

**Original language only**

**FAD MANAGEMENT PLANS PRESENTED IN 2018**

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BELIZE HIGH SEAS FISHERIES UNIT  
MINISTRY OF FINANCE  
GOVERNMENT OF BELIZE

Policy Name:	MANAGEMENT PLAN FOR THE MANAGEMENT OF FISH AGGREGATING DEVICES (FAD)				
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## 1. INTRODUCTION

### 1.1 Scope

This Plan sets out the methods and measures that the Belize High Seas Fisheries Unit (BHSFU) will use to standardize the use of Fish Aggregating Devices (FAD) for various purposes including limiting fishing mortality on vulnerable tropical tuna species such as juvenile bigeye, yellowfin and skipjack tuna.

Fundamentals of this Plan apply to Belize flagged purse seine vessels operating on the High Seas. Unless otherwise indicated, references to fishing or fishing vessels apply to purse seine fishing vessels, group purse seine fishing vessels and their support vessels.

### 1.2 Legal Status

In the first order, this FAD Management Plan represents the strategy of the BHSFU and does not have legal effect in its own right. It is the aim of the BHSFU to introduce specific features of the Plan through various means in the short term which may contain permit conditions and legally binding Fishing Vessel Circulars.

In the long term, this Plan will be reviewed according to further developments, such as to ICCAT Recommendation 15-01. Specific Regulations will be introduced to give legal effect to the Plan.

### 1.3 Objective

The objective of this FAD management plan is but not limited to:

- a. Reinforce the gathering of scientific data;
- b. Decrease the catch of bycatch of small tunas on FADs;
- c. Decrease the catch of by-catch of dolphins on FADs;
- d. Decrease the number of Lost or Beached FADs;
- e. Effectively manage the deployment and retrieval of FADs;
- f. Limit the number of FADs deployed

## 2. DESCRIPTION

### 2.1 Definition and Types of FADs

For the purpose of this Plan, a FAD is “any permanent, semi-permanent or temporary structure or device made from any material and used to lure fish in order to increase efficiency and effectiveness of the fishing operation”

This plan differentiates between different types of FADs for the intention of regulating their use. The following types of FAD are covered in this Plan:

*Anchored FAD* – an object or group of objects, of any size, that has or has not been deployed, including but not limited to vessels, buoys, floats, netting, webbing, plastics, bamboo, and logs floating on or near the surface of the water that fish may associate with and that has a mooring line attached to an anchor or other object that ensures the FAD remains in a fixed location.

*Drifting FAD* – any object or group of objects, of any size, that has been deployed, including but not limited to vessels, buoys, floats, netting, webbing, plastic, bamboo and logs floating on or near the surface of the water that fish may associate with.

*Other FAD* – Any other object or group of objects that fits the general description of a FAD but is not an anchored FAD or a deployed drifting FAD.

## **2.2 FAD Limits**

Purse seine vessels that are licensed in accordance with Belize’s High Seas Fishing Act, 2013 may deploy and use anchored FADs. The total number of anchored FADs that may be deployed shall not exceed 500 at any one time. The total number may be reviewed on a case by case basis and depending on the vessel size.

The deployment of FADs in the EEZ of other States are outside the restrictions imposed by this management plan and shall be in accordance with the laws of that State.

## **2.3 Consideration of interaction with other gear types**

In reference to possible conflict between purse seine fishing and the long line fleet which may result from the wide range use of FADs in the purse seine fishery, the situation will be monitored. Specifically, data will be gathered on the operation of the tuna long line fleet as it continues to grow and on the characteristics of purse seine catches as determined through our observer program. Any unfavorable impacts resulting from FAD fishing or FADs having obstructed the operation of the long line fleet will result in this policy being reviewed should such impacts be clearly established.

## 2.4 By-Catch Policy

Vessel owners/operators in the purse seine FAD fishery shall be required to submit information on the by-catch taken during fishing operations by species, estimates of volume or estimate of number of fish in catches. This shall be reported through the catch log sheets.

If the by-catch taken is utilized in any way, it is required that the operator submit a report on the disposition of the by-catch on a species-by-species basis.

The Belize High Seas Fisheries Unit through its observer program shall monitor the by-catch in both the anchored and drifting FAD tuna purse seine fishery with a goal of establishing the average weight of species make-up of by-catch.

## 2.5 FAD Ownership

This Plan does not generate any property rights over FADs or fish that may aggregate to them. No exceptionality of access is considered when a particular vessel deploys a FAD in accordance with this Plan.

# 3. INSTITUTIONAL ARRANGEMENT

## 3.1 Institutional responsibilities for the FAD Management Plan

The Belize High Seas Fisheries Unit, under the Ministry of Finance is the competent authority responsible for the development and implementation of this FAD Management Plan.

## 3.2 Application process for FAD deployment approval

Vessel owners/operators shall provide prior notice to the Belize High Seas Fisheries Unit of their intention to deploy FADs. The information to be provided shall include:

- i. Location in latitude and longitude,
- ii. Date of deployment,
- iii. New or replacement FAD,
- iv. FAD number assigned.

All FAD deployment, for new or replaced FADs shall be witnessed and documented by an observer approved by the BHSFU.

### 3.3 FAD replacement Policy

The owners/operators shall notify the Belize High Seas Fisheries Unit before any lost FADs are replaced and a report from an observer shall be required as testimony of the replacement of the FAD. Replacement of FADs shall be deployed with a new identification number in accordance with this Plan.

### 3.4 Additional reporting obligations

#### Location of FADs and reporting

Owners/operators of tuna purse seine FAD fishery should submit quarterly list of FADs deployed. The list should provide, at a minimum, position of each FAD in terms of latitude and longitude, date of deployment and identification of lost FADs. This list should be submitted no later than 30 days after the preceding quarter has ended.

#### Monitoring of the FAD Fishery

Catch data shall be collected from all purse seine vessels based on the use of FADs in order to monitor the species make-up of tunas and other information of the FAD associated catches. Additionally, a FAD Log is kept on board the vessel and should be utilized daily to record all FAD activities on deployment and retrieval of FADs and any other relevant information as required by ICCAT.

#### Reporting requirements for FAD fishing

Owners and operators that utilized FADs in their fishery shall comply with the reporting requirement as set out in this Plan and other legally binding circulars and submit information on their catches.

Owners/operators involved in FAD fishery shall be required to carry on board fisheries observers to monitor their fishing activities, FAD deployment operations, supply and mothership activities up to 100%.

#### FAD License

FADs cannot be deployed and utilized without a FADs license issued by the Director of the Belize High Seas Fisheries Unit.

- a. Any vessel owner/operator who intends to deploy FADs on the high seas shall be required to have a FAD license.

