

INDIAN OCEAN TUNA COMMISSION

**DEVELOPMENT OF HARMONIZED TERMS AND
DEFINITIONS FOR IOTC CONSERVATION AND
MANAGEMENT MEASURES**

FinalReport

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Acronyms and abbreviations

AFV	Authorized Fishing Vessel
CMMs	Conservation and management measures
CoC	Compliance Committee
CPCs	Contracting Parties and Cooperating non-Contracting Parties
EEZ	Economic Exclusive Zone
FADs	Fish Aggregating Devices
FOC	Flag of Convenience
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IOTC	Indian Ocean Tuna Commission
MCS	Monitoring, Control and Surveillance
NAFO	Northwest Atlantic Fisheries Organization
PSMA	Port State Measures Agreement adopted in 2009
RFMO	Regional Fisheries Management Organization
SC	Scientific Committee
UNFSA	United Nations Fish Stocks Agreement adopted in 1995
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission

INTRODUCTION

The Indian Ocean Tuna Commission (IOTC) is an intergovernmental organization established under article XIV of the FAO Constitution. The Agreement for the establishment of the IOTC (IOTC Agreement) was adopted in 1993 and came into force in 1996. The IOTC is responsible for the management of tuna and tuna-like species in the Indian Ocean with primary objective the conservation and optimum utilization of the stocks and long-term sustainability of fisheries based on these stocks. In order to achieve this objective, the IOTC is mandated *inter alia* to adopt, in accordance with article IX of the IOTC Agreement and on the basis of scientific advice, conservation and management measures (CMMs). These measures may be either binding on IOTC Member States (Resolutions)¹ or non-binding (Recommendations).²

The first CMMs were adopted in 1998 at the third annual session of the Commission. Since then new CMMs have been adopted every year by the Commission at its annual meeting.³ For several years CMMs were compiled and published on the IOTC website as a Collection of Resolutions and Recommendations by IOTC. All recommendations and resolutions were reproduced in chronological order, including those that were no longer relevant or that had been superseded by later recommendations or resolutions. Over time, with the growing number of resolutions and recommendations, the need to improve the coherence and clarity of the body of IOTC CMMs was recognized. In 2011, the Commission adopted a Resolution calling for the establishment of a Working Group of interested Contracting Parties and Cooperating non-Contracting Parties to consider the development of a Compendium of IOTC Resolutions and Recommendations. In particular, this Working Group was tasked to: a) reflect on the most appropriate structure for this Compendium; b) suggest alterations of an editorial nature to improve the structure and/or drafting of the text and remove inconsistencies and redundancies; and c) recommend a process for the incorporation of new decisions taken by the Commission in the compiled text.⁴ Pursuant to this decision, a study to review the CMMs and recommend structural options for a compendium was completed with the support of the SmartFish Program. This study also includes recommendations on areas to be updated and harmonized. Based on the findings and recommendations of this study, the Commission decided to publish a Compendium of Active Conservation and Management Measures for the Indian Ocean Tuna Commission, with CMMs arranged in a reverse chronological order. By removing all CMMs that had been superseded, those that had been replaced without being formally superseded and those that were no longer relevant because they had fulfilled their purpose or were obsolete, the Compendium has contributed significantly to clarify the current state of IOTC CMMs.⁵

For many years, IOTC CMMs were regarded as a collection of juxtaposed measures rather than a set of interrelated regulations. As a result, little attention was paid to ensure the coherence and consistency of the terminology used throughout IOTC CMMs. Over the years, this has created uncertainty and confusion with respect to the meaning of certain terms and affected the good and uniform comprehension of certain CMMs by leaving room for interpretation. This issue was raised by an increasing number of Contracting Parties and Cooperating non-Contracting Parties (CPCs). At its eighteenth session, the Commission noted confusion among many CPCs regarding the lack of a clear definition of the term “fishing vessels” and agreed that the Compliance Committee (CoC) should

¹ Where adopted by a two-thirds majority of Members present and voting (article IX, paragraph 1, of IOTC Agreement)

² Where adopted by a simple majority of Members present and voting (article IX, paragraph 8, of IOTC Agreement)

³ No CMMs were adopted in 2004 since the Commission did not hold an annual meeting that year.

⁴ See Resolution 11/01 regarding consolidation of IOTC Resolutions and Recommendations.

⁵ See Resolutions 13/01 and 14/01 on the removal of obsolete conservation and management measures. The former was superseded by the latter.

develop a recommendation for a clear definition for the terms or expressions “fishing vessels”, “fishing” and “fisheries related activities”.⁶ At the same annual meeting, certain CPCs expressed concerns on many issues related to the implementation of the Regional Observer Programme and requested, among other things, the Commission to establish clearer definitions.⁷ This was captured in the CoC’s recommendation stipulating that “there should be a requirement for all Conservation and Management Measures to use a set of clear definitions” and directing the so-called Compendium Working Group to develop definitions of key terms to be posted on the IOTC website and incorporated in the Compendium of CMMs.⁸

The overall objective of this study is to ensure the global coherence, enhance the comprehension and facilitate the effective implementation of IOTC CMMs, by providing clear definition to the key terms used. More specifically, the objectives of this study are fourfold: a) evaluate the consistency of all key terms used in existing CMMs, bearing in mind the context of their application; b) propose definitions for the key terms used without affecting the spirit of the CMMs; c) identify CMMs where there are lack of clarity in use of terms, responsibilities and reporting timeline inconsistency; and d) create a glossary of the terms and their definitions that can be incorporated into the IOTC website.

This document first describes the methodology underpinning the work undertaken under this project. It then examines each IOTC CMM so as to identify existing definitions of key terms and detect terms that may require to be defined to ensure the good comprehension and facilitate the effective implementation of IOTC CMMs. It analyses and discusses each identified term and provides recommendations on the wording of the definitions and on whether or not these terms should be included in the IOTC Glossary of Terms. Finally, it makes some suggestions with respect to the way forward.

2. Methodology

The study focused primarily on the Compendium of active CMMs as published on the IOTC website on 10 September 2015.⁹ Consultation of deleted or superseded CMMs was made to check if specific terms had been defined therein and to better understand the context of, or rationale underlying, certain measures. Where terms or expressions were not defined and there was uncertainty as to the meaning of a particular term or expression, one had to revert to the CMM where it was first introduced to examine whether it provided information or evidence on its intended meaning (e.g. flag of convenience vessels).

