup>64</sup>

### 3.2. Sub-regional and National-led initiatives

It is not in the scope of this report to provide an exhaustive overview of the MCS capacity of all 22 Southeast Atlantic coastal States. However, it is important to mention some recent developments and best practices at a national level that could provide inspiration and some lessons learned for the entire region.

#### SRFC member States

In the SRFC Convention Area, "investment in MCS has been much higher in the northern countries whose wide continental shelves and rich waters are more targeted by illegal fishing fleets, than in the south" (Dombouya, *et al.* 2017). Mauritania, Senegal and Cabo Verde have made significant efforts to acquire equipment for both naval and air force patrols. Coastal stations are equipped with radars and tracking systems (e.g. VMS), and all three countries have provided material support for conducting joint patrols in the region. There is, however, an underlying

64 [https://www.efca.europa.eu/sites/default/files/AR\\_2020\\_20210601%20ECA%20observations%20included\\_1.pdf](https://www.efca.europa.eu/sites/default/files/AR_2020_20210601%20ECA%20observations%20included_1.pdf)

difficulty to maintain and properly use such equipment.<sup>65</sup> In July 2021, Mauritania concluded a SFPAs with the EU with an accompanying Implementation Protocol that aims to enhance transparency and improve data collection through electronic systems to monitor all fleet activities in Mauritanian waters.<sup>66</sup> In Senegal, the Directorate for Fisheries Protection and Monitoring, responsible for planning and coordinating surveillance operations, organised a 5-day training in August 2020 to qualify 54 government fisheries officers (with one woman) as fisheries observers to contribute to the fight against IUU fishing.<sup>67</sup> The EU-Cabo Verde SFPAs and its Protocol adopted in June 2020 aims to strengthen MCS of the Cabo Verdean EEZ.<sup>68</sup> In 2021, Cabo Verde ran the 'Combined Detect and Monitor Mission' of extensive air patrols supported by the US Navy, Interpol and TMT.

The Gambia established a new Fisheries Monitoring Centre in May 2021 under the EU-Gambia SFPAs, equipped with a VMS system allowing continuous maritime surveillance.<sup>69</sup> In August 2021, The Gambia organised a training for fishing vessel observers.<sup>70</sup> More progress can be made in The Gambia in terms of transparency by regularly publishing up-to-date lists of licensed vessels, infringements and by effectively enforcing laws and applying fines to those not respecting them.<sup>71</sup> MCS in Guinea Bissau is mostly conducted through armed patrols of the navy and coast guards at sea, VMS and radars (Intchama, Belhabib and R.J. 2018). Guinea uses satellite technology such as VMS and AIS, a national observer programme, naval and air force patrols, a national register of industrial fishing vessels, a

technical inspection team and a surveillance programme involving the participation of artisanal fishers as part of its MCS toolkit.<sup>72</sup> Sierra Leone has set up a Joint Maritime Committee through a MoU composed of various government agencies<sup>73</sup> to improve MCS and maritime security.<sup>74</sup> This cross-sectoral committee is responsible for tackling a variety of illegal maritime activities such as piracy, counter narcotics and people smuggling while it aims to reduce costs and improve transparency.<sup>75</sup> In 2019<sup>76</sup> and 2021, Sierra Leone imposed a one-month ban for industrial fishing to protect marine resources.

### *FCWC member States*

In their RPOA-IUU, FCWC member States agreed to strengthen MCS at a national level. Liberia has developed a National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing based on the provisions of the International Plan of Action to Prevent, Deter and Eliminate IUU Fishing (IPOA-IUU) and the FCWC RPOA-IUU.<sup>77</sup> Similar to neighbouring Sierra Leone, Liberia has a MCS Coordinating Committee formalised through a MoU responsible for MCS activities that includes representatives from the Liberia Coast Guard, the Liberia Maritime Authority, the National Port Authority, the Ministry of Finance and the Ministry of Justice.<sup>78</sup>

Even though MCS in Cote d'Ivoire was evaluated to be "weak, although improving" in 2017 according to an independent study commissioned by the European Commission,<sup>79</sup> the EU and Cote d'Ivoire decided to renew their Fisheries Partnership Agreement in 2018 for a

65 <http://www.fao.org/3/cb1767en/CB1767EN.pdf>

66 [https://ec.europa.eu/oceans-and-fisheries/news/eu-and-mauritania-announce-conclusion-negotiations-new-fisheries-agreement-2021-07-29\\_en](https://ec.europa.eu/oceans-and-fisheries/news/eu-and-mauritania-announce-conclusion-negotiations-new-fisheries-agreement-2021-07-29_en)

67 <https://www.usaid.gov/senegal/news/54-new-government-fisheries-observers-trained-and-qualified-fight-iuu-fishing>

68 <https://oeil.secure.europarl.europa.eu/oeil/popups/summary.do?id=1622356&t=d&l=en>

69 <https://www.mofwr.gm/news/53a54098-c861-11eb-8f4f-025103a708b7>

70 <https://www.mofwr.gm/news/d621c6e1-fb63-11eb-8f4f-025103a708b7>

71 <https://www.cffacape.org/news-blog/the-gambia-eu-sfpa-transparency-is-necessary-to-make-the-fight-against-iuu-efficient>

72 <https://www.comhafat.org/fr/files/actualites/Guin%C3%A9e%20Pr%C3%A9sentation%20strat%C3%A9gie%20de%20surveillance%20des%20p%C3%Aches.pdf>

73 The Ministry of Fisheries and Marine Resources, the Maritime Wing of The Republic of Sierra Leone Armed Forces, the Sierra Leone Maritime Administration, the Office of National Security, the National Revenue Authority, the Foods Unit of the Ministry of Health and Sanitation and the Labor Ministry.

74 <http://www.fao.org/fishery/static/tenure-user-rights/root/volume3/C39.pdf>

75 <https://spcsrp.org/en/sierra-leone>

76 <https://stopillegalifishing.com/press-links/sierra-leone-moves-to-combat-overfishing/>

77 <http://extwprlegs1.fao.org/docs/pdf/lbr195830.pdf>

78 Ibid.

79 <https://op.europa.eu/en/publication-detail/-/publication/49b6a33f-d02a-11e8-9424-01aa75ed71a1>

period of six years. Cote d'Ivoire reserves part of the annual financial contribution that the EU will pay for, among other things, the improvement of MCS of fishing activities.<sup>80</sup> Neighbouring Ghana, on the other hand, does not have a Fisheries Partnership Agreement with the EU and has received a second warning (yellow card) from the European Commission in June 2021 after having received one in November 2013 which was lifted in October 2015 after it addressed the shortcomings.<sup>81</sup> According to the European Commission, "identified shortcomings include illegal transshipments at sea of large quantities of undersized juvenile pelagic species between industrial trawl vessels and canoes in Ghanaian waters, deficiencies in the monitoring, control and surveillance of the fleet and a legal framework that is not aligned with the relevant international obligations Ghana has signed up to".<sup>82</sup> Moreover, "the sanctions imposed by Ghana to vessels engaging in or supporting IUU fishing activities are not effective and not an adequate deterrent".<sup>83</sup>

Togo and Benin both organised interagency National Working Group meetings in 2019 at their respective national Directorates of Fisheries to bring together representatives involved in the MCS of fisheries activities, including navy, police, port and maritime affairs, to increase their awareness of IUU fishing activities, its impact and various measures developed at the regional level to combat it.<sup>84</sup> In 2021, Togo adopted its NPOA-IUU drafted with the support of the EU PESCAO project.<sup>85</sup> Benin and Nigeria have also drafted a NPOA-IUU with EU PESCAO support.<sup>86</sup> The Secretary-General of FCWC gifted video-conferencing equipment and MCS equipment (e.g. radios, portable

megaphones, inspection bags and cameras) to Benin in March 2021 to improve working conditions for MCS staff in the context of the Covid-19 pandemic.<sup>87</sup> Benin is soon getting VMS and AIS through the FCWC regional MCS centre. The MCS Department of Nigeria's Federal Fisheries Department is responsible for fisheries management, but in the last 15 years, there was no budget dedicated to this government agency and therefore it lacks the financial capacity (e.g. for patrol vessels) to conduct MCS activities.<sup>88</sup>