- b. A FAD license shall be issued simultaneously with the fishing license issued to the vessel and shall be valid for similar period.
- c. Each purse seine vessel shall be required to keep its FAD license on board with fishing on FAD.
- d. FADs can only be deployed consistent with their FAD license

### **3.5 Conflict Resolution in relation to FADs**

Any conflict arising between the operators in the purse seine FAD fishery shall be referred to the Director of the Belize High Seas Fisheries Unit and where a resolution cannot be made then the matter shall be taken to the Registrar of Ships in accordance with Belize's High Seas Fishing Act, 2013 and subsidiary regulations, and whose decision shall be final.

### **3.6 Details of any closed areas or periods**

This section of the Plan describes the provisions that will be applied to Belize flagged purse seine fishing vessels operating in the high seas in accordance with ICCAT's Guidelines for the Preparation of FAD Management Plan as contained in Recommendation 15-01

The requirements below will be endorsed via conditions of fishing licenses issued to relevant vessels until such time as this Plan is reflected in Belize's Regulations.

All Belize flagged purse seine fishing vessels operating in the high seas and any other jurisdictions utilizing FAD in the ICCAT Convention area will be required to observe the Area/Time closure in relation with the protection of juveniles as contained in Recommendation 15-01 from January 1<sup>st</sup> to February 28<sup>th</sup> of each year as specified below:

- Southern limit: parallel 4° / South latitude
- Northern limit: parallel 5° / North latitude
- Western limit: meridian 20° / West longitude
- Eastern limit: the African coast

The prohibition outlined above includes but is not limited to:

- Launching any floating objects, with or without buoy;
- Fishing around, under, or in association with artificial objects, including vessels;
- Fishing around, under, or in association with natural objects;

- Towing floating objects from inside to outside the closure area.
- Vessels fishing on unassociated 'free schools' shall be required to have an authorized observer on board for the duration of their fishing activities within the area/time closure.

### 3.7 Requirements for Deploying FADs

The deployment of any FADs during the FAD closure periods specified above is strictly prohibited. At any other times, deployment must be directed in accordance with the requirements below.

Consistent with para.37 of ICCAT Recommendation 15-01, all Belize flagged purse seine fishing vessels operating on the high seas during the area/time closure specified above will be subject to 100% observer coverage under the ICCAT Scientific Observer Program. Observers will monitor all FAD deployments of all surface fishing vessels 20 meters LOA or greater fishing tropical tunas in the area/time closure referred to above.

The vessel master must provide the following information in writing to the Director of High Seas Fisheries of the Belize High Seas Fisheries Unit, when deploying a drifting FAD:

- i. The date of deployment;
- ii. The location (latitude and longitude) recorded in degrees and minutes;
- iii. FAD type (anchored FAD, drifting artificial FAD, etc)
- iv. The FAD number that has been assigned; and
- v. A declaration that the FAD meeting the marking and design requirements contained in sections 4.1.4 and 4.1.5 respectively.

No FAD shall be deployed unless prior authorization from the BHSFU is granted and which shall be reliant on:

- i. Provision of all the information above; and
- ii. The number of FADs already deployed by the vessel

The BHSFU shall not authorize the deployment of a FAD if records show that the FAD limit would be surpassed by the relevant vessel.

## 4. FAD CONSTRUCTION, SPECIFICATION AND REQUIREMENTS

### 4.1 FAD Marking

Deployed drifting FADs must be clearly marked as follows:

- a. With the raft section clearly painted with reflecting paint so that it can be seen from a distance of 1 kilometer;
- b. The raft section should support a radar reflector that must be suspended at least 2 meters above the waterline of the raft;
- c. With the name of the vessel that has deployed it;
- d. The FAD numbers.
- e. Electronic devices such as transponders and radio beacons which mechanically and constantly indicate their location by way of signals may be used in addition to other devices, but should not be activated at radio signals that could clash with other devices used for navigation and search and rescue purposes.

The name of the vessel and FAD number shall be contained on a removable plate such that in the event that FADs are changed, the plate can be connected to the new FAD ensuring that the same FAD number corresponds to the same deployment location in terms of latitude and longitude.

The marking of the FAD above must be in lettering at least 30cm high and of a color that contrasts with the color of the plate. The plate must be connected to a point on the FAD where it is clearly noticeable.

The FAD number is to be allocated by the vessel master and shall be the first three letters of the vessel name followed by a two-digit number (which shall be sequential according to the number of FADs deployed in the high seas), followed by the letters "HS" to indicate deployment in the high seas

For example:

Vessel Name: RANDOM

FAD ID: RAN01HS

#### 4.2 FAD Design and Construction

In order to minimize the ecological impact of FADs, in particular the entanglement of sharks, turtles and other non-target species, and the release of synthetic persistent marine debris, all deployed man-made FADs must meet the following minimum criteria:

- i. The surface structure of the FAD should not be covered or only covered with material implying minimum risk of entanglement by-catch species and should be constructed such that they can be easily located at their place of deployment.
- ii. The sub-surface components should be exclusively composed of non-entangling material (e.g. ropes or canvas).
- iii. The use of biodegradable materials should be prioritized in the designing of FADs.
- iv. The design should include an appropriate number of counter weights along the synthetic rope to ensure that it sinks to the bottom if the floater becomes detached and drifts away.
- v. The design and maintenance of FADs shall be the responsibility of the owner/operator deploying the FADs

#### 4.3 Replacing Lost FADs

The vessel master shall notify the BHSFU that a FAD has been permanently lost by providing the following information:

- i. The date of last sighting of the FAD;
- ii. The location (latitude and longitude) recorded in degrees and minutes of last sighting;
- iii. The FAD number; and
- iv. FAD Construction material.

The BHSFU will review this information and may grant approval to deploy a replacement FAD depending on the situations.

#### **4.4 Requirement for Retrieving FADs**

Consistent with ICCAT Recommendation 15-01, all Belize flagged purse seine fishing vessels operating on the high seas during the area/time closure will be subject to 100% observer coverage under their Scientific Observer Program. Observers will monitor all FAD retrievals and also ensure that the master makes a record of this within the FAD Log.

The vessel master must supply the following data in writing to the BHSFU:

- i. The date of retrieval;
- ii. The location (latitude and longitude) recorded in degrees and minutes of retrieval; and
- iii. The FAD numbers.

#### **5. APPLICABLE PERIOD FOR FAD MANAGEMENT PLAN**

This plan is applicable for a period of 2 year from date of issuance.

#### **6. MONITOR AND REVIEW OF IMPLEMENTATION OF FAD MANAGEMENT PLAN**

This FAD Management Plan shall be reviewed every year and may be amended at any time as deemed necessary. The next review is scheduled for January 2019.