Since no list of key terms and definitions had been established, the first task was to catalogue the terms that had already been defined in the CMMs by reading carefully through each active resolution and recommendation. While doing so, note of other terms that were frequently used throughout the CMMs or that were thought to be important to the good comprehension of the CMMs was taken down to assess, at a later stage, whether or not they should be regarded as potential key terms and be provided with a definition. Upon completion of that task, lists of defined key terms and other frequently used or important terms were put together (See tables 1 and 2 in Annex 1). These lists were then assessed against the following instruments:

⁶ IOTC-2014-S18-R[E], paragraph 65, at p. 16. See <http://www.iotc.org/documents/report-eighteenth-session-indian-ocean-tuna-commission>

⁷ IOTC-2014-S18-R[E], paragraph 158, at p. 27. See <http://www.iotc.org/documents/report-eighteenth-session-indian-ocean-tuna-commission>

⁸ Recommendation CoC11.11 in IOTC-2014-S18-R[E], Appendix IX, at p. 61. See <http://www.iotc.org/documents/report-eighteenth-session-indian-ocean-tuna-commission>

⁹ See <http://iotc.org/cmm>

- a) the glossary that was drawn up to assist in the transposition of IOTC requirements into Contracting Parties' national legislation and is reproduced in Annex 2.¹⁰ This glossary was provided for use as a reference that provides a best practices basis for reviewing and as appropriate amending the use of terms in national laws (hereinafter referred to as "best practices glossary").¹¹ It also incorporates relevant definitions used in international fisheries instruments. Terms included in this glossary were reviewed one-by-one to assess their relevance in the context of this particular undertaking. It should be noted that the terms that were applicable only in the context of national laws have not been taken into consideration;
- b) the terms and definitions used in the CMMs of other tuna Regional Fisheries Management Organizations (RFMOs), in particular the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Inter-American Tropical Tuna Commission (IATTC) and the Western and Central Pacific Fisheries Commission (WCPFC);¹²
- c) the terms and definitions found in the main binding international fisheries instruments, namely, the 1993 Compliance Agreement, the 1995 United Nations Fish Stocks Agreement (UNFSA), and the 2009 Port State Measures Agreement (PSMA);¹³ and
- d) the IOTC Glossary of scientific terms, acronyms and abbreviations that is published on the IOCT website and used by the Scientific Committee (SC).¹⁴

Existing IOTC definitions were compared to the definitions of the same terms in the instruments and documents mentioned above to determine which wording would be the most appropriate in the IOTC context, and taking into consideration international best practices. For important terms that were not already defined in the IOTC CMMs, but whose inclusion in the IOTC Glossary of terms was thought to be relevant, definitions were assessed against those found in the instruments mentioned above and international best practices and adapted to the IOTC context, where required. Pursuant to this assessment, a list of key terms to be included in the IOTC Glossary of Terms was established (See table 5 in Annex 5).

Careful review of each active IOTC CMM allowed for the detection of inconsistencies and redundancies in the use of terms, both within individual CMM and throughout the body of CMMs. These inconsistencies and redundancies were documented and discussed and corrective measures were proposed to rectify them (see sections 3 and 4 below).

3. Review of IOTC CMMs

This section summarizes the main findings stemming from the review of each individual CMM and is, for ease of read, supported by a series of tables and other documents appended to this study. Detailed findings for each CMM are not reproduced in this section but can be found in Annex 4.

¹⁰ IOTC, Legislative framework, Review of active IOTC Resolutions and draft provisions for incorporation of IOTC Resolutions into national legislative frameworks, Part 2, at p. 5, 2015.

¹¹ See Annex 2.

¹² See table 3 in Annex 3. For the WCPFC, it also includes definitions found in article 1 of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean adopted in 2000.

¹³ See table 4 in Annex 3.

¹⁴ See www.iotc.org and click on the IOTC Science Glossary link in the quick links box on the home page.

3.1 Review of existing key terms and definitions

3.1.1 Catalogue of key terms

To date, thirty terms have been defined in active IOTC CMMs (see table 1 Annex 1). These terms can be divided into four broad categories:

a) generic or core terms:

authorized fishing vessel (AFV), CPCs, fish, fishing, fishing related activities, IUU fishing, IUU fishing activities, port, and vessel;

b) technical terms (related to gear, fisheries or vessels):

abandoned FADs, artisanal fisheries, coastal fisheries, configured, data buoys, fish aggregating device (FAD), improperly documented, instrumented buoys, large-scale driftnets, large-scale-fishing vessels, large-scale tuna vessels, longline fisheries, surface fisheries and unfit for human consumption;

c) scientific terms:

BMSY, FMSY, harvest control rules, limit reference points, and target reference points;

d) Monitoring, control and surveillance (MCS) terms:

field sampler and observer.

There is **no consistent approach in the way the definitions of these terms were introduced** in the IOTC CMMs. Some were introduced through brackets next to the term they define (e.g. large-scale tuna vessels), or a footnote (e.g. coastal fisheries, longline fisheries, surface fisheries) and others through a specific paragraph at the beginning of a CMM (e.g. fish, fishing, fishing related activities) or in a paragraph in the body of a CMM (e.g. instrumented buoy). It should be noted that the approach used in Resolution 10/11, which contains an entire paragraph dedicated to the use of terms providing for the definitions of six terms under the heading “General provisions”, is an exception as it has not been used in any other CMM. This approach is modelled after the PSMA.

The **scope of application** of these definitions is not always clear. While it is expressly specified for some of them that they were intended to apply to a specific CMM only,¹⁵ no particular indication is provided for others.¹⁶ As a result, one may wonder whether it should be inferred from the absence of any information on the scope of application of a definition that this definition is to be construed as being of global application throughout IOTC CMMs. Considering that little attention was paid to ensure the coherence of the definitions of terms throughout IOTC CMMs, this interpretation is unlikely. No record was found to back up such an approach. Therefore, this omission is probably the result of a lack of rigor in the formulation of IOTC CMMs. Furthermore, it is noteworthy that the scope of the definitions of the terms “fish”, “fishing”, “fisheries related activities”, “IUU fishing”, “port” and “vessel” is restricted to Resolution 10/11 in spite of their falling into the category of core and generic terms.

3.1.2 Other frequently used or important terms

¹⁵ See for instance the wording of Resolution 15/02, paragraph 2, which provides that “[T]his Resolution defines an instrumented buoy as a buoy with a clearly marked reference number allowing its identification and equipped with a satellite tracking system to monitor its position”.

¹⁶ Consult the column on reference/scope of table 1 in Annex 1 of this document.

Pursuant to the review of the active IOTC CMMs, an additional twenty-six terms have been identified as potential key terms (see table 2 in Annex 1). The list was established on the basis of two criteria: (a) the frequency of their use; and (2) their importance to ensure the good comprehension of the IOTC CMMs.

Using the same classification as in section 3.1.1 above, these terms can be divided in four categories:

a) generic and core terms:

captain, fishing vessel,¹⁷ flag of convenience, IOTC Agreement, IOTC Area of competence, IOTC Record of Fishing Vessels, IUU fishing vessel, master and operator;

b) technical terms (related to gear, fisheries or vessels):

artisanal fishing, artisanal fishing vessel, auxiliary vessel, cargo vessel, carrier vessel, mother ship, supply vessel, support vessel and tender vessel;

c) scientific terms:

bycatch and discard;

d) MCS terms:

aircraft, IOTC observer, (fishing) logbook, scientific observer, vessel monitoring device, vessel monitoring system (VMS).

3.1.3 Inconsistencies, recurrence and improper use of terms¹⁸

As a general rule, there is a lack of rigor and consistency in the use of terms within individual CMMs and throughout the body of CMMs. This shortcoming affects the good and uniform comprehension of the CMMs and leaves room for interpretation. As a result, CPCs may have a different understanding of some CMMs, which, in turn, may undermine the effectiveness of their implementation.