### *COREP member States*

Member States of COREP<sup>89</sup> do not yet have structured and efficient MCS systems in place at a national level.<sup>90</sup> Cameroon has a MCS system in place, but it is poorly functional due to a lack of trained staff, a coastal command centre and operational equipment (Thierry, Kindong and Xu 2018). There are no procedures for collecting quality data for MCS purposes (Thierry, Kindong and Xu 2018). In February 2021, the European Commission notified Cameroon with a yellow card, because 1) the registration procedure does not include the verification of the history of vessels (e.g. IUU listed fishing vessels have been entitled to fly its flag), 2) there has been a recent increase in fishing vessels registered under its flag, raising concerns on Cameroon's ability to efficiently control and monitor its fleet (in particular outside its waters),<sup>91</sup> 3) the legal framework is outdated and does not have the necessary provisions to ensure appropriate control of its vessels and 4) "Cameroon has not demonstrated sufficient willingness to cooperate with the Commission in fighting IUU fishing".<sup>92</sup>

80 [https://ec.europa.eu/oceans-and-fisheries/news/lunion-europeenne-et-la-cote-divoire-renouvellent-leur-laccord-de-partenariat-de-peche-pour\\_fr](https://ec.europa.eu/oceans-and-fisheries/news/lunion-europeenne-et-la-cote-divoire-renouvellent-leur-laccord-de-partenariat-de-peche-pour_fr)

81 [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_2745](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_2745)

82 Ibid.

83 Ibid.

84 The FCWC Secretariat and the Technical Team supporting the WATF participated in these meetings: <https://fcwc-fish.org/our-news/national-working-group-meetings-improve-effective-fisheries-mcs-in-togo-and-benin>

85 [https://marketac.eu/wp-content/uploads/2020/05/AB-Decision-20-W-1-Annual-Report-2019.pdf\\_\\_compressed.pdf](https://marketac.eu/wp-content/uploads/2020/05/AB-Decision-20-W-1-Annual-Report-2019.pdf__compressed.pdf)

86 West Africa Task Force: (2019) Record of the 9th West Africa Task Force Meeting. West Africa Task Force.

87 <https://www.gouv.bj/actualite/1218/lutte-contre-peche-illicite-dans-golfe-guinee-cpco-dote-benin-materiels/>

88 <https://theconversation.com/how-illegal-fishing-harms-nigeria-and-what-to-do-about-it-160553>

89 Angola, Cameroon, Gabon, the Democratic Republic of Congo, the Republic of Congo and Sao Tome and Principe with Equatorial Guinea as an observer.

90 <http://www.corep-se.org/blog/atelier-de-validation-du-cadre-detablissement-dune-cellule-de-coordination-regionale-de-suivi-contrôle-et-surveillance-des-peches-scs-dans-la-zone-corep-ainsi-que-des-protocoles-y-afferents-2/>

91 <https://www.cffacape.org/publications-blog/cameroon-iuu-yellow-card-the-eu-should-also-sanction-european-fishing-companies-hiding-behind-this-countrys-flag>

92 [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_621](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_621);

[https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_21\\_646](https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_646)

Equatorial Guinea has a low level of fisheries MCS with no national MCS system or strategy in place (Belhabib, Hellebrandt Da Silva, *et al.* 2016).<sup>93</sup> There have been instances where Equatorial Guinea (and The Gambia) granted access to foreign fishing vessels in their waters in return for financial payments without having the necessary capacity to conduct stock assessments and adopt scientifically based catch limits.<sup>94</sup> São Tomé and Príncipe has insufficient capacity for inspection and control of its coastline to implement its laws and therefore illegal fishing activities continue. However, recently there has been some improvement in the collection of fisheries data and local communities have more knowledge and understanding of fisheries regulations and the need to conserve fish (Nuno, *et al.* 2021).<sup>95</sup> There are ongoing efforts to establish a network of marine protected areas across São Tomé and Príncipe that will require strong MCS strategies.<sup>96</sup>

In 2014, at the IUCN World Parks Congress, the Gabonese government announced a programme to protect at least 23% of its EEZ.<sup>97</sup> In 2017, the President of Gabon, Ali Bongo Ondimba, increased Gabon's ambition and declared the creation of a Marine Protected Area network composed of nine new national marine parks and eleven new aquatic reserves covering 26% of its EEZ at the UN Ocean Conference in New York (Cardiec, *et al.* 2020).<sup>98</sup> In February 2021, Gabon and the EU established a new Protocol to their fisheries Agreement.<sup>99</sup> With the inclusion of the maritime domain ("Blue Gabon") in its Emerging

Gabonese Strategic Plan (Ndjambou, Lembe and Ndong 2019),<sup>100</sup> Gabon aims to strengthen controls at sea, partly with the financial compensation it gets from the EU through the renewed Protocol.<sup>101</sup> In July 2021, Gabon launched the "Nemo" platform for the monitoring of artisanal maritime fishing boats using satellite beacons.<sup>102</sup> The Fisheries Ministry will manage the platform together with the National Defence Ministry and the Ministry in charge of the sea, in particular the National Agency of National Parks.

The Republic of Congo has access to and availability of VMS data, but there is a lack of coordinated data management with data originating from multiple providers (Doherty, *et al.* 2021). This is problematic, because VMS is not an effective deterrent by itself and there needs to be sufficient capacity to fill data gaps and identify inconsistencies between different data sources (Cremers, Wright and Rochette, 2019). Moreover, "establishing strong links within the enforcement chain, from detection to conviction, is imperative if regulations are to lead to compliance".<sup>103</sup> To tackle these challenges, the Minister of Agriculture, Livestock and Fisheries of the Republic of Congo announced in March 2020 the government's intention to create a new inter-ministerial commission in charge of monitoring law enforcement equipped with patrol boats, drones and other MCS tools.<sup>104</sup> Moreover, in April 2020, the Republic of Congo decided to set up a new Fisheries Monitoring Centre in cooperation with a private company that will provide the Congolese government with

93 [http://www.fao.org/fishery/docs/DOCUMENT/eaf\\_nansen/Reports/EAF-NansenReportNo20\\_en.pdf](http://www.fao.org/fishery/docs/DOCUMENT/eaf_nansen/Reports/EAF-NansenReportNo20_en.pdf)

[https://www.afdb.org/sites/default/files/documents/projects-and-operations/en\\_-\\_equatorial\\_guinea\\_-\\_ar\\_-\\_support\\_project\\_for\\_the\\_dev\\_of\\_value\\_chains\\_in\\_the\\_fisheries\\_and\\_aquaculture\\_sector\\_pasfa\\_0.pdf](https://www.afdb.org/sites/default/files/documents/projects-and-operations/en_-_equatorial_guinea_-_ar_-_support_project_for_the_dev_of_value_chains_in_the_fisheries_and_aquaculture_sector_pasfa_0.pdf)

94 [https://usa.oceana.org/sites/default/files/fishing\\_the\\_boundaries\\_of\\_law\\_final.pdf](https://usa.oceana.org/sites/default/files/fishing_the_boundaries_of_law_final.pdf)

95 <https://www.cbd.int/doc/nr/nr-06/st-nr-06-en.pdf>

96 <https://www.blueactionfund.org/portfolios/establishing-a-network-of-marine-protected-areas-across-sao-tome-and-principe-through-a-co-management-approach/>

97 <https://news.mongabay.com/2014/11/gabon-protects-23-of-its-coastal-waters/>

98 <https://www.africa-newsroom.com/press/le-president-de-la-republique-gabonaise-son-excellence-ali-bongo-ondimba-annonce-la-creation-de-20-aires-marines-protgees-au-siege-des-nations-unies>

99 [https://ec.europa.eu/oceans-and-fisheries/news/european-union-and-gabon-building-new-partnership-sustainable-fisheries-2021-02-11\\_en](https://ec.europa.eu/oceans-and-fisheries/news/european-union-and-gabon-building-new-partnership-sustainable-fisheries-2021-02-11_en)

100 The Emerging Gabon Strategic Plan for 2011- 2016 included three pillars "Green Gabon", "Industrial Gabon", and "Gabon of Services". However, during the 38th Session of the FAO Conference in Rome in June 2013, the Gabonese President announced that the government had added a fourth pillar: "Blue Gabon".