# **FISH AGGREGATING DEVICE MANAGEMENT PLAN FOR VESSELS FLAGGED IN CURAÇAO**

## **1. Background**

According to the fisheries management policies that Curaçao has been traditionally carrying out in order to assure the sustainable management of the fishing resources in general; also considering that the control of fishing effort is a necessary issue in the ICCAT area; and with the aim to guarantee the sustainability of the target and bycatch populations of species related to tuna fisheries, the following Fish Aggregating Device<sup>1</sup> Management Plan is hereby established.

## **2. Objectives**

- To provide a scientific basis for the approval of measures that guarantee the rational use of FADs in the tuna fisheries of the Atlantic Ocean.
- To widen the technical knowledge of these devices and of their eventual positive or negative impact on the ecosystems.
- To develop joint information exchange schemes between operators, scientists and Administrations to facilitate the communication of any progress made in this field and the implications it could have.
- To improve the knowledge on the composition of species and sizes to be found in the sets made on FADs.

## **3. Application field**

This Management Plan applies to the tuna purse seiner vessels licensed to fish in the Atlantic Ocean.

## **4. Definitions**

Fish Aggregating Device (FAD). Floating objects, either natural or man-made, which gather some species underneath, thus making those species more accessible to their search and subsequent catch by fishing vessels.

### FAD types:

- Anchored FADs: those that are artificially fixed to the bottom of the sea preventing them from drifting; these include the support vessels anchored at an underwater mountain.

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<sup>1</sup> Hereinafter referred to as FADs.

- Drifting object with a net: those non anchored FADs composed of either a continuous panel or one in the shape of a grill, which is associated to a hanging piece of net or rope, which serves as a sail under the sea.
- Drifting object without hanging materials: those non anchored FADs composed of either a continuous panel, or one in the shape of a grill.
- Natural FADs: any floating object found at sea, such as vegetable waste, dead animals or debris of human origin used as a FAD.
- Other drifting FADs: any FAD that differs from the above-mentioned.

**Activities related to FADs:**

- Deployment: The activity that involves the deployment of any given FAD at sea.
- Checking: The fishing activity that involves the monitoring of the previously deployed FADs to carry out maintenance tasks or verify the fish gathering underneath the device.
- Set: The fishing operating to catch the fish schools associated to a FAD.
- Collection: The fishing activity that involves the recovery of a FAD from the sea.

**Buoy types:**

GPS buoy: A buoy equipped with a GPS system.

Radio buoy: A buoy equipped with a radio system.

Visual buoy: A buoy equipped with no electronic system, only identifiable at sight.

Oceanographic buoys: buoys used for oceanographic research.

**5. Identification of FADs**

Each FAD to be deployed must be previously assigned a sequence of characters that will identify it. That sequence must be maintained during its lifetime.

Operators might select the identification system they prefer, provided that the sequence assigned remains individual and unique for each FAD.

Depending on the results obtained by the application of the present Plan, this Administration could, if needed be, establish common and compulsory marking system for all the FADs used by the fleet flagged in Curaçao.

**6. Register and communication of FAD related information**

**6.1. Inventory**

As an initial measure, by December the 31<sup>st</sup>, 2012 all operators must deliver to the Ministry of Economic Development a list of the operative FADs used by the fleet before that date.

The list must include the information requested in Annex I for each FAD.

The list must be updated at least on a quarterly basis.

The objective of this inventory is to provide all possible information on the characteristics of the FADs in use. It also aims to provide the scientific community with an analysis of the logbook entries derived from the individual identification of each FAD.

## **6.2. Specific Activity Registry**

Operators must keep a Registry that includes all activities related with FADs.

The information to be incorporated in this registry is included in Annex II.

In the event of using a natural FAD, operators must also register this information, assuming by “deployment” the assignment of a buoy and as “collection” its removal. If this FAD is intended to be of further use, its information must be included in the inventory already mentioned in the previous chapter.

Whenever a fishing or auxiliary boat carries out any given activity which is related to a FAD that originally did not belong to that ship, all information regarding this activity must still be registered. In these cases, the box that contains the identification of the FAD must be filled with the word “external”, along with a visible character sequence that leads to the identification of the FAD.

Lastly, for each activity carried out on a FAD, all events related to by catch must be recorded, including the following data: species, number of individuals and number of individuals which were set free alive.

This Registry of Activity must be delivered to the competent Authorities at least on a quarterly basis.

## **6.3. Logbook entries**

Apart from the specific record mentioned in the previous section, Masters must continue to record in the logbook the following information related to the activity over FADs:

- Set on FADs: position, date, identification and results must be indicated.
- As stated in the previous point, all the sets made on FADs not originally belonging to the fishing vessel, as well as set made on natural FADs which are to be included in the inventory, must be duly recorded in the logbook.
- Catches associated to marine mammals, whale sharks, underwater mountains, or any element that could contribute to gather fish (such as dead animals, concentration of random materials, etc.) have to be recorded as well. The aim is to provide the most complete possible information about the set made, including position, date and result of the set.

## **7. FAD monitoring**

The vessels must, to the extent possible, keep the monitoring information for each FAD that carries a satellite buoy. Such information must be linked to the ID number assigned to that particular FAD.

## **8. Measures to avoid the loss of FADs**

The operators of the vessels must avoid as much as possible the loss of FADs at sea.

In case of loss or impossibility to recover any given FAD (i.e. those that fall in areas or periods closed for the fishing) operators must record in the Specific Activity Registry its last known position and date.

## **9. Measures to mitigate the catch of juvenile and non-target species**

The use of the most selective methods to avoid the catch of juvenile and associated species will be encouraged. These might include, among others, size-sorting grids incorporated in the purse seine nets.

Along with that, the use of acoustic systems (such as echo sounders) will also be encouraged. They should help to avoid the catch of non target species or sizes, allowing their identification before the set is made.

Research related to mechanisms that provide an alternative to net pieces hanging below the FADs will be promoted. These systems should avoid the entangling of marine species, especially turtles, by using different materials or smaller nets, in order to minimize their negative impact. Vessel shall also develop new FAD prototypes made of biodegradable materials.

## **10. Specific closures on FAD fisheries. ICCAT Recommendation 15-01 and 16-01**

During the FAD closure period established by ICCAT (REC 16-01), fishing activities, or those in support of them, which are related to bigeye and yellowfin tuna, and are also associated with floating objects (including FADs), are forbidden, as follows:

- a) From January the 1<sup>st</sup> to February the 28<sup>th</sup> every year and,
- b) In the area defined below:

Northern limit: Parallel 05° North latitude

Southern limit: Parallel 04° South latitude

Western limit: Meridian 20° West longitude

Eastern limit: African coast

The prohibition includes:

- the deployment of any floating object, with or without buoys
- Fishing around, under or in association with artificial objects, including vessels

- Fishing around, under or in association with natural objects, and
- Towing floating objects located inside the area to a position outside it.