While this section provides an overview of the various types of inconsistencies found in the body of active IOTC CMMs, one should refer to the analysis of each individual CMM provided in Annex 4 for more details.

The following **inconsistencies** have been detected when reviewing the body of active IOTC CMMs:

- a) Lack of consistency and rigor in the wording of the terminology used to refer to the same term, expression, notion or concept, for instance:
- the expressions “IOTC Record of Fishing Vessels”, “IOTC Record”, “IOTC Record of Authorized Vessels” and “IOTC Record of Vessels” have been used to refer to the IOTC Record of fishing vessels established by Resolution 15/04;
 - the expressions ““IOTC area of competence”, “area of competence” and “IOTC Convention area” have been used to refer to the IOTC area of competence defined under Article II of the IOTC Agreement;

¹⁷ This term could have fallen in the category of technical terms but in view of its importance for the good comprehension of the IOTC CMMs it has been placed in the category of generic or core terms.

¹⁸ This section covers both terms that have been defined in the IOTC CMMs and those that have been identified as potential key terms.

- the terms “carrier vessel” and “receiving carrier vessel” were used to designate the vessel on the receiving end of a transshipment operation under Resolution 14/06;
 - the expressions “vessel monitoring device”, “satellite-tracking device”, “satellite monitoring device” and “VMS” have been used to refer to VMS equipment to be fitted on board fishing vessels;
- b) Distinct terminologies are used for designating the same term, concept or notion (interchangeable terms), for instance:
- the terms “supply vessel”, “support vessel” auxiliary vessel” and “tender vessel” have been used together or separately to refer to any vessel supporting fishing operations and in particular assisting any purse seiner in the deployment, monitoring and retrieving of drifting FADs;
 - the terms “master” and “captain” are used to refer to the person in charge of a vessel;
- c) Several terminologies are used for referring to closely-related terms, notions or concepts without making clear whether the use of these different terminologies is intended to convey distinct meanings, or whether it merely reflects a lack of rigor in the wording of the CMMs, for instance:
- The terms “observer”, “scientific observer” and “IOTC observer” are used to refer to the notion of observer. However, it is unclear whether these three terms are interchangeable or whether they have different meanings;
- d) The same term may have a different meaning in different CMMs, for instance:
- The term “artisanal fisheries” is synonymous to “coastal fisheries”, that is fisheries other than longline or surface fisheries as defined in Resolution 15/02, whereas it has clearly a different meaning in Resolution 13/04 and Resolution 13/05 where it is used to exclude local fishing vessels (artisanal or not) operating exclusively within their flag State’s economic exclusive zone (EEZ) from the scope of these resolutions. In Resolution 13/06, it differs slightly from the meaning under Resolutions 13/04 and 13/05 as it refers to fishing vessels operating exclusively within their flag State’s EEZ for the purpose of local consumption (subsistence fishing);

The lack of definitions of key terms has led to the **recurrence** of some definitions in different CMMs, particularly the systematic repetition of the meaning of the acronym “CPCs” (referring to Contracting Parties and Cooperating Non-Contracting Parties) in virtually every IOTC CMM.

Some terms have been used **improperly**, notably:

- a) the concept of “flag of convenience” (or its acronym “FOC”) has been used improperly in Resolution 99/02 in lieu and place of the term “IUU” and also to designate vessels flying the flag of a non-CPC operating in the IOTC area of competence.¹⁹ This concept refers generally to flag States, which keep an open registry and/or do not or are not willing to exercise control over vessels flying their flags thus allowing them to not comply with applicable rules of national and/or international law;
- b) the expression “IUU fisheries” used in the preambles of Resolutions 15/04 and 14/05 in lieu and place of the expression “IUU fishing”;

¹⁹ See further explanations under Resolution 99/02 in Annex 4.

- c) the expression “private access agreements” in Resolution 14/05 seems to refer to “individual licenses or authorizations” issued by a coastal State to foreign fishing vessels to operate within the waters under its jurisdiction instead of all access agreements concluded by the Government of the Flag State with a private entity such as a fishing company. Additionally, the terminology “private access agreement” is not used in international fisheries instruments or national laws.²⁰

Recommendations to rectify inconsistencies, recurrence and improper use of terms have been made in section 4. Additional recommendations have also been formulated in Annex 4 to address inconsistencies and improper use of terms that are specific to a particular CMM.

4. Analysis and Recommendations

This section examines and assesses the adequacy of the definitions of each term that has already been introduced in the active IOTC CMMs against the instruments listed in section 2 and international best practices and also takes into consideration the IOTC context. It also reviews the terms that were identified as potential key terms (see table 2 in Annex 1) to determine whether they should be retained as key terms in the IOTC Glossary of terms and if so, discuss which definition would be the most appropriate in the IOTC context by making use of the instruments mentioned in section 2. The terms and definitions are examined by category following the classification under section 3.

4.1 Generic or core terms

4.1.1 General considerations

Core terms are fundamental terms that needs to be clearly defined to ensure the good comprehension of IOTC CMMs and avoid misunderstanding or misinterpretation by CPCs. Their meaning is applicable throughout IOTC CMMs unless expressly specified otherwise for the purpose of a particular resolution or recommendation or any provision thereof.

For the purpose of this study, generic terms are those referring to areas, agreements, institutions, members or mechanisms that are commonly used in IOTC CMMs and whose wording should consistent throughout to avoid creating confusion or misunderstanding.

4.1.2 Existing definitions in IOTC CMMs

Nine core terms have been defined in IOTC CMMs, namely: authorized fishing vessel, CPCs, fish, fishing, fishing related activities, IUU fishing, IUU fishing activities, port, and vessel.

The terms “**fishing**” and “**fishing related activities**” are examined together due their close relationship. These definitions are drawn from the PSMA and where reproduced *verbatim* in Resolution 10/11. These two concepts are complementary and are defined *a contrario sensu*. The former defines the extent of the activities that should be regarded as fishing and include not only the harvesting or catching of fish but also any activity undertaken to search for, attract and locate fish prior to its being caught. By contrast, the latter refers to “any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transshipping or transporting of

²⁰ See further explanations under Resolution 14/05 in Annex 4.

fish that have not been previously landed at a port, as well as the provisioning of personnel, fuel, gear and other supplies at sea.” It is noteworthy that no reference is made to the deployment, monitoring and retrieving of drifting FADs, which is a common practice in the purse seine tuna fisheries in the Indian Ocean. Whether this activity should be regarded as a fishing activity or a fishing related activity is debatable and can be argued both ways. Indeed, it can be argued that it is a fishing activity as it is used to attract fish (and also to locate fish when used in conjunction with instrumented buoys or other electronic device). Conversely, it can be contended that it is a “fishing related activity” as it is an activity in preparation for fishing. National and international practice shows that the definition of the term “fishing” was interpreted broadly in the late 90s and early 2000s. For instance, the definition of that term in the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean is very broad and include any harvesting activity and supporting operations including the placing, searching for or recovering of FADs or associated electronic equipment (see table 3 in Annex 3). Since then, the notion of “related fishing activities” has been widely introduced in national legislation and international fisheries instruments alike and as a result the definition of the concept of “fishing” has been narrowed down as the definition in the PSMA demonstrates. One should also take into consideration that the deployment, monitoring and retrieving of FADs is carried out by supply or support vessels. Thus, it might be useful, in the context of IOTC, to dispel any ambiguity on this point by making clear that the deployment, monitoring or retrieving of drifting FADs is to be regarded as a fishing related activity.