101 <https://popups.uliege.be/0770-7576/index.php?id=6096&file=1>

102 <https://www.lenouveaugabon.com/fr/agro-bois/0507-17180-peche-artisanale-le-gabon-lance-nemo-l-application-de-surveillance-des-embarcations-en-mer>

103 Ibid.

104 <https://www.adiac-congo.com/content/ressources-halieuistiques-henri-djombo-invite-les-pecheurs-respecter-la-reglementation-113854>

equipment, software and training to enable authorities to have a complete overview of fishing activity in their EEZ.<sup>105</sup> Neighbouring Democratic Republic of Congo (DRC) has a small coast of approximately 40 km with an EEZ of 1150 km<sup>2</sup> which is strongly affected by the impacts of climate change, flooding from the sea and the Congo River as well as coastal erosion exacerbated by deforestation in the mangroves.<sup>106</sup> DRC has created a MCS centre for marine pollution,<sup>107</sup> but the MCS of fishing or other human activities in its EEZ has not been a priority so far.

### *Southeast Atlantic SADC member States*

Angola, Namibia and South Africa, are members of the Southern African Development Community (SADC) and are party to the Benguela Current Convention and SEAFO. The three States conduct joint MCS operations in offshore waters with SADC patrol vessels. Angola has an electronic reporting system linked to a VMS system that allows it to collect data on fishing vessels entering and leaving its EEZ.<sup>108</sup> Angola and Namibia signed a MoU in 2014 that establishes a framework for bilateral communication, cooperation and collaboration in relation to the collection and exchange of relevant data and information, MCS activities, the development of common positions in regional and international bodies and to combine financial and human capital efforts in the management of shared fish stocks.<sup>109</sup> In the context of this MoU, the States developed four protocols on economic cooperation, MCS, aquaculture and resource management.<sup>110</sup> However, the MoU has not been fully implemented yet (Iitembu, *et al.* 2021).

Namibia has established an effective MCS system for fishing activities with land-based monitoring of all landings, sea-based monitoring using patrol boats, 100% observer coverage on the trawl fleet and VMS on all vessels (Control Union 2020). Namibia consistently applies sanctions to tackle non-compliance and these demonstrably and consistently provide effective deterrence (Control Union 2020). In January 2019, Namibia and South Africa signed a MoU on fisheries cooperation including a commitment to conduct joint actions, such as joint surface and aerial marine fisheries surveillance patrols, sharing of assets used for sea patrols and joint observer programmes to ensure compliance, and to reduce and eliminate IUU fishing.<sup>111</sup> South Africa uses a multi-sectoral approach for its ocean governance with three departments—the departments of Environment, Forestry and Fisheries, Transport and Defence—operating monitoring tools and making use of patrol vessels. However, “concerns over coordination, maintenance and operational budgets have hindered past efforts and resulted in periods when South Africa’s waters were occasionally left unpatrolled” (Walker and Reva 2020). Government authorities make use of several Maritime Domain Awareness (MDA) tools for MCS activities, such as the SeaFAR system, which takes AIS, VMS and synthetic aperture radar data to provide information on suspicious vessels in South African waters.<sup>112</sup> The COVID-19 pandemic did not affect South African fisheries law enforcement as inspectors had access to VMS and AIS data from home, used to identify vessels in its EEZ, and there were no visible changes in fishing vessel behaviour observed.<sup>113</sup>

105 <https://fisheries.groupcls.com/the-congo-sets-up-a-new-fisheries-monitoring-center/>

106 <https://www.cbd.int/doc/nr/nr-06/cd-nr-06-fr.pdf>

107 <https://www.droitcongolais.info/7b-subdivision-rs-735-753.html>

108 <https://fcwc-fish.org/autres-actualites/luanda-les-systemes-electroniques-assurent-le-controle-des-bateaux-de-peche?lang=fr>

109 “The Memorandum of Understanding between the Government of Namibia and Angola (Proclamation No. 22).” (accessed 9 April 2021). Available at <http://www.lac.org.na/laws/2015/5785.pdf>

110 <https://stopillegalfishing.com/press-links/angola-namibia-sign-agreement-fisheries-sector/>

111 <https://www.gov.za/speeches/minister-senzeni-zokwana-signs-memorandum-understanding-namibian-counterpart-minister>, <https://www.fishingindustrynewssa.com/2019/01/24/mou-signed-sa-and-namibia-agree-joint-fisheries-cooperation/>

112 <https://stopillegalfishing.com/press-links/seafar-south-africas-watchful-eye-maritime-resources/>

113 <https://stopillegalfishing.com/covid-impacts/covid-19-impact-on-fisheries-enforcement-in-south-africa/>

### 3.3. Civil society initiatives

Several civil society organisations are highly engaged in MCS initiatives, including:

- **Trygg Mat Tracking (TMT)** - an important actor of the WATF - collaborates with fisheries enforcement agencies and other relevant partners, gathering information, building cooperation and providing training in MCS for national and regional authorities.<sup>114</sup> TMT is currently developing a joint work programme with Global Fishing Watch to provide pilot countries in Africa with new tools to rapidly risk-assess vessels coming to ports and to facilitate Port State Measures, thus ensuring assessments are made in an informed manner.
- Since 2016, **Sea Shepherd** has been working in partnership with the governments of Gabon,<sup>115</sup> Liberia,<sup>116</sup> São Tomé and Príncipe,<sup>117</sup> Tanzania,<sup>118</sup> Namibia,<sup>119</sup> The Gambia,<sup>120</sup> Benin<sup>121</sup> and Sierra Leone<sup>122</sup> to tackle fisheries crime by providing the use of civilian offshore patrol vessels to these States so that their authorities can enforce fisheries regulations and conservation laws in their national waters.<sup>123</sup>
- The **Environmental Justice Foundation (EJF)** trains local communities in Sierra Leone, Ghana, Liberia and Senegal<sup>124</sup> to report on IUU fishing, and investigates and documents the activities of fishing vessels potentially engaging in IUU fishing activities in West Africa.<sup>125</sup> In 2020 and 2021, EJF shared information on fishing activities/vessels with, and recorded some level of cooperation by, five coastal States (Ghana, Guinea, Liberia, Senegal and Sierra Leone). In addition, EJF shared information with ICCAT on possible IUU activity, including on activities in ABNJ and ports in the Southeast Atlantic.<sup>126</sup>
- **Stop Illegal Fishing (SIF)** is an independent African based NGO committed to ending the impacts of illegal fishing. SIF coordinates several MCS initiatives both at national and regional levels on the African continent.<sup>127</sup>
- **WWF** together with the Government of Ghana, the International Seafood Sustainability Foundation and the Ghana Tuna Association implemented pilot activities set up under the framework of the Common Oceans ABNJ Tuna Project with the use of electronic monitoring systems (aboard the domestic tuna purse-seine fleet) to combat IUU fishing.<sup>128</sup>

114 <https://www.tm-tracking.org/initiatives>

115 (Ndjambou, Lembe and Ndong 2019)

<https://www.gabonreview.com/operation-albacor-suivi-controle-surveillance-accrus-peche-thoniere/>;

<https://www.seashepherdglobal.org/latest-news/gabon-arrest-illegal-fishing/>;

<https://stopillegalfishing.com/press-links/sea-shepherd-assists-gabon-arrest-two-chinese-vessels/>;

<https://www.seashepherdglobal.org/latest-news/sea-shepherd-returns-to-gabon-to-help-combat-illeg/>;

<https://www.seashepherd.nl/nl/nieuws-en-events/defending-the-largest-mpa-2/>

116 <https://www.seashepherdglobal.org/our-campaigns/operation-sola-stella/>

117 <https://seashepherd.org/campaigns/iuu-fishing-africa/iuu-campaigns/operation-albacore/>

118 <https://seashepherd.org/campaigns/iuu-fishing-africa/iuu-campaigns/jodari/>

119 <https://www.seashepherdglobal.org/latest-news/namibia-partnership/>

120 <https://www.seashepherdglobal.org/latest-news/four-trawlers-gambia/>

121 <https://news.cision.com/sea-shepherd-global/r/sea-shepherd--eco-benin-and-the-government-of-benin-launch-new-partnership-to-stop-illegal-fishing-i,c2825712>

122 <https://www.seashepherdglobal.org/latest-news/five-trawlers-new-partnership-sierra-leone/>

123 <https://news.cision.com/sea-shepherd-global/r/sea-shepherd--eco-benin-and-the-government-of-benin-launch-new-partnership-to-stop-illegal-fishing-i,c2825712>; <https://www.seashepherdglobal.org/our-campaigns/iuu-fishing/learn-more/>