FAD limits:

Curaçao shall ensure that for purse seiners flying our flag and fishing for bigeye, yellowfin or skipjack tunas on FADs the following provisional limits are not exceeded:

- No more than 500 FADs with or without instrumental buoys are active at any one time in relation to each of our vessels through such measures as, for example, the verification of telecommunication bills.

## **11. Control and monitoring measures**

The relevant authorities could carry out documentary inspections regarding the provisions specified in the present plan. They might request, if needed be, the data referred to in the sixth paragraph.

The Ministry of Economic Development will be the responsible for processing and monitoring the information supplied by the operators. This Authority shall be entitled to prepare the monitoring reports of the present plan and also to propose the measures it may see fit in order to improve the overall performance of the system.

## **12. Measures for the confidentiality of the data supplied by the operators**

The information supplied by the operators will always be treated confidentially. Its use will be strictly limited to scientific ends, or those of control, if necessary. The Ministry of Economic Development assumes that this information will not be made public beyond the above-mentioned limits, at least without the express consent of the shipowners.



(COURTESY TRANSLATION)

**MANAGEMENT PLAN FOR FISH AGGREGATING DEVICES  
(FAD)**

**1. Basis and background of this plan**

The current legislation in force covers the following provisions that justify the elaboration of this management Plan for fishing aggregating devices utilized by the Spanish purse seiner fleet targeting tropical tunas:

- The 1995 United Nations Stock Agreement has as the main goal the assuring of long term conservation and sustainable exploitation of the stocks of highly migratory species.
- FAO code of good practices, with regard to fishing investigation, sets the obligation of the reliable data collection which enables the due stock assessment just like the implementation of studios on fishing gear selectivity and its environmental impact and to promote the results of the investigation as the basis to establish the management objectives.  
FAO code of conduct points out that “fishing gear should be marked according to national legislation to identify the owner of the gear. The requirements of this marking should have into account uniform marking systems and internationally acknowledged.”  
Lastly, and following the FAO Code, “the States should cooperate in the perfection and implementing of operative fishing technologies, materials and methods to minimize the loss of fishing gear and its effect as ghost fishing”.
- EU Regulation 1380/2013, 20th Dec 2002, on the Common Fisheries Policy, points out as the main target is the sustainable exploitation of living aquatic and aquaculture resources in the context of sustainable development, having into account environmental, economic and social aspects in a balanced fashion. This regulation modifies EC Regulations 1954/2003 and 1224/2009, and repeals Regulations 2371/2002 and 639/2004, as well as Council Decision 2004/585.
- Law 3/2001, of Maritime Fisheries, sets amongst its goals, in article 3 the safeguard of the responsible fisheries resources exploitation, encouraging its development and adopting all necessary measures to protect, preserve and regenerate the said resources and their ecosystems and promote the fisheries and oceanographic research.

The experience from the first FAD plan in Spain of 2010, as well as the new international provisions, has led to the current revision of the Plan.

**2.- Scope of application of the present plan**

The present plan is aimed at Spanish-flagged freezer tuna purse seiners operating in the Indian, Atlantic and Pacific Ocean, targeting tropical tuna as well as Spanish



flagged supply vessel supporting the mentioned purse seiner vessels.

The Secretary General for Fisheries shall be the authority that ensures the implementation of this plan.

### **3. Objectives**

- Improving information collection for scientific advice purposes.
- Contributing to enhanced knowledge of catch composition in FAD sets.
- Increasing knowledge of these devices with regard to their technical features and their possible impact on ecosystems.
- Establishing information-sharing mechanisms among operators, scientists and administrations, in order to achieve better knowledge of progress made in this field and the implications thereof.

### **4.- Definitions**

The following definitions shall only affect the present plan, in order to enhance understanding thereof.

- Main vessel: Fishing vessel making catches and to which catches made are assigned.
- Support vessel: Fishing vessel acting as an auxiliary vessel for main vessels, assisting in fishing; for example in deploying, monitoring and hauling in FADs.
- Fishing activity: Extracting fishing resources in external waters, as well as crustaceans and mollusks, using fishing gears and methods.
- Fish Aggregating Device (FAD): Natural or artificial objects deposited on the surface, under which various species aggregate, thus making them more accessible for fishing vessels to locate and catch.

### **Types of FADs**

- o Anchored FADs: Those artificially moored to the seabed to prevent drifting, including support vessels anchored to a seamount.
- o Drifting raft with a net: Unanchored FADs composed of a panel— either continuous or grill-shaped—associated with a net used as a sail at sea.
- o Drifting raft without a net: Unanchored FADs composed of a panel— either continuous or grill-shaped.
- o Natural FADs: Any FAD found at sea (e.g. plant remains, dead animals, man-made waste) used as a FAD
- o Other drifting FADs: Any FAD other than those above.



### FAD-related activities

- Deployment: Operation by which a vessel releases a FAD at sea.
  - Verification: Operation by which a vessel monitors a previously deployed FAD in order to perform maintenance activities or to check the aggregation of fish around the device.
  - Set: Fishing maneuver to catch shoals of fish associated with a FAD.
  - Hauling: Operation by which a vessel retrieves a FAD from the sea.
- Beacon: Device whose purpose is locating or monitoring a FAD.

### Types of beacons

- GPS beacon: Beacon accompanied by a global positioning system (GPS)
  - Radio beacon: Beacon accompanied by a radio system
  - Visual beacon: Beacon without any electronic device, only identifiable by sight
- Oceanographic buoy: Buoys used for oceanographic research

## **5.- Obligations under the RFMOS regarding FADS.**

Tuna RFMO have adopted the following provisions:

### **WCPFC:**

- Conservation and Management Measure for bigeye, skipjack and yellowfin tuna (CMM 2015-01). It includes provisions on FADs.
- Conservation and Management Measure on the application of high seas FAD closures and catch retention (CMM 2009-02), which sets out the specifications regarding FAD closure.
- Conservation and Management Measure on instrumental buoys (CMM 2009-05)
- Conservation and Management Measure on cetaceans (CMM 2011-03)

### **IOTC:**

- Resolution 10/02, on mandatory statistical requirements for IOTC members and cooperating non contracting parties (CPCS), sets that all parties shall submit on a quarterly basis the number of FADS deployed per vessel.
- Resolution 15/08, on FAD management Plan.
- Resolution 15/02, on the recording of statistical data. Sets the obligation of reporting number of FADs by quarter, including position, type and other information.
- Resolution 15/09 that sets a Working Group on FADs
- Resolution 12/03 on recording catches, including information on deployment of FADs.
- Resolution 13/04, on the conservation of cetaceans.
- Resolution 13/05 on the conservation of whale sharks.