The term “**IUU fishing**” refers to “**IUU fishing activities**” set out in Resolution 11/03. This term has been used 55 times throughout active IOTC CMMs either by itself or in conjunction with the terms “vessels” or “activities”. It is clearly intended as being of general application and thus should not be confined to Resolution 10/11. It is noteworthy that the concept of IUU fishing activities is adapted to the IOTC context.

A definition of the term “**fish**” is introduced in Resolution 10/11 and is applicable to that Resolution only. It appears that this Resolution has been closely modelled after the PMSA and that therefore there was a need to adapt some of its wording to the IOTC context. In other IOTC CMMs, the expression “tuna and tuna-like species” is commonly used (45 times) and is well understood. As a result, the introduction of a definition of the term “fish” in the IOTC Glossary of Terms does not seem to be warranted.

The notion of “**port**” introduced in Resolution 10/11 is drawn from the PSMA and reflects best international practice. The definition of this term should apply to all IOTC CMMs and thus should not be confined to the framework of that Resolution.

The abbreviation “**CPCs**”, which stands for Contracting Parties and Cooperating Non-Contracting Parties, is used throughout IOTC CMMs and its meaning is repeated in every CMM where it is used.

Recommendation 1

It is recommended to:

- (1) Keep the definition of the term “fishing” as it is;
- (2) Modify the definition of the concept of “fishing related activities” so as to include a reference to the deployment, monitoring and retrieving of drifting FADs (see table 5 of Annex 5);

- (3) Include both the terms “fishing” and “fishing related activities” in the IOTC Glossary of Terms, as these terms should apply throughout IOTC CMMs, unless expressly provided otherwise for the purpose of a particular resolution or recommendation or any provision thereof;
- (4) Introduce the definition of the concept of “IUU fishing” in the IOTC Glossary of Terms (see table 5 in Annex 5);
- (5) Not extend the scope of application of the definition of the term “fish” in Resolution 10/11 and to modify it so as to make a reference to species listed in Annex B of the IOTC Agreement (see table 6 in Annex 5);
- (6) Retain the definition of the term “port” unchanged and introduce it in the IOTC Glossary of Terms;
- (7) Include the abbreviation “CPCs” in the IOTC Glossary of Terms so as to avoid its meaning being repeated throughout IOTC CMMs.

While only the terms “**vessel**” and “**AFV**” have been defined in the IOTC CMMs, this paragraph will discuss all terms related to the term “vessel” which have been identified in the IOTC CMMs. They are the following: AFV, auxiliary vessel, carrier vessel, cargo vessel, fishing vessel, large-scale fishing vessels, large-scale tuna vessels, large-scale tuna longline vessels, mother ship, supply vessel, support vessel, and tender vessel. Before going any further in the analysis, it is useful to reproduce the definition of the term “vessel” in Resolution 10/11: *“any vessel, ship of another type or boat used for, equipped to be used for, or intended to be used for, fishing or fishing related activities”*. This definition is drawn from the PSMA and encompasses all vessels harvesting the fish and involved in fishing related activities.

As shown above, no less than 12 terms in relation to some type of vessels have been used in the IOTC CMMs. This has caused a great deal of confusion as it is unclear whether these terms have distinct meanings, overlap to some extent or are interchangeable. A closer look at this list reveals that these terms can be divided into two groups along the lines of the definition of the notion of “vessel” reproduced above; those relating to “fishing vessels” (vessels harvesting the fish) on the one hand and those involved in fishing related activities on the other. Five terms falls in the former group, namely, AFV, fishing vessel, large-scale fishing vessels, large-scale tuna vessels, and large-scale tuna longline vessels and seven in the latter group, auxiliary vessel, carrier vessel, cargo vessel, mother ship, supply vessel, support vessel and tender vessel.

With respect to the terms in the “fishing vessels” group, three of these terms are clearly used to refer to **large-scale fishing vessels**, that is vessels that are 24 meters in length overall (LOA) and above. In this regard, it would seem that, in the IOTC context, the terms “large-scale fishing vessels” and “large-scale tuna vessels” are synonymous. The term “AFV” refers to the vessels that are registered in the IOTC Record of Fishing Vessels (or the IOTC Record of Authorized Vessels). As for the term “**fishing vessel**”, though it has not been expressly defined, there is evidence, in a number of resolutions, that it is construed in a broad sense as including not only harvesting vessels, but also support and supply vessels as well as auxiliary vessels. As a result, it would appear that the term “fishing vessel” has a similar meaning to the term “vessel” as defined in Resolution 10/11.

As for the terms falling in the group of “vessels involved in fishing related activities”, it appears that the terms “**support vessel**” and “**supply vessel**” have been used consistently to designate vessels assisting purse seiners in the deployment and monitoring of FADs. In addition, these words have

been used interchangeably in similar sentences in different CMMs demonstrating that these two terms have the same meaning.²¹ The term **“tender vessel”**, which was introduced by Resolution 15/08, is used only once in relation to the use of drifting FADs. Likewise, the term **“auxiliary vessel”** has been used only once in Resolution 15/04 to mention that this type of vessels like support and supply vessels was to be regarded as a fishing vessel. In the absence of any specific provisions indicating otherwise, it seems fair to assume that the terms “support vessel”, “supply vessel”, “auxiliary vessel” and “tender vessel” have a similar meaning.

The other three terms in that latter group are **“carrier vessel”**, **“cargo vessel”** and **“mother ship”**. All of these terms have been used in the context of a specific Resolution. Though it has not been formally defined, the meaning of the term “carrier vessel” is clear and refers to vessels that are duly authorized by their flag State and have been entered by the IOTC Secretariat on the IOTC Record of Carrier Vessels to receive tuna and tuna-like species and sharks from large-scale tuna longline fishing vessels. These vessels fall in the broader category of vessels involved in fishing related activities.²² The terms “cargo vessel” and “mother ship” have been used only once in the context of Resolution 11/03 requiring that CPCs take all the necessary measures to prevent their cargo vessels and mother ships from participating in any transshipment with vessels on the IUU Vessels List. While there seems to be no need to define the term “mother ship”, the term “cargo vessel” however may require further clarification if it is to be used more broadly in IOTC CMMs. One should bear in mind that the definition of the expression “fishing related activities” covers the transportation of fish to its first point of landing. This means that further transport of fish (after landing) is not covered by this definition. Therefore, the notion of “cargo vessel” is at best partially captured by this definition or not at all if it is understood to refer to any vessel transporting any goods including fish or fishery products.