124 <https://ejfoundation.org/news-media/new-project-will-use-transparency-and-participation-to-fight-illegal-fishing-in-senegal>

125 <https://ejfoundation.org/what-we-do/ocean/ending-illegal-fishing>

126 See document ref. COC-312 at [https://www.iccat.int/com\\_2020/index.htm#en](https://www.iccat.int/com_2020/index.htm#en)

127 <https://stopillegalfishing.com/all-initiatives/>

128 <http://www.fao.org/3/ca0513en/CA0513EN.pdf>;

<https://www.worldwildlife.org/projects/electronic-monitoring-for-transparency-in-ghana-s-tuna-fleet>; <http://www.fao.org/in-action/commonoceans/news/detail-events/en/c/1180349/>

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## 4. Role of ports in the MCS of ABNJ in the region

### 4.1. Strategic role of ports in MCS

Though flag States are responsible for their vessels,<sup>129</sup> port States can nonetheless play a key role in combating illegal activities. Ports provide the gateway between maritime and land borders. They provide a myriad of services for both fishing and non-fishing activities, which have an impact on ABNJ. In the fishing context, most fishing ports in the region fall under the administration and management of port authorities. The region's ports are therefore sites for the processing, repackaging and distribution of fish and non-fish products, labour services, cold storage, and refuelling or bunkering of fishing vessels. In the non-fishing context, they are key in the development of oil and gas exploitation and maritime trade activities among others.<sup>130</sup> Increasing port activities in the region (Barnes-Dabban, Van Koppen and Mol 2017), with implications for ABNJ, calls for a re-evaluation of the role of ports and coastal States in the MCS of these activities. Ports together with their States can play a cost-effective role in the compliance and enforcement of international rules when vessels call or request access to (services at the) ports for practical reasons after having been involved in illegal activities in ABNJ.

Ports in the Southeast Atlantic collect data through, for example, AIS and VMS on the movements of vessels, the landing of products (not only fisheries) and the movement of crews. In addition, inspectors in ports verify fishing authorisations (e.g. valid fishing licenses, authorised species, transshipment, destination and fishing areas) and assess the conditions and health of the crew. Ports

exchange this information with other States based on bilateral agreements, task forces, RFMOs, RFBs and Regional Economic Communities (RECs).

There are two main instruments that regulate the role that ports can play in the MCS of human activities in ABNJ in the region, namely the Port State Measures Agreement to control vessels engaged in IUU fishing or fishing-related activities (4.2) and the Abuja MoU to control the safety and security of vessels (4.3). These two instruments are complementary, with the former focussing solely on fishing and fishing-related activities in ABNJ while the latter (and port State control mechanisms more generally) deals with issues beyond fisheries, such as safety, security, environment and labour standards. Strengthening their mutual effectiveness is important as well as the cooperation between these two mechanisms to ensure that IUU fishing is incorporated into port State control. This is especially relevant to tackle the problem of illegal fish reaching “ports of convenience” where there are minimal inspection requirements and favourable tax or customs rules. In cases where there are effective Port State Measures (PSM) in place, some fishing operators avoid these ports and carry out illegal “transshipments”<sup>131</sup> at sea to maximise their profits.

### 4.2. The Port State Measures Agreement

The Port State Measures Agreement (PSMA) is the first international agreement to target IUU fishing and requires port States to play a more active role in addressing IUU fishing.<sup>132</sup>

<sup>129</sup> However, commitment to the effective exercise of flag State responsibility varies considerably based on a range of factors. I.e. A flag State may register vessels in exchange for a fee, without exercising effective control over the vessel. This is desirable to the vessel operator as it reduces the costs associated with, e.g. MCS equipment, safety, insurance and training (Cremers, Wright and Rochette, 2019).

<sup>130</sup> Due to their strategic location, ports have the possibility to influence the 'price to pay' and to set the minimum standards for countries that do not have access to the sea.

<sup>131</sup> The practice of moving catch from one vessel to another.

<sup>132</sup> Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (approved by the FAO Conference 22 November 2009 and entered into force on 5 June 2016), Article 2.

The PSMA includes international legally binding obligations and sets global minimum standards for the inspection of foreign vessels that seek to enter the port of another State. Crucially, the PSMA requires State parties to refuse entry to ports where it has “sufficient proof” that a vessel has engaged in IUU fishing or fishing related activities.<sup>133</sup> This blocks these vessels from making repairs, refuelling and selling illegal catch in the port, for example. The State must communicate its decision to the vessel’s flag State (and, if appropriate, to relevant coastal States, RFMOs and other international organisations).<sup>134</sup> Port States have various tools at their disposal to conduct MCS activities, such as the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record)<sup>135</sup> and catch documentation schemes.<sup>136</sup>

In the Southeast Atlantic region, the following States are party to the PSMA: Mauritania, Senegal, The Gambia, Guinea, Sierra Leone, Liberia, Côte d’Ivoire, Ghana, Togo, São Tomé and Príncipe, Gabon, Namibia and South Africa.<sup>137</sup> Through its Global Capacity Development programme,<sup>138</sup> the Food and Agriculture Organization of the United Nations (FAO) has helped Ghana, Guinea, Liberia, Mauritania and Sierra Leone with their implementation of the PSMA by providing training for inspectors, managers and government officials on MCS and operational procedures. In Guinea, the FAO workshops resulted in an inter-ministerial decree that aims to coordinate the implementation of the PSMA at the national level. The programme covers three phases: 1) a check to see what the State has already put in place, 2) a legal review and 3) a MCS review. States that want to receive assistance through the Global Capacity Development programme can make a formal request to the FAO regional office in Senegal. The FAO could be more active at the sub-regional level to harmonise practices and legislation. Currently, the FAO helps the countries in the

region that request assistance while taking into account the needs of the wider region. The programme aims to enhance the capacity of countries at a national level first before strengthening capacity at a regional level.

SIF, in addition to supporting the WATF, works closely with the FAO on the implementation of the PSMA in Ghana through a capacity-building project funded by the German government.<sup>139</sup> The African Ports Networks, coordinated by SIF, supports information sharing amongst African Ports and promotes the implementation of the PSMA. The EU, with its PESCAO project, also supports the PSMA implementation process through legal and training support provided by EFCA.

### 4.3. The Abuja MoU

The Memorandum of Understanding (MoU) on Port State Control for West and Central Africa region (Abuja MoU) is one of nine regional MoUs established pursuant to International Maritime Organization (IMO) Resolution A.682(17) of 1991.<sup>140</sup> The Abuja MoU was officially established on 22 October 1999 as an intergovernmental organisation and it covers the entire Southeast Atlantic region (22 countries from Mauritania to South Africa). Its mission is to develop a system of harmonised port State control inspection procedures that helps to eliminate or reduce identified risks and creates a safety regime to prevent marine accidents. This is important, because sub-standard shipping can lead to 1) threats to human life, 2) risks to the marine environment and 3) risks to cargo.

The Abuja MoU allows for cooperation and exchange of information between member authorities in the region through, for example, a modern and functional automated information database, professional training for port State control officers, the use of a

133 The PSMA applies to both fishing and “fishing related activities” such as the landing, packaging and transporting of fish, as well as the provisioning of personnel, fuel and gear at sea.

134 Ibid, Article 9.

135 <http://www.fao.org/global-record/en/>

136 <http://www.fao.org/in-action/globefish/fishery-information/resource-detail/en/c/426994/>

137 Guinea-Bissau, Bénin, Nigeria, Cameroon, Equatorial Guinea, Republic of the Congo and Angola have not signed or ratified the agreement. See: <http://www.fao.org/port-state-measures/background/parties-psma/en/>.

138 <http://www.fao.org/port-state-measures/capacity-development/ongoing-capacity-building-efforts/en/>

139 <https://stopillegalifishing.com/initiatives/implementing-port-state-measures/>

140 <http://www.abujamou.org/index.php>

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common port State control officers' manual by all member States and the development of harmonised port State procedures in all port States in the region.

There are several factors that make the Abuja MoU successful: 1) the development of harmonised port State procedures in all ports in the region, 2) having a modern and functional automated information database, 3) ensuring port State control officers are professional and well-trained and 4) the use of a common Port State Control Officers' Manual, as procedure, by all States.

Some of the challenges of increasing automation in the region include slow internet speed, unreliable connectivity, lack of IT skills and government authorities not submitting the right standardised forms or up-to-date inspection data to the Abuja MoU Secretariat.