### **IATTC:**

Resolution 2013-01 on the multiannual program for the conservation of tunas in the East Pacific Ocean (2014-2016), which sets the intention of this Commission to undertake a pilot program for research into and gathering information on FADs.



Resolution 15-03 on recording FAD information, which also sets a working group on FADs.

**ICCAT:**

Recommendation 14-03 which sets a working group on FADs.

Recommendation 14-01 on a multiannual program for the conservation of tropical tunas.

## **6.- Identification of FADs**

Each FAD shall have a sequence of characters serving as an identifier for each device to be used. This sequence shall not vary during the device's lifespan.

Operators may choose the identification system, with the only prerequisite that it be individual and unique for each FAD.

Depending on the results obtained through the implementation of the present plan, in the future—if it is considered appropriate—a single

## **7. Register and information-sharing regarding FADs**

### **7.1. Inventory**

As an initial measure, operators shall send the Deputy Directorate General for Agreements and Regional Fisheries Organizations, by 31 December 2010, a list of operative FADs being used by the fleet at that date.

This list shall include, for each FAD, the information contained in Annex I. As far as possible, this information should be provided at the detail level of fishing vessels.

This list shall be promptly updated whenever a change takes place, and such updates must be sent at least quarterly. The aim of this inventory is to provide as much information as possible on the characteristics of FADs being used, and to enable scientists to analyze the data collected in fishing logs thanks to the individual identification of each FAD.

### **7.2. Specific Activity Register (FAD logbook)**

Operators shall keep a register where FAD-related activities shall be recorded. The information that must be recorded in this register is included in Annex II of this plan.

If operators use any natural FADs, this information shall also be recorded, and in such cases deployment shall be understood as assigning a beacon, and hauling as withdrawing the beacon. Should this FAD be intended for periodical use, information regarding it shall be included within the inventory envisaged above.



Whenever an activity is conducted involving a FAD that does not initially belong to the fishing or auxiliary vessel that detected it, all the information regarding this activity shall also be reported. The word "external", together with the visible character sequence leading to its identification, shall be recorded in the section corresponding to identification.

Finally, for each activity conducted involving a FAD, every incident regarding accidental catches shall be recorded: species, number of specimens, and number of specimens released alive.

This activity register shall be sent at least quarterly to the Deputy Directorate General for Agreements and Regional Fisheries Organizations.

### 7.3. Records in fishing logbooks

In addition to the specific register set forth above, ship captains shall record in the fishing logbook if each set has been done on Fads or free schools.

When the set is done on FADs, the identification must be recorded, according to the criteria set in the preceding point.

## **8. Monitoring of FADs**

As far as possible, vessels must record monitoring information for each FAD that has a satellite beacon, based on its assigned number.

Moreover, efforts should be made to record information obtained from other beacons (e.g. visual, radio).

There shall be no obligation to communicate the recorded information. However, such information may be requested in order for the designated scientific personnel to conduct specific studies or in order to carry out monitoring activities. This information may be requested, prior approval by the operators for its use.

## **9. Measures to prevent loss of FADs**

Vessel operators shall prevent, as far as possible, loss of FADs at sea.

In the event of a loss or of the impossibility of hauling in a FAD (areas or seasons closed to fishing), operators must record, in the Specific Activity Register, its last known date and position.

## **10. Measures to mitigate the catch of juvenile tuna and non-target species**



From January 1, 2015 on, all entangling FADs should be progressively replaced by others which minimize incidental catches, including these features:

- The upper part will not be covered, and if that is metallic, the material should be tightly covered or with a maximum of net size of 3 cm.
- The tail should be of non entangling material. If that include nets, its maximum size will be 3 cm.

All withdrawal or replacements should be recorded in the In the FAD logbook and the inventory

From June, 30, 2015 on all activity on entangling FADs is forbidden.

From September, 30, 2015 on all entangling FADs must have been removed, even if they are recorded in the inventory of the vessel.

The use of methods that reduces juvenile catches and associated species is encouraged in order to get cleaner catches.

The Parties to this plan may propose pilot actions in order to advance in some of the aspects described.

## **11. Specific closures on fishing with FADs**

ICCAT:

Fishing for, or supported activities to fish for bigeye, yellowfin and skipjack tunas in association with objects that could affect fish aggregation, including FADs, are prohibited during the period 1 January to 28 February in the following area:

- Southern limit: parallel 4° / South latitude
- Northern limit: parallel 5° / North latitude
- Western limit: meridian 20° / West longitude
- Eastern limit: the African coast

The prohibition referred to in paragraph includes:

- launching any floating objects, with or without buoys;
- fishing around, under, or in association with artificial objects, including vessels;
- fishing around, under, or in association with natural objects;
- towing floating objects from inside to outside the area.

In order to comply with the FAD limit set in Recommendation 15-01, each vessels must submit a certificate issued by the company that supplies the beacons or by a scientific institute that certifies the following data:



- Number of instrumental buoys per vessel at any time by quarter.

## IOTC

In order to comply with the FAD limit set in Resolution 15-08, each vessels must submit a certificate issued by the company that supplies the beacons or by a scientific institute that certifies the following data:

- Number of instrumental buoys per vessel at any time by quarter.
- Number of instrumental buoys contracted by year.

Non instrumental buoys shall be gradually eliminated by January 1, 2017.

## **12. Measures to monitor and follow up the present plan**

The relevant authorities may perform documentary monitoring of the provisions envisaged in the present plan, and they may require, if necessary, the data described in section 6.

The Spanish Institute of Oceanography (IEO), as the Spanish scientific authority in this regard, shall be responsible for processing and monitoring the information provided by the operators, and shall be authorized to draft the follow-up reports for this plan and to propose the measures it deems appropriate in order to improve the functioning thereof.

Moreover, the General Secretariat for Fisheries may determine, in coordination with the IEO, the participation of other scientific bodies in order to fulfill the objectives set forth in the present plan.

## **13. Confidentiality measures for the information provided by operators**

The information provided by the operators shall be treated as confidential at all times, and its use shall be restricted solely to scientific or monitoring purposes, if necessary. The General Secretariat for the Sea undertakes not to disclose this sensitive information, other than for the aforementioned purposes, without the express consent of the shipowners.

## **14. Amendments to the present plan**

This plan shall be amended in line with future measures adopted within the different RFMOS and with the conclusions of the reports envisaged in section 12.

## **15. Implementation**

All provisions in this Plan will be in force until further modifications are adopted or new international provisions are set.