For sake of clarity, it would seem advisable to follow the approach adopted in the PSMA by providing a broad definition of the term “vessel” as including both harvesting vessels and vessels involved in fishing related activities. As indicated above, there is clear evidence that the term “fishing vessel” is also construed broadly in a number of resolutions. Therefore, to avoid any redundancy between the notion of “vessel” as defined in Resolution 10/11 and that of “fishing vessel”, one should move the definition of the term “vessel” in the IOTC Glossary of Terms and introduce a narrower definition of the term “fishing vessel” (as referring to harvesting vessels only) in the same Glossary.²³ A third term would then need to be introduced to cover all vessels involved in fishing related activities, which could be the term “supply vessel” as it is the most frequently used in IOTC CMMs. Additionally, the term “support vessel” could be kept to designate the vessels that are assisting fishing vessels in the tuna purse seine fishery using drifting FADs, in particular by deploying, monitoring, modifying and retrieving these FADs. Consequently, the terms “auxiliary vessel” or “tender vessel” would become superfluous and could thus be deleted. Some of these terms though could be kept in the context of a particular CMM should there be a need for it.²⁴

Recommendation 2

It is recommended to:

²¹ See table 2 in Annex 1 and comments under Resolution 15/02 in Annex 4.

²² See comments under Resolution 14/06 in Annex 4.

²³ Note that alternatively one could have opted to delete the term “vessel” and replace it by the term “fishing vessel” and supplement it with the terms “harvesting vessel” and “supply vessel”. While this approach would also have restored clarity between terms, it is however not fully consistent with the term “fishing”.

²⁴ See for instance the definition of the term “auxiliary vessel” in ICCAT Recommendation 14-04 in table 3 of Annex 3.

- (1) retain the definition of the term “vessel” as it is and to introduce it in the IOTC Glossary of Terms;
- (2) introduce a narrower definition of the term “fishing vessel” as referring to harvesting vessels in the IOTC Glossary of Terms (see table 5 in Annex 5);²⁵
- (3) replace the expression “authorized fishing vessel” by that of “authorized vessel” as vessels required to be registered in the IOTC Record of Authorized Vessels include not only fishing vessels but also vessels involved in fishing related activities;
- (4) modify the definition of the term “authorized vessel” by adding language providing that it also includes vessels authorized to carry out fishing relating activities in the IOTC area of competence and move it into the IOTC Glossary of Terms (see table 5 in Annex 5);
- (5) introduce a definition of the term “large-scale fishing vessel” in the IOTC Glossary of Terms (see table 5 in Annex 5). Consequently, the term “large-scale tuna vessels” could be deleted. Note that a definition of the terms “large-scale vessel” and/or “large-scale supply vessel” may also be introduced, should there be a need for it;
- (6) introduce a definition of the term “supply vessel” to refer collectively to any vessel involved in fishing related activities in the IOTC Glossary of Terms (see table 5 in Annex 5);
- (7) keep the term “support vessel” and introduce a definition of this term in the IOTC glossary (see table 5 in Annex 5). This term is intended to designate specifically vessels used to assist fishing vessels in the tuna purse seine fishery with use of drifting FADs (deployment, monitoring or retrieving of FADs). The terms “auxiliary vessel” or “tender vessel” should be deleted;
- (8) formally define the term “carrier vessel” in the context of Resolution 14/06;²⁶
- (9) not provide any definition for the terms “mother ship” and “cargo vessel” and to replace these terms by the generic term “supply vessel” in paragraph 16, point a), of Resolution 11/03. It should be noted that, hitherto, these terms have been used only once in the context of Resolution 11/03.

4.1.3 Potential key terms

Nine generic or core terms have been identified as potential key terms where reviewing each individual CMM, namely: captain, fishing vessel, flag of convenience, IOTC Agreement, IOTC Area of competence, IOTC Record of Fishing Vessels, IUU vessel, master and operator. Note that the term “fishing vessel” will not be considered under this section as it has already been discussed in section 4.1.2 above. As for the term “flag of convenience”, it is discussed in the context of Resolution 99/02 (see Annex 4).

As was mentioned in section 3.1.3 above, both the terms “**captain**” and “**master**” have been used in IOTC CMMs and refer to the person in charge of a vessel. In the absence of any provision specifying otherwise, it seems clear that these two terms are interchangeable. Practice shows that the term “master” is commonly used in the English version of international fisheries instruments, whereas the

²⁵ This definition is consistent with the definition of the notion of “fishing”.

²⁶ See explanation under Resolution 14/06 in Annex 4.

term “captain” is used in the French version of the same instruments. Likewise, at national level, the choice of words varies along language lines. The term “captain” is commonly used in French speaking countries, whereas the term “master” is the term of choice in most English speaking countries. The same applies to IOTC CMMs where the term “captain” is used throughout in the French version. Therefore, it would seem that the use of the term “captain” in the English version is merely the result of a lack of rigor and consistency in the use of terms.²⁷ The term “master” is often defined in national legislation in common law countries, mainly in response to the need of clearly establishing criminal or civil responsibilities pursuant to an infraction. While this term is not defined in binding international fisheries agreements, it has been defined by ICCAT in the context of Recommendation 75-02 (see table 3 in Annex 3).

The term “**operator**” has been used 23 times throughout IOTC CMMs, mainly in association with the term “owner”, particularly in the context of providing information in various forms, or “vessel” in the expression “vessel operator”. While this term is not considered in the interpretation section of binding international fisheries agreements, it has been defined in the context of WCPFC CMM 2004-03 on Specifications for the Marking and Identification of Fishing Vessels (see table 3 in Annex 3). It is a generic term referring to any person who exercises any sort of control on a vessel including the master, owner and charterer and the beneficial owner(s). A similar definition is provided for in the best practices glossary. Like for the term “master”, the term “operator” is often defined in national legislation in common law countries in response to the need of clearly establishing criminal or civil responsibilities pursuant to an infraction.

The terms “**IOTC Agreement**”, “**IOTC Area of competence**”, and “**IOTC Record of Fishing Vessels**” are straightforward and not susceptible to misinterpretation or misunderstanding. However, to ensure consistency in the wording of these terms, it may be advisable to include them in the IOTC Glossary of Terms.

Recommendation 3

It is recommended to:

- (1) delete the term “captain” and to replace it by the term “master” throughout the English version of the IOTC CMMs;
- (2) not define the terms “master” and “operator”, unless there is a need to do so in the context of a particular CMM;
- (3) include a definition of the terms “IOTC Agreement” and “IOTC Area of competence” in the IOTC Glossary of Terms (see table 5 in Annex 5);
- (4) replace the term “IOTC Record of Fishing Vessels” by the term “IOTC Record of Authorized Vessels” and include a definition of the latter in the IOTC Glossary of Terms (see table 5 in Annex 5).

4.2 Technical terms

²⁷ Note that the term “master” has been used 48 times throughout IOTC CMMs, whereas the term “captain” has been used only 9 times and in two Resolutions only. Interestingly, both the terms “captain” and “master” have been used in Annex I and Annex III of Resolution 14/06.

For the purpose of this study, technical terms are those used in relation to fishing gears and vessels as well as those describing the different types of fisheries.