#### 4.4. Best practices examples

##### *Port Task Force Ghana*

The Port Task Force Ghana (PTFG) aims to implement the National Strategy and Action Plan of the PSMA by promoting cooperation amongst national agencies such as Port Authorities, Marine Police, Navy, Food and Drugs Authority, etc.

Enhanced cooperation will stop illegal fishing vessels from entering Ghana's port and thus stop illegally caught fish from being landed. This will be achieved through a real-time communication platform, capacity building and harmonized standard operating procedures.

The PTFG implements the PSMA through three main activities:

- **Check** involves identifying illegal activity such as vessel identity fraud, illegal fishing, unauthorised activities and more. A risk assessment conducted during this process will determine next steps, such as an inspection if necessary;
- **Inspect** involves the physical checking of the vessel, including documents, catch, gear and more to identify violations. If violations are identified, the PTFG will act accordingly;
- **Act** may entail denial of port entry, communication with other States and organisations and imposition of additional penalties directly when applicable.

##### *The West Africa Task Force*

The West Africa Task Force was established in 2015 by the six member States of FCWC (Benin, Côte d'Ivoire, Ghana, Liberia, Nigeria and Togo) and is the MCS arm of the organisation. It operationalises key FCWC conventions on information sharing and MCS cooperation among its member States. The approach underpinning the Task Force rests on the sharing of intelligence and information between fisheries enforcement officers, technical experts, national agencies, regional organisations and other regional and global players, supported by practical tools, and helps to spur enforcement actions through vessel inspections in proxy ports against illegal fishing operators thereby contributing to improved compliance.

## 5. Options to strengthen MCS in the region

There are several ways in which Southeast Atlantic coastal States can strengthen MCS in the region, namely through improved data collection and sharing (5.1), cooperation and coordination (5.2), harmonisation of legislation and sanctions (5.3), capacity building (5.4) and through getting more actively involved in global processes (5.5).

### 5.1. Collection and sharing of data

**At the national level,** Southeast Atlantic coastal States could put in more efforts to establish a coordinated system of monitoring and information collection of human activities taking place in ABNJ. Increasing this monitoring and data collection capacity is essential to ensure that States are aware of any activities that their vessels are involved in and to keep an eye on vessels flagged to other States that might conduct illegal activities affecting the Southeast Atlantic coast. In order to ensure more transparency and to facilitate monitoring and data collection, Southeast Atlantic States can make IMO vessel registration numbers as well as AIS and VMS technology on board compulsory for all their fishing vessels operating in ABNJ while proactively sharing this data with RFMOs and coastal States in the region (Cremers, Wright and Rochette, 2019). States and RFMOs in the Southeast Atlantic might need to receive support to ensure they have sufficient capacity to implement these new data collection responsibilities.

It would be desirable to share this information on a platform that is available in all the local languages. In recent years, non-State actors have increasingly been using MCS tools to survey vessels in the region. States may wish to come up with a national strategy that

defines the extent to which they would like to share data with non-State actors and how the information that non-State actors provide can be used for national knowledge platforms.

**At the regional level,** there should be an increase of cooperation and coordination on data collection and sharing between government authorities, RFMOs, RFBs as well as intergovernmental organisations. When sharing data on human activities in ABNJ with other actors in the region, there needs to be mutual trust that this information is reliable. Regional information-sharing could take the form of: 1) formal agreements on information-sharing between coastal States; and 2) a legal framework for joint MCS activities in ABNJ coordinated with existing RFMO frameworks. Coordination of data collection and resource sharing between contracting parties and non-contracting parties could help with the effectiveness of observer programmes and to help fill geographical gaps in monitoring capacity of human activities in ABNJ (OECD 2021).

Southeast Atlantic States could take inspiration from the Pacific Islands Forum Fisheries Agency (FFA)<sup>141</sup> that established a Regional Monitoring, Control and Surveillance Strategy (RMCSS) 2018- 2023.<sup>142</sup> As part of this strategy, Small Island Developing States (SIDS):

- Created a Regional Fisheries Surveillance Centre (RFSC),<sup>143</sup> the Pacific Islands Regional Fisheries Observer (PIRFO) programme<sup>144</sup> and have put regional standards in place in terms of licensing of fishing vessels, Port State Measures and electronic reporting and monitoring;<sup>145</sup>

141 17 member States (15 Pacific Small Island Developing States, Australia and New Zealand).

142 [https://www.ffa.int/system/files/RMCSS% 20% 2022% 20August% 20web% 20version.pdf](https://www.ffa.int/system/files/RMCSS%202022%20August%20web%20version.pdf)

143 To share data gathered by surface and aerial surveillance on all fishing vessels in the region.

144 PIRFO is run by the Secretariat of the Pacific Community (SPC) with the support of FFA.

145 <http://www.sustainpacfish.net/compliance-case-studies/>

- Established the Niue Treaty on Cooperation in Fisheries Surveillance and Enforcement and the Niue Treaty Subsidiary Agreement, which expands enforcement powers of the SIDS to include cross-vesting of enforcement powers and sharing of enforcement assets.

As the regional centre set up by FCWC with EU support (PESCAO) has recently (2021) been set up, FCWC member States might be able to learn some lessons from the Pacific.

## 5.2. Cooperation and coordination

**At a national level,** States should develop inter-sectoral platforms that allow for inter-agency cooperation and coordination between the customs authorities, the navy, fisheries agencies, the police and different ministries. In addition, cooperation between port authorities and fisheries inspectors allow for exercising more effective control over foreign-flagged vessels. There are already several examples in the region of national working groups that allow for better cooperation between sectors and agencies. Besides building on national efforts, Southeast Atlantic States can increase cooperation and coordination at a regional and global level in the MCS context.

**At a regional level,** cooperation and coordination among neighbouring States is key to address common regional constraints in coastal and offshore management, such as a lack of human capacity for data analysis or a lack of materiel to inspect vessels. There are already joint operations happening in the region, such as the 4-5 joint operations the SRFC is organising per year with PESCAO support. AU States have indicated that they will strive to increase joint regional surveillance operations at sea and will establish sea-going Navies and/or Coast Guard networks around Africa, with a cross-border hot pursuit function, allowing an offended State to pursue and catch a vessel

suspected of illegal fishing activities in the EEZ of a neighbouring State.<sup>146</sup> This AU initiative aims to build on existing efforts and promote inter-agency and transnational cooperation and coordination on maritime safety and security, but can also be used for the conservation and sustainable use of BBNJ. The Abidjan Convention could help with these cooperation and coordination efforts through its BBNJ working group.

Lessons can be learned in that respect from the Permanent Commission for the South Pacific (CPPS), a strategic regional alliance among its member States.<sup>147</sup> CPPS has adopted a Declaration on IUU fishing in August 2020 that calls on its members to:

- Strengthen the exchange of information;
- Encourage the use of satellite technologies;
- Increase transparency;
- Improve monitoring and surveillance of fishing activities in the region; and
- Request the Secretary General of the CPPS to identify mechanisms for international cooperation to strengthen the capacity of its members to combat and prevent IUU fishing.<sup>148</sup>

In the SRFC context, members have drafted a Convention on Monitoring, Control and Surveillance (MCS Convention) and additional protocols<sup>149</sup> that would establish a sub-regional vessels register and observers programme, a carding system to tackle IUU fishing at the sub-regional level and a framework for information exchange among member States.<sup>150</sup> Ensuring the adoption of this MCS Convention is one concrete option to improve MCS through cooperation and coordination in the region.

146 [https://cggrps.com/wp-content/uploads/2050-AIM-Strategy\\_EN.pdf](https://cggrps.com/wp-content/uploads/2050-AIM-Strategy_EN.pdf), para 31.

147 The CPPS member States are Chile, Colombia, Ecuador and Peru. Panama is a signatory to the Lima Convention and participates in CPPS as an observer. CPPS does not have a management mandate; "CPPS Estatuto Article 4 gives CPPS the competency to promote the conservation of marine living resources beyond the national jurisdiction of its member States without mentioning to which extent this competency applies. Article 1 of the Lima Convention applies to areas within national jurisdiction and adjacent high seas areas that are impacted by marine pollution" (Durussel, *et al.* 2018).