MINISTERIO DE  
AGRICULTURA,  
ALIMENTACIÓN Y MEDIO  
AMBIENTE

SECRETARÍA GENERAL DE PESCA  
DIRECCIÓN GENERAL DE RECURSOS PESQUEROS Y  
ACUICULTURA  
SG de Acuerdos y Organizaciones Regionales de  
Pesca.

The infringements of these provisions would be considered as a non compliance to the conditions required to obtain the Temporary Fishing Permit and will be penalized according to Title V of LAW 3/2001, 26 May, on Maritime Fishing of the State.

Courtesy translation

## PLAN DE GESTION DES DCP EN OCÉAN ATLANTIQUE 'GWHTCP EG

### I - Textes de référence

- Recommandation 16-01 de la Commission internationale pour la conservation des thonidés de l'Atlantique (CICTA) sur un programme pluriannuel de conservation et de gestion pour les thonidés tropicaux ;
- Recommandation 10-09 de la Commission Internationale pour la Conservation des Thonidés de l'Atlantique sur les prises accessoires de tortues marines et, en particulier, l'alinéa 2.a ;
- Recommandations 05-05, 10-07 et 11-08 de la Commission Internationale pour la Conservation des Thonidés de l'Atlantique relatives à la conservation des requins ;
- Directives visant à réduire la mortalité des tortues de mer liée aux opérations de pêche adoptées par la FAO, lors de la 26e session du COFI en mars 2005.

### II - Champ d'application

Ce plan de gestion des DCP est applicable aux thoniers senneurs immatriculés dans un port français et opérant dans les eaux des océans Atlantique, Indien ou Pacifique ainsi que des navires de soutien utilisés dans le cadre d'une activité de pêche thonière.

Par conséquent, le plan de gestion ne porte que sur des DCP dérivants. Ces DCP sont déployés en pleine mer. Aucune interaction avec d'autres engins de pêche d'autres flottille ni conflits d'usage n'ont été observés à ce jour.

### III - Définitions

**Activité de pêche :** Toute activité en relation avec le fait de localiser le poisson, de mettre à l'eau, de déployer, de traîner ou de remonter un engin de pêche, de ramener les captures à bord, de transborder, de conserver à bord, de transformer à bord, de transférer, et de débarquer des poissons et des produits de la pêche ;

**Balise :** Dispositif électronique servant à la localisation et au suivi d'un DCP.

**Balise active :** conformément à la résolution 17/08 de la CTOI, une bouée est considérée comme active lorsqu'elle a été allumée et déployée. Une bouée désactivée ne peut être réactivée que lorsqu'elle se trouve à bord du senneur qui en est propriétaire ou d'un navire de soutien.

**Dispositif de concentration de poissons (DCP) :** Objet flottant et dérivant, naturel ou artificiel, déployé ou utilisé par un navire de pêche dans l'objectif d'agrégéer des bancs de thonidés ciblés en vue de leur capture à la senne. Les activités liées aux DCP sont : le déploiement/mise à l'eau, la pose d'une balise pour suivre la trajectoire du DCP (qu'il soit déployé ou simplement trouvé par le navire, la pêche des bancs agrégés sur DCP, la visite, la maintenance et la réparation d'un DCP et le retrait de l'eau ;

**Dispositif de concentration de poissons traçable (DCPT)** : Objet flottant et dérivant, naturel ou artificiel, équipé d'une balise permettant sa localisation et son suivi et modifiant donc sensiblement la stratégie et l'effort de pêche d'un navire. Les activités liées aux DCPT sont les mêmes que celles liées aux DCP avec en plus la pose, l'échange ou le retrait d'une balise pour suivre la trajectoire du DCP ;

**Navire de pêche** : Tout navire équipé en vue de l'exploitation commerciale des ressources aquatiques vivantes ;

**Navire de soutien** : Tout navire venant assister le navire de pêche dans ses activités de pêche. Le navire de soutien n'est pas équipé d'engin de pêche.

#### IV - Objectifs

Le plan de gestion français des DCP vise donc 3 objectifs :

- **Amélioration de la connaissance de l'activité de pêche sur DCP :**

Une connaissance plus approfondie de cette pratique de pêche permettra de mieux en évaluer les impacts potentiels et de définir les mesures de gestion les plus appropriées. Dans cette perspective, le champ des informations saisies par les capitaines des navires et relatives à l'activité sur DCP de manière spécifique sera accru et rendu systématique.

En plus de la précision du type de DCP pêché (épave naturelle, radeau artificiel, DCP « classique » ou « non-maillant ») déjà renseignée, les informations relatives à la mise à l'eau, la récupération ou le transfert/modification de DCP seront collectées au travers d'un module « DCP » du journal de bord électronique (ERS) adapté à la pêche thonière et aux obligations des ORGP. Ces données présentent un intérêt majeur pour les évaluations scientifiques car elles permettent de mieux quantifier l'effort de pêche des senneurs et ainsi d'améliorer les évaluations de stocks et peuvent être facilement croisées avec les informations rapportées par les observateurs scientifiques.

Par ailleurs, le nombre de balises activées/désactivées par navire fait l'objet depuis le 1<sup>er</sup> janvier 2010 de déclarations trimestrielles par les fournisseurs de balises. Ces déclarations sont donc indépendantes des capitaines et des armements. Deux niveaux de contrôle peuvent être mis en place par l'autorité compétente. D'une part, au niveau des fournisseurs de bouées (Chaque identifiant INMARSAT ou IRIDIUM est affecté à un navire (ou plusieurs navires dans le cas de bouées partagées). L'identification du(es) navire(s) propriétaire(s) est contrôlable auprès de chaque fournisseur de bouées). Et, d'autre part, au niveau des fournisseurs de communications par satellites (Pour permettre les transmissions des informations de la bouée par satellite (positions/messages sondeurs) chaque fournisseur de bouées doit réaliser pour son client une activation de l'émetteur de la bouée).

- **Limitation de l'utilisation des DCP :**

Pour les armements français, la principale mesure de gestion permettant d'encadrer la pêche sur DCP est celle d'une limitation de l'utilisation des DCP. Cette limitation doit s'appliquer aux balises associées aux DCP (environ 90% des coups de senne réalisés sous objet concernent des radeaux ou des épaves naturelles déjà rencontrées équipés de balises).

Le propriétaire d'un DCP est le bateau qui reçoit la donnée communiquée par la balise associée à ce DCP.

Ces balises étant suivies par satellite, la manière la plus efficace et la plus précise de connaître le nombre réel de radeaux déployés en mer est donc de recourir aux données fournies par celles-ci (notamment les informations sur l'activation et la désactivation de ces balises). Un système basé sur une déclaration systématique des balises utilisées allié à un mécanisme de type « numerus clausus » a donc été mis en place par les armements.