4.2.1 Existing definitions in IOTC CMMs

Fourteen technical terms have been identified in IOTC CMMs. They are the following: abandoned FADs, artisanal fisheries, coastal fisheries, configured, data buoys, fish aggregating device (FAD), improperly documented, instrumented buoys, large-scale driftnets, large-scale-fishing vessels, large-scale tuna vessels, longline fisheries, surface fisheries and unfit for human consumption. Out of these terms, those relating to vessels²⁸ have already been examined in section 4.1.2 above. In the remaining twelve terms, five relate to fishing gears, four are used to define the various types of fisheries, one to regulate fishing activities around data buoys and two to specify the meaning of expressions related to a particular context.

Given the need to regulate purse-seine fishing operations in association with FADs in the Indian Ocean, the IOTC has recently adopted Resolution 15/08 which introduced three new terms, namely “fish aggregating device” or “FAD”, “abandoned FADs” and “instrumented buoy”. The definition of the term “FAD” reads as follows: “drifting (DFAD) or anchored floating or submerged objects (AFAD) deployed for the purpose of aggregating target tuna species”.²⁹ It is a simple definition encompassing both drifting and anchored FADs. Reference to the notions of “artificial FAD” and “natural FAD” has also been made in Resolution 15/08, but these notions have not been reflected in the definition.³⁰ The term “FAD” has also been defined in the CMMs adopted by IATTC and WCPFC³¹ as well as in the best practices glossary³² and the IOTC Glossary of scientific terms.³³ Comparison with these definitions shows that the definition retained by IOTC is not as detailed as the others. While it is similar to that provided by IATTC, there is no reference to the tracking devices fitted on FADs. The most comprehensive definitions are those found in the best practices glossary and in the IOTC Glossary of scientific terms. The former is modelled after the definition introduced by WCPFC, but has been extended to include a reference to the nature of FADs, whether manufactured (artificial), natural or a combination of both, and to tracking devices fitted on FADs to facilitate their location. The wording of the latter is more practical and provides information on the range of objects that can be used as FADs. It also puts emphasis on the ever improving sophistication of FADs, particularly the level of information they can transmit through satellite monitoring devices. It appears from the above that there are three core elements in the definition of the term “FAD” that need to be covered, the description of the object, its nature and the technology to track its location. Given that the design of FADs and the technology associated with their tracking and monitoring are evolving constantly, it would seem advisable to provide a comprehensive definition with not too many specific details. Therefore, it would seem appropriate to extend the current IOTC definition of the term “FAD” to include a reference to the nature of FADs (artificial or natural), which would be in line with the content of Resolution 15/08, and to electronic devices that can be used to monitor their position. The term “FAD” is used 209 times throughout IOTC CMMs and thus its definition should not be confined to Resolution 15/08.

Resolution 15/08 provides that drifting FADs used by purse seine vessels should be equipped with an instrumented buoy. The definition of the term “instrumented buoy” does not provide a description of the buoy itself but stipulates that it should be clearly marked and equipped with a satellite-

²⁸ Large-scale fishing vessels and large-scale tuna vessels

²⁹ This definition is provided for the specific purpose of Resolution 15/08

³⁰ See comments in Annex 4, paragraph ii)

³¹ See table 3 in Annex 3

³² See Annex 2

³³ *Supra* footnote 14

tracking system to monitor its position. To date this term has been used only twice within the context of Resolution 15/08.

The notion of “**abandoned FADs**” is introduced in Resolution 15/08, paragraph 15, and is defined as “FADs without a beacon or which have drifted outside the fishing zone”. The meaning of the expression “fishing zone” is unclear as there is no indication whatsoever as to whether it is a reference to the IOTC area of competence, the EEZ or fishing zone of a CPC or any other area.

The term “**large-scale driftnets**” has been introduced by Resolution 12/12 to prohibit the use of such nets in areas of the high seas in the Indian Ocean and bring IOTC regulations in line with rules of international law as reflected in the relevant United Nations General Assembly’s resolutions. The rule is that no driftnet or any combination of such nets longer than 2.5 km can be used in these areas. This definition is identical to that included in the IOTC Glossary of scientific terms. The technical term “**configured**” was introduced specifically to be used in association with the term “large-scale driftnet” so as to prevent the keeping on board of any device that could be used to assemble separate nets into a large-scale driftnet. The term “large-scale driftnets” is used thirteen times and in Resolution 12/12 only.

Four terms have been used to distinguish the various types of fisheries in the IOTC context, namely, “**artisanal fisheries**”, “**coastal fisheries**”, “**longline fisheries**” and “**surface fisheries**”. Definitions of these terms are provided in Resolution 15/02 through a footnote. The different types of fisheries are determined according to the type of fishing gears used. Longline fisheries are “fisheries undertaken by vessels in the IOTC Record of Authorized Vessels that use longline gear”. By contrast, surface fisheries are “all fisheries undertaken by vessels in the IOTC Record of Authorized Vessels other than longline fisheries; in particular purse-seine, pole-and-line, gillnet fisheries, handline and trolling vessels”. As for coastal fisheries, they refer to all “fisheries other than longline or surface, as defined above, also called artisanal fisheries”. It should be noted that the notions of “longline fisheries” and “coastal fisheries” are not defined in the IOTC Glossary of scientific terms. However, the notion of “surface fishery” is defined as: “fishing with pole and line, bait vessel, troll or purse seine to target surface-swimming species”. There is also a definition of the concept of “coastal waters” that reads as follows: “the waters adjacent to the land territory of a State, extending seaward from the territorial sea baseline to a distance of three nautical miles”. Review of previous resolutions dealing with statistical reporting requirements shows that no definitions of these different types of fisheries were provided.³⁴ If use of the terms “longline fisheries” and “surface fisheries” was made from the start, there was no reference to “coastal fisheries” in Resolution 01/05 but to artisanal, small-scale and sport fisheries instead. While there is no particular issue with the definitions of the terms “longline fisheries” and “surface fisheries”, there is however a need to clarify the content and extent of the concept of “coastal fisheries”. The term “coastal” generally refers to areas close to shore in line with the definition of “coastal waters” above. Where applied in the context of fisheries, it typically refers to fishing activities undertaken within the territorial sea (12 nautical-mile limit) by small-scale fishing vessels. Since “coastal fisheries” are assimilated to “artisanal fisheries”, one has to examine the meaning of that latter concept in the IOTC context. As indicated in section 3.1.3 above, inconsistencies have been noted in the use of that concept throughout IOTC CMMs. In addition, one should bear in mind that the term “artisanal” has given rise to long and intense discussions in international fora, but that no universal definition of that term could be agreed upon by the international community as it encompasses too many different realities in different countries. Consequently, the concepts of “artisanal fisheries”, “artisanal fishing” and/or “artisanal fishing vessel” are generally defined in national legislation using an array of technical criteria and combination thereof. In light of the above, it would seem that the definition of “coastal fisheries” was introduced to gather statistical data from fishing activities undertaken by vessels not required to

³⁴ See Resolutions 01/05, 08/01 and 10/02

be registered on the IOTC Record of Authorized Vessels catching tuna and tuna-like species and operating exclusively within the waters under the sovereignty or jurisdiction of the flag State. Since there is no recognized definition of the concept of “artisanal fisheries” at the international level, it would seem advisable to drop any reference to that concept and use the concept “coastal fisheries” more broadly. However, there is a need to review the definition of that concept to better reflect the types of fisheries it is intended to cover.