148 [http://cpps.dyndns.info/consulta/documentos/xiii\\_asamblea\\_extra\\_declaracion.pdf](http://cpps.dyndns.info/consulta/documentos/xiii_asamblea_extra_declaracion.pdf)

149 Protocol on the sub regional Register of industrial fishing vessels including the list of IUU fishing vessels; Protocol on the sub-regional observers Program; Protocol on the Exchange of information between Member States.

150 <https://spcsrp.org/en/27th-extraordinary-session-coordinating-committee-draft-convention-monitoring-control-and>

Other options to enhance MCS at a regional level include increased cooperation between existing regional bodies and the creation or extension of operational level task forces, such as the WATF and the Ports Environmental Network Africa (PENAF),<sup>151</sup> to other sub-regions in the Southeast Atlantic. PENAF could, for example, be used as an information sharing platform and thereby contribute to the systematic closing of ports in the region to non-compliant vessels. Regional task forces have proven to be a worthwhile approach to regional cooperation, because they offer a more flexible and cost-effective structure compared to a formal intergovernmental mechanism or high cost solutions such as regional VMS, joint patrols or a regional MCS centre (Stop Illegal Fishing 2021). FCWC and SRFC, for example, organise regular meetings at a technical level without creating additional or formal mechanisms. Task forces also allow a smaller group of States to test a concept before investing efforts into permanent cooperation and provide an opportunity to reflect on success and failures while ensuring there is no duplication of efforts (Stop Illegal Fishing 2021).

To strengthen cooperation between regional and sectoral regimes in the Southeast Atlantic region, States could adopt a MoU similar to the Abuja MoU or between the Abidjan Convention and RFMOs with a mandate that goes beyond port State control and covers all human activities taking place in ABNJ. This type of MoU could “formalise cross-sectoral cooperation on data collection and analysis as well as lead to joint monitoring and enforcement actions” in the region (Cremers, Wright and Rochette, 2020).

**At the global level,** there are also opportunities for Southeast Atlantic coastal States to enhance information sharing and cooperation with other States whose vessels and nationals engage in activities in ABNJ. This is important for data and evidence verification purposes, for securing effective enforcement actions and in terms of cost-effectiveness as flag States have a wealth of information about their vessels and nationals, such as VMS data.

Southeast Atlantic States can also become more actively involved in international platforms and networks that deal with MCS issues and provide the opportunity to exchange best practices and enhance their capacity to conduct MCS activities while at the same time increasing trust amongst compliance and law enforcement agents through networking events.

The FAO/ILO/IMO Joint Working Group (JWG) on IUU fishing and related matters is a strong example of cross-sectoral coordination. Indeed, since 2000, the JWG between the Food and Agriculture Organization (FAO), the International Maritime Organization (IMO) and the International Labour Organization (ILO) have worked together to address IUU fishing and related matters. Four meetings have been held to date, with the ILO becoming a formal member in 2019.<sup>152</sup> The JWG enhances collaboration to coordinate efforts to address IUU fishing and related matters within the context of each UN agency’s mandate: the FAO for fishing, the ILO for human safety and labour standard and the IMO on maritime safety. Cross-sectoral cooperation is essential to ensure these related issues are addressed together, as they are strongly intertwined. Particularly, the JWG focuses on fostering exchange and capacity development at the national level. The JWG uses the existing legal framework for ensuring compliance at sea, such as the PSMA of 2009, the Cape Town Agreement of 2012 and the 1995 IMO Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessels Personnel. This JWG can be used as a platform to combine efforts to strengthen MCS of human activities through a cross-sectoral approach and therefore it might be useful to expand its mandate beyond IUU fishing and related matters.

Similarly, the International Monitoring, Control and Surveillance Network (IMCS Network), established in 2001, is an informal and voluntary arrangement of more than 70 member States, RFMOs, RFBs and RECs<sup>153</sup> to promote and facilitate cooperation and coordination among members through information

<sup>151</sup> <https://www.penaf.org/>

<sup>152</sup> ILO attended in 2000, 2007 and 2015 as an observer.

<sup>153</sup> The Network also works closely with other intergovernmental organisations such as the FAO and INTERPOL and has non-State actors as official observer organisations such as Trygg Mat Tracking and Stop Illegal Fishing, which provides for collaboration and coordination opportunities in the Southeast Atlantic region.

exchange, capacity development and collaboration.<sup>154</sup> Ten of the 22 member States of the Abidjan Convention are also member of the IMCS Network.<sup>155</sup> Its mission is to achieve the improved effectiveness and efficiency of MCS activities in order to prevent, deter and eliminate IUU fishing and related fisheries activities at local, regional and international levels. Southeast Atlantic States may consider becoming a member of the IMCS Network and could attend the Global Fisheries Enforcement Training Workshop scheduled for August 2022 in Halifax, Nova Scotia hosted by the Canadian Department of Fisheries and Oceans.<sup>156</sup> This workshop provides an opportunity for MCS practitioners as well as experts from related fields from across the world to discuss and exchange MCS best practices, lessons learned and information on current activities. Southeast Atlantic States could also benefit from the IMCS Network to improve their MCS capacity by making use of:

- 1) Network MCS Capacity Building Activities,<sup>157</sup>
- 2) The Register of Vetted MCS Experts,
- 3) The Exchange of MCS Equipment<sup>158</sup> and
- 4) Collaborative MCS Activities such as representation at the FAO Committee on Fisheries (COFI) meetings or the INTERPOL's Fisheries Crime Working Group.

In ABNJ, the IMCS Network has facilitated the work of the Tuna Compliance Network<sup>159</sup> together with the FAO under the FAO ABNJ Tuna Project.<sup>160</sup> The IMCS Network looks to establish similar such informal networking groups with other relevant global RFMOs.

### 5.3. Harmonisation of legislation and deterrent sanctions

There are strides to be made in terms of the harmonisation of sanctions at the national level through increasing fines and sanctions as well as strengthening the legal system. This harmonisation should not be limited to one sector, because a vessel that is suspected of illegal fishing activities is likely to have also been involved in fisheries-related crimes, such as money laundering or human trafficking. The penalty system in place should include sanctions that are sufficiently severe to deter illegal activities. The first study attempting to create a regional database for offenses and sanctions in six West African countries<sup>161</sup> found that “higher fines contribute into reducing incentives of illegal fishing through a higher capability of catching offenders (increased resources for MCS), and providing higher incentives to avoid being caught” (Doumbouya, *et al.* 2017). The study calls for the implementation of the right of hot pursuit at a regional level, increased sanctions against repeat offenders and foreign illegal fishing operators as well as tackling issues of transparency, low governance and high corruption (Doumbouya, *et al.* 2017). Southeast Atlantic States may also wish to consider providing a range of minimum and maximum penalties to guide their legal authorities and to distinguish between small-scale and industrial fishing sectors.<sup>162</sup>

An example of harmonisation efforts in the Southeast Atlantic can be found in the FCWC RPOA-IUU adopted in 2018. Member States agreed that the FCWC Secretariat is responsible for preparing a list of infractions that constitute serious violations and is meant to harmonise deterrent sanctions against IUU fishing at a regional level.<sup>163</sup> Other sub-regions

154 <https://imcsnet.org>

155 Cameroon, Cabo Verde, Gambia, Ghana, Liberia, Mauritania, Nigeria, Senegal, Sierra Leone and South Africa.

156 <https://imcsnet.org/event/7th-global-fisheries-enforcement-training-workshop/>

157 The Network works to build MCS capacities, especially in developing countries where opportunities for cooperation between fisheries MCS and enforcement agencies and mutual assistance are not fully exploited.

158 The exchange of inspection equipment fosters joint efforts, cooperation and collaboration between authorities that require MCS equipment but do not have sufficient funding to acquire new equipment and authorities that are replacing reusable equipment.

159 <https://iwlearn.net/resolveuid/3dd56ba6-03a1-4e6f-bf4d-817eba6e4e98>

160 <http://www.fao.org/in-action/commonoceans/en/>

161 The Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal and Sierra Leone.

162 <http://extwprlegs1.fao.org/docs/pdf/lbr195830.pdf>

163 FCWC (2018) Regional Plan Of Action To Prevent, Deter And Eliminate Illegal, Unreported And Unregulated (IUU) Fishing In The Fisheries Committee For The West Central Gulf Of Guinea (FCWC) Member Countries.

in the Southeast Atlantic could consider adopting a similar regional strategy.