- **Réduction des impacts potentiels des DCP sur l'écosystème :**

Outre la réduction des impacts potentiels résultant de la limitation du nombre de DCPT, le plan de gestion intègre également des dispositions de nature plus qualitative résultant d'expérimentations ou de recherches complémentaires dans les domaines suivants : adoption de bonnes pratiques (remise à l'eau des tortues emmaillées par exemple), amélioration de la sélectivité (DCP non maillant, « turtle/shark free FAD »), adaptation de la stratégie de recherche du poisson, identification de la taille des poissons par échointégration sur les sondeurs latéraux...

Compte tenu de leur niveau d'utilisation, le plan de gestion français des DCP ne prévoit pas pour le moment d'encadrement des navires de soutien qui permettent pour chaque navire en disposant de gérer un parc de DCP et de multiplier le déploiement et le suivi des DCPT.

## **V - Mesures de gestion**

### **Identification et marquage des DCP**

Tout DCPT mis à l'eau par un thonier senneur français est identifié au moyen du numéro de série de la balise qui lui est associée. Celui-ci doit être visible sans avoir à démonter la balise et doit être conçu pour résister au séjour de la balise dans l'eau de mer et rester lisible durant la durée de vie de la balise.

Les DCP dont l'utilisation est autorisée par ce plan de gestion ne représentent pas un danger pour la navigation maritime. Par conséquent, il n'est pas nécessaire d'y associer un réflecteur radar.

### **Registre et suivi des balises**

Le capitaine du navire ou l'armement tient un registre spécifique des balises utilisées par le navire dans lequel est référencée chaque balise :

- Son numéro de série ;
- Le ou les navires disposant des informations de localisation de cette balise ;
- La marque et le type de balise ;

L'utilisation des DCPT fait l'objet d'un suivi au moyen d'états trimestriels produits par les fournisseurs des balises utilisées pour tracer leurs DCP. Cet état trimestriel établit le nombre de balises actives en début de période, le nombre de balises activées pendant le trimestre, le nombre de balises désactivées pendant le trimestre, le nombre de balises actives en fin de période et le nombre de balises ayant émis pendant le trimestre.

A des fins de recherche scientifique et à des fins statistiques, ces données ainsi que les enregistrements de position des balises pourront être transmises aux instituts scientifiques

et aux organismes de gestion des pêches compétents, dans le respect des conditions de confidentialité.

### **Enregistrement des activités liées aux DCP**

Le capitaine d'un navire de pêche ou d'un navire de soutien enregistre sur le livre de bord les activités suivantes :

- Déploiement/mise à l'eau de tout DCP
- Retrait de tout DCP
- Visite avec ou non manipulation (entretien/échange) de tout DCP

Pour chacune de ces activités, les informations collectées sont les suivantes

- Date et heure ;
- Position (latitude, longitude) ;
- Type de DCP (épave naturelle, d'origine anthropique, radeau artificiel, « classique » ou « non-maillant ») avec si nécessaire une courte description (tronc d'arbre, tas de paille, bidon, corde, ...) ;
- Numéro de la balise associée s'il s'agit d'un DCPT ;
- Numéro de balise retirée s'il s'agit d'un DCPT lorsque la balise appartenait au navire sinon la mention « balise d'un navire tiers » ;
- Observations éventuelles de requins ou de tortues maillés lorsque le DCP présente des parties faites de filets.

En plus des informations listées ci-dessus, le capitaine d'un navire de pêche enregistre également sur le livre de bord pour chaque opération de pêche sur un DCP les informations suivantes (en partie déjà prévu par la réglementation en vigueur) :

- Lorsqu'il s'agit d'un DCPT, si la balise lui appartient où s'il s'agit d'une balise d'un navire tiers ;
- Les tonnages capturés par espèce (thons ciblés ou captures accessoires) ;
- Les quantités éventuelles de rejet

A des fins de recherche scientifique et à des fins statistiques, les informations relatives aux activités des DCP communiquées par les capitaines des navires sont transmises aux instituts scientifiques et aux organismes de gestion des pêches compétents, dans le respect des conditions de confidentialité définies par les conventions en vigueur.

### **Limitation du nombre de DCPT**

Le plan fixe une limite moyenne de 300 DCP déployés par navire et par armement.

A tout moment, les navires restent soumis aux limites individuelles de DCP fixées la CICTA.

Le nombre de balises actives d'un navire à un moment donné correspond à la somme :

- du nombre de balises propriétaires actives, et
- du nombre de balises communes (activées par un navire de pêche ou un navire de soutien) divisée par le nombre de thoniers associés.

Ces dernières ne pouvant pas faire l'objet d'un contrôle indépendant, l'usage de balises HF est prohibé depuis le 30 juin 2012.

Les capitaines des navires et leurs armements continueront à mettre en œuvre toutes les mesures utiles visant à empêcher ou limiter la perte en mer de DCP.

### **Mesures d'atténuation des effets des DCP sur l'environnement**

Toute action visant à améliorer la sélectivité des senneurs lorsqu'ils pêchent sous objet est encouragée afin de limiter les rejets et en particulier les prélèvements de juvéniles et de petits individus d'espèces ciblées ou les captures accidentelles d'espèces non ciblées (avec une attention particulière portée aux espèces sensibles comme les requins).

Les armements mettent à la disposition des équipages l'information nécessaire à la réalisation de DCP entraînant un risque de maillage très faible voire nul pour les tortues et les requins et fournissent les navires en matériaux permettant de réaliser ces DCP. Les armements entretiennent depuis le 1<sup>er</sup> janvier 2014 des ateliers de confection de DCP non-maillants dans chacun des ports d'attache des senneurs français (Abidjan en Côte d'Ivoire, Seychelles et Ile Maurice). Les DCP utilisés par la flottille soumise au présent plan de gestion sont conçus :

- pour éliminer tout maillage de requins ou de tortues,
- pour éviter de représenter un risque pour la navigation.

Les armements travaillent à mettre au point des DCP biodégradables afin de limiter les effets de leur déploiement sur l'environnement, même lorsque ceux-ci sont perdus.

Il est interdit aux navires de pêche ainsi qu'aux navires de soutien de mettre à l'eau tout DCP non conçu pour réduire à zéro le risque de maillage des tortues et des requins.

Ces mesures sont applicables pour toute la durée de ce plan de gestion.

### **Mesures de préservation des requins (principalement associés aux DCP)**

Les armements encouragent les équipages à mettre en œuvre les moyens de remise à l'eau vivants de requins qui leur semblent les plus efficaces et les moins dangereux pour les marins, à mettre au point des procédures standards pour les différents types de captures (gros requins, petits requins, raies manta, requins baleine) et à les diffuser entre eux.