The term “**data buoy**” was introduced by Resolution 11/02, paragraph 1, to regulate fishing activities around these buoys so as to prevent their being damaged by such activities. The definition is straightforward and does not give rise to any specific issues. It is used 12 times and solely in Resolution 11/02.

The expressions “**improperly documented**” and “**unfit for human consumption**” were defined to ensure the good comprehension of Resolution 03/03 and Resolution 15/06 respectively. The former specifies the omissions and actions that would result in a Bigeye Tuna Statistical Document to be regarded as being improper. It should be noted that an identical definition is provided in IATTC Resolution C-03-01.³⁵ The latter describes the conditions under which a fish should be considered as being unfit for human consumption. As it stands the definition is related to the purse seine fishery. Should there be a need to apply a similar definition to another fishery (e.g. longline fishery), the definition would have to be adjusted to that particular fishery. A more extensive definition is provided for in WCPFC CMM 2009-02, as it also describes what the expression “unfit for human consumption” does not include.³⁶

Recommendation 4

It is recommended to:

- (1) Modify the definition of the term “FAD” by adding language providing that it includes both artificial (or manufactured) and natural FADs and that they may be fitted with electronic devices to monitor their position (see table 5 in Annex 5);
- (2) Introduce the definition of the term “FAD” in the IOTC Glossary of Terms;
- (3) Keep the definition of the term “instrumented buoy” as it is within the context of Resolution 15/08;
- (4) Review the definition of the term “abandoned FAD” to clarify what the expression “fishing zone” is referring to and keep the definition within Resolution 15/08;
- (5) Keep the definition of the term “large-scale driftnet” as it is and in Resolution 12/12 since, to date, it has not been used in any other resolution. It should be noted, however, that this definition is of global application and could be moved into the IOTC Glossary of Terms should it be used in several CMMs;
- (6) Retain the definition of the technical term “configured” unchanged and keep it in Resolution 12/12;
- (7) Review the definition of the concept of “coastal fisheries”, drop any reference to “artisanal fisheries” and include it in the IOTC Glossary of Terms (see table 5 in Annex 5);

³⁵ See table 3 in Annex 3.

³⁶ See table 3 in Annex 3.

- (8) Retain the definitions of the terms “longline fisheries” and “surface fisheries” as they are and keep them in Resolution 15/02;
- (9) Retain the definition of the term “data buoy” as it is and to keep it in Resolution 11/02;
- (10) Retain the definition of the terms “improperly documented” as it is and keep it in Resolution 03/03;
- (11) Retain the definition of the expression “unfit for human consumption” as it is and keep it in Resolution 15/06.

4.2.2 Potential technical terms

Nine technical terms were identified as frequently used or important terms under section 3.1.2. All but one relate to some type of “vessels”: artisanal fishing vessel, auxiliary vessel, cargo vessel, carrier vessel, mother ship, supply vessel, support vessel and tender vessel. The other term is “artisanal fishing”. Out of these nine terms, seven have been examined under section 4.1.2 and will not be considered any further under this section. The two remaining terms, “artisanal fishing” and “artisanal fishing vessel”, are studied together in the paragraph below.

There is a reference to the concept of “**artisanal fishing**” in Resolution 10/11 on port State measures to prevent, deter and eliminate IUU fishing in paragraph 3, point 1(a), to exclude vessels from a neighboring State that are engaged in “artisanal fishing for subsistence” from the scope of this resolution, provided that the flag State and the port State cooperate to ensure that such vessels do not engage in IUU fishing or fishing related activities in support of such fishing. It reflects the wording of Article 3.1(a) of the PSMA. In this particular context, the concept of “artisanal fishing” seems to be used in lieu and place of “subsistence fishing”. Indeed, while there is no recognized universal definition of the concept of “artisanal fishing”, this type of fishing generally refers to a commercial activity undertaken by small-scale vessels, not to a non-commercial activity. The term “**artisanal fishing vessel**” is used twice throughout the IOTC CMMs in Resolution 11/04 on a Regional Observe Scheme. In the context of this Resolution, the term “artisanal fishing vessel” is clearly used to designate any vessel, catching tuna and tuna like species, less than 24 meters in length overall operating exclusively in the waters under the sovereignty or jurisdiction of the flag State, that is vessels that are not required to be registered on the IOTC Record of Authorized Vessels. Considering the lack of agreement on the definition of the concept of “artisanal fishing” at the international level, this definition is likely to differ from the definitions of the terms “artisanal fishing” and “artisanal fishing vessel” under national law and thus may lead to misunderstanding, which, in turn, may undermine the effectiveness of this Resolution’s implementation. Under the circumstances, it would seem advisable to drop any reference to “artisanal fishing” and “artisanal fishing vessel” and use the term “coastal fisheries” instead (see comments under section 4.2.1 above).

Recommendation 5

It is recommended to:

- (1) Replace the expression “artisanal fishing for subsistence” in Resolution 10/11, paragraph 3, point 1(a) by the expression “subsistence fishing”;
- (2) Replace the phrase “[T]he number of the artisanal fishing vessels landings” by “the number of landings by vessels engaged in coastal fisheries” in the first sentence of Resolution 11/04,

paragraph 4;

- (3) Replace the phrase “[T]he indicative level of the coverage of the artisanal fishing vessels” by “[T]he indicative level of the coverage by vessels engaged in coastal fisheries” in the second sentence of Resolution 11/04, paragraph 4.

4.3 Scientific terms

For the purpose of this study, scientific terms are those of a scientific nature, but exclude those describing or linked to fishing gears that are regarded as technical terms.

4.3.1 Existing definitions in IOTC CMMs

Five definitions of scientific terms have been identified in the IOTC CMMs, namely, BMSY, FMSY, harvest control rules, limit reference points, and target reference points.

Definitions of the terms “**BMSY**” and “**FMSY**” are provided in Resolution 15/10, paragraph 1, for the specific purpose of explaining the figures found in Table 1 on interim target and limit reference points. While the wording of these definitions do not reproduce *verbatim* that provided in the IOTC Glossary of scientific terms, they are clearly drawn from it.

Definitions of the terms “**harvest control rules**”, “**limit reference points**” and “**target reference points**” were introduced through footnotes by Resolution 12/01 on the implementation of the precautionary approach. They are all sourced from the FAO Fisheries Glossary. The concept of “harvest control rules” is used 15 times throughout IOTC CMMs in 3 different Resolutions, namely 12/01, 14/03 and 15/10. The notions of “limit reference points” and “target reference points” make up the broader concept of “limit and reference points”, which is used 23 times throughout IOTC CMMs.

Recommendation 6

It is recommended to:

- (1) Retain the definitions of the terms “BMSY” and “FMSY” as they are and to keep them in Resolution 15/10;
- (2) Introduce the definitions of the terms “harvest control rules”, “limit reference points” and “target reference points” in the IOTC Glossary of Terms;
- (3) Have the Scientific Committee validate the definitions under paragraph 2 above before their being introduced in the IOTC Glossary of Terms.