As part of a regional approach, Southeast Atlantic States can also work on the financial viability of MCS operations. The money earned by fines, licenses and quotas can be invested in MCS tools or observer programmes to make MCS more cost-effective as is being done in Namibia.<sup>164</sup> It is also useful to establish a mechanism for conducting shared investigations, because complex international investigations can take a long time to move from identification to enforcement action with the risk of losing momentum or the process being abandoned altogether as new priorities arise (Stop Illegal Fishing 2021). Shared monitoring and investigations can also encourage regional cooperation to tackle the problem of flags of convenience and to act against operators making use of these.

In maritime areas in the Southeast Atlantic that are disputed territory, neighbouring States can consider adopting a precautionary approach to avoid conflict between ocean users and management authorities of different States that both claim jurisdiction in these areas. In the fisheries context, one option could be to establish ‘buffer zones’ around disputed areas where vessel operators are not allowed to go as part of their licence conditions.<sup>165</sup>

#### 5.4. Capacity-building

A lack of capacity is often mentioned as the key challenge in the region in conducting MCS activities in ABNJ. MCS capacity in the region has historically been developed from a coastal State perspective and involved mostly national fisheries institutions and actors, with a focus on domestic fisheries. Port authorities, having responsibility for fishing ports, are not adequately trained and equipped to facilitate the implementation of the PSMA.<sup>166</sup> Broadening the scope and area of focus of MCS efforts to activities other than fishing and in ABNJ requires dedicated capacity-building and awareness raising to

better understand risks, detect infractions, investigate and sanction.

There are various cost-effective ways to increase MCS capacity, such as using low cost and pragmatic tools that can be used from land such as AIS and VMS that provide information on the identity, position, course and speed of vessels active in ABNJ. Many Southeast Atlantic States have not yet made AIS or VMS mandatory. The increased use of and reliance on technology for MCS activities will increase the need for those skilled in the use and maintenance of, for example, remote sensing tools, satellite-based information systems and drone operation. In their EEZ, States could focus on “incremental investments to show immediate results in reducing illegal fishing, such as leasing patrol vessels rather than procuring new construction”.<sup>167</sup> However, more technology does not necessarily lead to a better MCS system as visible presence of observers and inspectors is key to dissuade offenders from conducting illegal human activities. Remote control tools are not supposed to replace patrol vessels; they are complementary tools. This means that State authorities will still have to ensure they have sufficient capacity to conduct surveillance and enforcement activities with patrol vessels.

Inter-agency cooperation coupled with training and the pooling of resources where appropriate can also help overcome capacity challenges. It is important that reinforcement of capacity needs takes place throughout the entire legal chain, meaning that law enforcement officers, prosecutors and judges have an understanding of fisheries and conservation illegal activities. This helps resolve issues regarding the chain of evidence. The WATF is a good example, because it provides capacity building from the point where intelligence about infringements to fisheries rules is received to the enforcement and prosecution of perpetrators.<sup>168</sup>

<sup>164</sup> <https://www.cbd.int/financial/monterreytradetech/namibia-monsusprod.pdf>

<sup>165</sup> West Africa Task Force: (2019) Record of the 9th West Africa Task Force Meeting. West Africa Task Force.

<sup>166</sup> Forthcoming in an African Development Bank publication authored by Barnes-Dabban, H.

<sup>167</sup> <https://documents1.worldbank.org/curated/en/968291468209069932/pdf/WARFPOPID010Appraisal0Stage.pdf>

<sup>168</sup> <https://stopillegalifishing.com/initiatives/watf/>

## 5.5. Global and regional processes

Improved regional cooperation would allow Southeast Atlantic States to speak with a unified and stronger voice, by engaging in the following activities:

- Ratifying and implementing international and regional agreements relevant to MCS (see Annex 1), adapting their legislative framework accordingly at the national level and promoting compliance with these regulations;
- Strengthening international MCS provisions and standards in the BBNJ treaty text currently under negotiation at the United Nations (UN).<sup>169</sup> The provisions related to environmental impact assessments (EIAs) are especially relevant for the Southeast Atlantic region where there are often tensions between different sectors using the same ocean space without any obligation to conduct EIAs or strategic environmental assessments (SEAs);
- Contributing to the ongoing negotiations at the World Trade Organization on fisheries subsidies and advocating for the prohibition of harmful subsidies that contribute to overcapacity, overfishing and IUU fishing.<sup>170</sup> Instead, subsidies can be used for technical assistance in the form of joint surveillance operations or training activities, access to new vessel tracking and onboard monitoring technologies, and for human capacity to analyse whether a vessel and its owner have been involved with IUU activities in the past (Belhabib 2019);

➤ Reassessing fisheries partnership agreements with third parties, such as the EU and China, fishing in the Southeast Atlantic region to ensure that they have to abide by regional minimum terms and conditions (e.g. compulsory remote electronic monitoring and IMO numbers) in return for access to resources. Southeast Atlantic coastal States should also regularly assess whether they have sufficient capacity to monitor distant-water fleets active in their EEZ;<sup>171</sup>

➤ Improving documentation of human activities in ABNJ and enhancing transparency and traceability in relation to resources extracted from the ocean. In the context of fisheries, this could be developed through setting global minimum trade standards in terms of traceability in supply chains to reduce risks of illegal activities taking place in ABNJ. Other market measures include catch documentation schemes and eco-labelling (Hosch and Blaha 2017).

It is important to keep in mind that Southeast Atlantic States are not the only actors that play a role in strengthening MCS in the region. There are many foreign-flagged vessels profiting from the resources in both the EEZ and the high seas around them. In the end, it is the role of flag States to have sufficient oversight over vessels registered to them whether they are willing and able or not. Moreover, many distant-water fishing companies own or manage a fleet flagged to a Southeast Atlantic State. This is, for example, increasingly common in Cameroon where vessels with a history of illegal fishing are flagged to this State while being owned or managed by European-registered companies, together with Russian investors.<sup>172</sup> These companies often hide ultimate beneficial ownership (UBO), thereby making it difficult to find out who needs to be prosecuted. Options to address this challenge include: 1) enhancing ownership reporting requirements when vessel

169 States at the UN are negotiating an international legally binding instrument for the conservation and sustainable use of BBNJ and there are several pathways to strengthen MCS through this new instrument (Cremers, Wright and Rochette 2020).

170 WTO negotiations on fisheries subsidies, launched in 2001 at the Doha Ministerial Conference, aim to “clarify and improve” existing WTO rules on fisheries subsidies. The negotiations are meant to lead to an agreement to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing: [https://www.wto.org/english/tratop\\_e/rulesneg\\_e/fish\\_e/fish\\_e.htm](https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_e.htm)

171 <https://www.cffacape.org/publications-blog/ten-priorities-for-the-future-of-sustainable-fisheries-partnership-agreements>

172 <https://www.cffacape.org/publications-blog/cameroon-iuu-yellow-card-the-eu-should-also-sanction-european-fishing-companies-hiding-behind-this-countrys-flag>.

owners register with a flag State or as part of RFMO rules, 2) refusing flag or fishing authorisation to vessels owned by shell or front companies, 3) enforcing national laws on company and vessel ownership, 4) requiring IMO numbers for all fishing vessels and 5) closing Flag of Convenience registries.<sup>173</sup>

Similarly, the role of foreign funders should not be underestimated. The presence of international funders add transparency and increase surveillance activities in the region, but they mostly focus on building a MCS network while the legislative system often remains weak, thereby questioning the ability of States to maintain an effective MCS system that is sustainable and independent from foreign funders (Doubouya, *et al.* 2017). During the Ebola crisis, for example, there was a significant increase in illegal catches in Sierra Leone when the World Bank and EJP suspended their funding and capacity-building training for MCS activities (Doubouya, *et al.* 2017).