Les armements demandent aux équipages de faciliter le travail des scientifiques embarqués visant à marquer des requins avant leur remise à l'eau vivant afin d'évaluer leur taux de survie.

Les armements mettent à la disposition des équipages l'information et la formation nécessaire à l'amélioration des pratiques de remise à l'eau vivant des requins capturés par la senne dans des conditions de sécurité optimales pour les marins et fournissent les navires en dispositifs de manipulation et de remise à l'eau des requins et raies.

### **Utilisation des navires de soutien**

En l'absence de recommandation de la CICTA en la matière, les armements s'appliquent à respecter la résolution 16-01 de la CTOI qui limite le nombre de navires de soutien à deux navires pour cinq senneurs.

## **VI - Mesures de confidentialité des informations liées à la pêche sur DCP**

Toutes les informations rapportées conformément au présent plan de gestion doivent être traitées de manière confidentielle et ne pourront être utilisées qu'à des fins scientifiques, statistiques et/ou de contrôle et surveillance. Toute autre utilisation de ces informations devra obtenir le consentement de l'armement du navire.

## **VII - Durée et révision du plan de gestion**

Le présent plan de gestion est applicable depuis le 1<sup>er</sup> janvier 2018.

**Plan de gestion des Dispositifs de concentration des poissons (DCP)**  
**SENEGAL**  
**(Provisoire)**

**Introduction :**

Le présent plan de gestion des DCP est élaboré dans le cadre de la mise en œuvre de la recommandation 16-01 de L'ICCAT portant plan pluriannuel de gestion et de conservation des thonidés tropicaux.

Le présent plan s'applique aux senneurs et canneurs de pavillon sénégalais et utilisant des DCP et des dispositifs électroniques accessoires associés dans leurs activités de pêche.

**1. Objectifs :**

Le plan de gestion vise les objectifs suivants:

- Améliorer les connaissances scientifiques sur la pêche sous DCP ;
- Encadrer l'utilisation des DCP et des dispositifs électroniques associés;
- Atténuer les impacts des DCP sur les juvéniles de thonidés ciblés, sur les espèces non ciblées et les écosystèmes.

**2. Description du DCP et des dispositifs associés:**

Les dispositifs de concentration de poissons sont définis comme tout objet flottant naturel ou artificiel équipé d'accessoire électronique ou non utilisé pour concentrer des thons à des fins de pêche.

Les DCP utilisés par les canneurs et senneurs sont des DCP amarrés (DCPA) ou des DCP dérivants (DPCD) naturels ou artificiels. Ils peuvent porter des marques d'identification lisibles et/ou porter un dispositif électronique (GPS, échosondeur, transmetteur de satellite...) permettant de repérer la position du DCP.

Les balises et bouées associées aux DCP doivent porter les numéros de série lisibles aux fins d'identification.

**2. Mesures de gestion :**

**Enregistrement des informations sur les DCP :**

**Informations sur les DCP :**

Le déploiement de DCP est soumis à information du Ministère chargé de la pêche selon les modalités fixées dans l'annexe 1 du présent plan de gestion.

Les capitaines de navires tiennent à bord un journal DCP mentionnant les informations sur les activités de pêche et les opérations de déploiement et d'utilisation des DCP selon le modèle figurant à l'annexe 1.

Ces informations sont les suivantes:

- La Marque du DCP
- Le N° de la balise
- Le Type de DCP
- Le Type de visite
- La Date et l'Heure
- La position
- Les Prises estimées
- Les Prises accessoires

**Informations sur les balises acquises :**

Les armateurs sont tenus de tenir à jour un registre des balises acquises et d'informer trimestriellement l'Administration des pêches compétente de la liste des DCP déployées à l'exception de celles rencontrées fortuitement et des balises acquises au cours de l'année.

## **Mesures de Réduction des prises accessoires :**

### **Conception des DPC**

Les structures de conception des DCP sont libres mais doivent respecter les exigences minimales d'éclairage et de présence de dispositifs permettant de visualiser le DCP tels que des réflecteurs radars et porter des marques et identifiants du DCP. Les dispositifs électroniques, radiobalises, balises échosondeurs et transmetteurs par satellite doivent porter des marques et des identifiants.

La structure superficielle du DCP ne devrait pas présenter un risque d'emmèlement des espèces accessoires. A cet effet elle ne devrait pas être couverte ou si c'est le cas elle devrait être couverte uniquement d'un matériel présentant un risque minimum d'emmèlement des espèces accessoires.

Les éléments de sub-surface devraient être exclusivement composés de matériel non emmélant (p.ex. cordes ou toile).

L'utilisation de matériel biodégradable devrait être privilégiée autant que possible.

### **Mesures de mitigation :**

L'utilisation de bouées devrait limiter autant que possible les prises accessoires accidentelles d'espèces autorisées et d'espèces non autorisées.

Pour gérer les interactions avec les autres engins tels que les palangres, le déploiement des DCP tient compte de la présence de palangres dans la zone de déploiement.

Une distance minimale entre les DCP est de 3 miles marins.

### **Pertes des DCP :**

Les armateurs doivent prendre toutes les mesures pour prévenir les pertes de DCP et doivent autant que possible s'atteler à leur récupération le cas échéant.

### **Zone et période de fermeture:**

En référence à la recommandation 16-01 de l'ICCAT, le déploiement de DCP est formellement interdit dans la zone délimitée par les parallèles 4°/latitude Sud et 5°/latitude Nord et le méridien 20°/longitude Ouest et la côte africaine du 1<sup>er</sup> janvier au 28 février de chaque année.

Le nombre maximum de balises activées en même temps ne peut dépasser 500 pour chaque navire.

### **3. mise en œuvre du plan de gestion :**

#### **Responsabilités institutionnelles:**

La Direction des pêches maritimes assure la coordination de la mise en œuvre et le suivi du plan de gestion des DCP. Les aspects opérationnels liés à la gestion des DCP notamment le contrôle en mer, au port sont assurés par la direction de la Protection et de la Surveillance des pêches. Le Centre de recherche océanographiques de Dakar- Thiaroye assure le conseil scientifique pour la mise en œuvre et le suivi du plan de gestion.

### **4. Confidentialités des informations :**

Les informations fournies par les armateurs dans le cadre de ce plan de gestion sont protégées et ne peuvent être utilisés qu'à des fins scientifiques et de gestion de la pêche.

### **5. Période applicable, suivi et révision du plan de gestion :**

Le présent plan de gestion est applicable pour trois (3) ans et pourrait faire l'objet de révision si des informations nouvelles sont disponibles.