<sup>173</sup> <https://www.tm-tracking.org/post/illegal-fishing-operators-exploit-company-structures-to-cover-up-illegal-operations>

**Table 3. Overview of options to strengthen MCS in the Southeast Atlantic**

<b>Collection and sharing of data</b>	<p>Establish a coordinated system of information gathering and monitoring of human activities taking place in both EEZs and ABNJ, by:</p> <ul style="list-style-type: none"><li>➤ Making IMO vessel registration numbers as well as AIS and VMS technology on board compulsory for all national fishing vessels operating in ABNJ while proactively sharing this data with RFMOs and coastal States in the region;</li><li>➤ Creating and maintaining a regional record of authorised fishing vessels with up-to-date lists of licensed vessels;</li><li>➤ Adopting formal agreements on information-sharing between coastal States, flag States, RFMOs, inter-governmental organisations and task forces;</li><li>➤ Addressing practical challenges in data collection such as language barriers, poor internet connection and data confidentiality issues;</li><li>➤ Involving local communities in data collection.</li></ul>
<b>Cooperation and coordination</b>	<p>For each country to:</p> <ul style="list-style-type: none"><li>➤ Develop inter-sectoral platforms for cooperation and coordination between custom authorities, navy, fisheries agencies, police, and different ministries;</li><li>➤ Get involved in international platforms and networks that deal with MCS issues.</li></ul> <p>For the region to:</p> <ul style="list-style-type: none"><li>➤ Adopt the SRFC MCS Convention;</li><li>➤ Increase cooperation between existing regional bodies;</li><li>➤ Increase joint regional surveillance operations at sea and establish sea-going Navies and/or Coast Guard networks around Africa, with a cross-border hot pursuit function;</li><li>➤ Create or extend operational level task forces;</li><li>➤ Expand the mandate of the Abidjan Convention BBNJ Working Group to include cooperation and coordination on MCS;</li><li>➤ Adopt a MoU similar to the Abuja MoU or between the Abidjan Convention and RFMOs with a mandate that goes beyond port State control and covers all human activities taking place in ABNJ.</li></ul>
<b>Harmonisation of legislation and deterrent sanctions</b>	<ul style="list-style-type: none"><li>➤ Establish a national MCS system or strategy;</li><li>➤ Consistently apply sanctions to tackle non-compliance and that provide effective deterrence, including a) clear guidelines on a range of minimum and maximum penalties given to legal authorities, b) increased sanctions against repeat offenders and c) an up-to-date list of infringements;</li><li>➤ Develop financial viability of MCS operations;</li><li>➤ Include a condition that foreign fishing vessels only receive access to national waters if there is sufficient MCS capacity to monitor and inspect these vessels;</li><li>➤ Refuse flag or fishing authorisation to vessels owned by shell or front companies and enforce national laws on company and vessel ownership;</li><li>➤ Enhance ownership reporting requirements when vessel owners register with a flag State or as part of RFMO rules;</li><li>➤ Close Flag of Convenience registries;</li><li>➤ Implement the right of hot pursuit;</li><li>➤ Adopt a regional observer programme and a harmonised regional port inspection programme.</li></ul>
<b>Capacity-building</b>	<ul style="list-style-type: none"><li>➤ Generalise the use of low cost MCS tools such as AIS and VMS;</li><li>➤ Develop inter-agency cooperation, coupled with training all throughout the legal chain and pooling of resources where appropriate;</li><li>➤ Maintain a dedicated budget for MCS activities;</li><li>➤ Create the COREP regional MCS centre and the SADC MCSCC.</li></ul>
<b>Global and regional processes</b>	<ul style="list-style-type: none"><li>➤ Ratify and implement international and regional agreements relevant to MCS;</li><li>➤ Reassess fisheries partnership agreements with third parties to ensure they abide by regional minimum terms and conditions;</li><li>➤ Strengthen international MCS provisions and standards in the BBNJ treaty text currently under negotiation;</li><li>➤ Contribute to the ongoing negotiations at the World Trade Organization on fisheries subsidies;</li><li>➤ Set global minimum trade standards in terms of traceability in supply chains to reduce risks of illegal activities taking place in ABNJ;</li><li>➤ Implement catch documentation schemes and eco-labelling.</li></ul>

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## Annex I: Membership and Treaty Ratification of Southeast Atlantic Coastal States\*

	Angola	Benin	Cameroon	Cabo Verde	Democratic Republic of Congo	Congo	Côte d'Ivoire	Gabon	Gambia	Ghana	Guinea	Guinea-Bissau	Equatorial Guinea	Liberia	Mauritania	Namibia	Nigeria	Sao Tome and Principe	Senegal	Sierra Leone	South Africa	Togo
<b>INTERNATIONAL ORGANISATIONS</b>																						
IMO	1977	1980	1961	1976	1973	1975	1960	1976	1979	1959	1975	1977	1972	1959	1961	1994	1962	1990	1960	1973	1995	1983
ISA	2010	1997	2002		2008	2008	1995	1998		1995	1995		2008	2008	1996	1995	1995	1995	1995	1994	1997	1995
IWC	2002	2005			2008	2008	2004	2002	2005	2000	2000	2007			2003			2018	1982		1948	2005
<b>INTERNATIONAL AGREEMENTS</b>																						
<b>ACAP</b>																						
CBD	1998	1994	1994	1995	1994	1996	1994	1997	1994	1994	1993	1995	1994	2000	1996	1997	1994	1999	1994	1994	1994	1995
CITES	2013	1984	1981	2005	1976	1983	1994	1989	1977	1975	1981	1990	1992	1981	1998	1990	1974	2001	1977	1994	1975	1978
CMS	2006	1986	1983	2006	1990	2000	2003	2008	2001	1988	1993	1995	2004	2004	1998		1987	2001	1988		1991	1996
CMS Sharks MoU	RS	2017	RS	RS	RS	2019	2017	RS	RS	2010	2010	RS	RS	2010	2014	RS	RS	RS	2010	RS	2011	2010
FAO Compliance Agreement	2006	1999		2006					2003						1998			2009				
PSMA	2009	2010		2016				2010	2016	2016	2016			2017	2017			2016	2017	2018	2016	2016
MARPOL	2002	2000	2009	1977	2004	1988	1988	1983	1992	1991	2003	2017	1996	1983	1998	2003	2002	1998	1997	2001	1985	
UNCLOS	1990	1997	1985	1987	1989	2008	1984	1998	1984	1983	1985	1986	1997	2008	1996	1983	1986	1987	1984	1994	1997	1985
UNFSA	2017						1996	1996		2017	2005	1995		2005	1995	1998	2009	1997				2003
<b>REGIONAL ORGANISATIONS</b>																						
ICCAT	1976			1979			1972	1977		1968	1991	2016	1987	2014	2008	1999	2007	1983	2004		1967	
SEAFO	2006														2002						2008	
CECAF				2003														2003				
SRFC				1985																		
FCWC																						
COREP																		1984				
ATLAFCO				2001									1994					2017				
CCSBT																				2016		
Abuja MoU																						
<b>LARGE MARINE ECOSYSTEMS</b>																						
Canary Current LME				BC					BC		BC	BC			BC						BC	
Guinea Current LME	BC	BC	BC		BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
Benguela Current LME	BC																					BC

\* Information adapted and updated based on Table 1 (p. 17-22) in (Durussel, et al. 2018). BC: bordering country. RS: Range state. OBS: Observer

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November 2021



# About the STRONG High Seas Project

The STRONG High Seas project is a five-year project that aims to strengthen regional ocean governance for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. Working with the Secretariat of the Comisión Permanente del Pacífico Sur (CPPS; Permanent Commission for the South Pacific) and the Secretariat of the West and Central Africa Regional Seas Programme (Abidjan Convention), the project will develop and propose targeted measures to support the coordinated development of integrated and ecosystem-based management approaches for ocean governance in areas beyond national jurisdiction (ABNJ). In this project, we carry out transdisciplinary scientific assessments to provide decision-makers, both in the target regions and globally, with improved knowledge and understanding on

high seas biodiversity. We engage with stakeholders from governments, private sector, scientists and civil society to support the design of integrated, cross-sectoral approaches for the conservation and sustainable use of biodiversity in the Southeast Atlantic and Southeast Pacific. We then facilitate the timely delivery of these proposed approaches for potential adoption into the relevant regional policy processes. To enable an interregional exchange, we further ensure dialogue with relevant stakeholders in other marine regions. To this end, we set up a regional stakeholder platform to facilitate joint learning and develop a community of practice. Finally, we explore links and opportunities for regional governance in a new international and legally-binding instrument on marine biodiversity in the high seas.

**Project duration:** June 2017 – May 2022

**Coordinator:** Institute for Advanced Sustainability Studies (IASS)

**Implementing partners:** BirdLife International, Institute for Sustainable Development and International Relations (IDDRI), International Ocean Institute (IOI), Universidad Católica del Norte, WWF Colombia, WWF Germany

**Regional partners:** Secretariat of the Comisión Permanente del Pacífico Sur (CPPS), Secretariat of the Abidjan Convention

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