4.3.2 Potential scientific terms

Two scientific terms were identified as frequently used terms in the IOTC CMMs, namely, “bycatch” and “discard”.

The term “**bycatch**” is used 60 times throughout IOTC CMMs. Of note is the use of the expression “incidental catch” in certain resolutions such as Resolution 12/04 on the conservation of marine turtles and Resolution 13/06 on a scientific and management framework on the conservation of

shark species caught in association with IOTC managed fisheries. In Resolution 12/06 on reducing the incidental bycatch of seabirds in longline fisheries, the term “bycatch” is used at times in association with the term “incidental” and at other times without giving the impression that there may be different types of bycatches, incidental and others. Therefore, for sake of clarity it might be useful to introduce a definition of the term “bycatch” in the IOTC Glossary of Terms. In the International Guidelines on bycatch management and reduction of discards developed by FAO, it was noted that “[I]t is not possible to develop a standard international definition of bycatch because of the very diverse nature of the world’s fisheries, historical differences in how bycatch has been defined nationally, ambiguities associated with bycatch related terminologies and choices of individual fishers on how different portions of their catch will be used. Also there are functional interpretations of bycatch that include catch that a fisher did not intend to catch but could not avoid, often did not want or chose not to use. There are also regulatory interpretations of bycatch in fisheries management plans and these types of interpretations may not necessarily coincide”. As a result, one will have to craft a definition that is adapted to the IOTC context. In this regard, it is noteworthy that the term “bycatch” is always used to refer to species other than those under the IOTC mandate as listed in Annex B to the IOTC Agreement. Thus, one will have to determine whether the definition of the term “bycatch” provided in the IOTC Glossary of scientific terms may be reproduced in the IOTC Glossary of Terms. It is a very practical and operational definition that may require some modifications prior to being introduced therein.

The term “discard” is used 33 times throughout IOTC CMMs. A definition of the term “discards” or “discarding” is provided in the IOTC Glossary of scientific terms and reads as follows: “any part of the catch that is returned to the sea, whether dead or alive”. This definition is simple and broad.

Recommendation 7

It is recommended to:

- (1) Introduce a definition of the term “bycatch” in the IOTC Glossary of Terms that is modeled after the definition contained in the IOTC Glossary of specific terms (see table 5 in Annex 5);
- (2) Reproduce the definition of the term “discard” contained in the IOTC Glossary of scientific terms in the IOTC Glossary of terms (see table 5 in Annex 5).

4.4 MCS terms

MCS terms are those relating to the monitoring, control and surveillance of fishing activities.

4.4.1 Existing definitions in IOTC CMMs

Two MCS terms have been defined in IOTC CMMs, namely, “field sampler” and “observer”.

The definitions of the terms “**field sampler**” and “**observer**” have both been introduced by Resolution 11/04 on a Regional Observer Scheme. These terms are defined *a contrario sensu* to distinguish between persons who collect information on land and monitor offloading of catch by fishing vessels (field samplers) from persons who collect information on board fishing vessels (observers). Both definitions are accompanied by a brief explanatory note describing the scope of field sampling and programs and observer programs. Both these programs have a scientific focus.

As mentioned in section 3.1.3, the term “observer” has been used in combination with the terms “IOTC” and “scientific” in the expression “**IOTC observer**” and “**scientific observer**”. The term “observer” is used 93 times throughout IOTC CMMs, including 13 times in combination with the term “program”, whereas the term “IOTC observer” is used 7 times and the term “scientific observer” 6 times. The term “IOTC observer”³⁷ is mainly used in Resolution 14/06 establishing a program for transshipment by large-scale fishing vessels. IOTC observers are appointed by the IOTC Executive Secretary to be placed on board carrier vessels authorized to receive transshipments in the IOTC area of competence from large-scale tuna longline vessels flying the flag of CPCs that implement the IOTC Observer Program. The main role of IOTC observers is to ensure compliance with the provisions of Resolution 14/06 and in particular to check if the transshipped quantities of fish are consistent with the reported catch in the IOTC transshipment declaration.³⁸ It is unclear whether the concurrent use of the terms “observer” and “scientific observer” reflects a difference in meaning between these two terms and in particular whether this indicates that when used without being qualified as “scientific” the term “observer” should be construed as also referring to “compliant” observers. The definition of the term “observer” is very broad and reads as follows: “a person who collects information on board fishing vessel”. While the type of information to be collected is not specified, the explanatory note accompanying the definition states that “observer programmes can be used for quantifying species composition of target species, bycatch, by-products and dead discards, collecting tag returns, etc.”. This seems to indicate that that these programs are intended to be scientific in nature. This interpretation is corroborated by the provisions of Resolution 11/04, paragraph 10, laying down the tasks to be carried out by observers, which are scientific tasks. However, the list is not exhaustive and thus these programs may be used for other purposes as demonstrated by the regional observer program established under Annex III of Resolution 14/06.

Recommendation 8

To restore clarity and consistency in the use of terms relating to the concept of “observer”, it is recommended to:

- (1) Use only two terms to refer to observers throughout the IOTC CMMs, namely “scientific observer” and “IOTC observer”.
- (2) Delete the definition of the term “observer” in Resolution 11/04 and introduce a definition of the term “scientific observer” in the IOTC Glossary of Terms (see table 5 in Annex 5);
- (3) Introduce a definition of the term “IOTC observer” for the specific purpose of Resolution 14/06 (see table 6 in Annex 5).

It is also recommended to:

- (4) Modify the definition of the term “field sampler” and keep it in Resolution 11/04 (see table 6 in Annex 5).

4.4.2 Potential MCS terms

Six MCS terms were identified as potential important terms, namely, aircraft, IOTC observer, (fishing) logbook, scientific observer, vessel monitoring device and vessel monitoring system (VMS). The

³⁷ Note that the term “IOTC regional observer” is also used in Resolution 14/06.

³⁸ The tasks to be performed by IOTC observers are laid down in Resolution 14/06, Annex 3, paragraph 5.

terms “IOTC observer” and “scientific observer” have already been examined under section 4.4.1 and will not be considered further under this section.

The term “**aircraft**” is used twice in IOTC CMMs. A definition of this term is provided in the best practices glossary.³⁹ It is worded broadly to ensure that it includes helicopters and any unmanned or remotely operated airborne devices such as drones. While some countries have started to use drones for fisheries MCS purposes, this issue has not yet been debated in the IOTC forum. Therefore, for the time being, it seems premature to introduce a definition of the term “aircraft” in the IOTC Glossary of Terms.

The term “**logbook**” is used 48 times in IOTC CMMs, including 3 times to refer to electronic logbook system and 4 times to refer to FAD logbook. A definition of the term “fishing logbook” is provided in the best practices glossary⁴⁰ and in the IOTC Glossary of scientific terms.⁴¹ The definition provided in the latter glossary is very broad and does not provide any detail, whereas the definition contained in the former glossary makes clear reference to paper fishing logbooks (as opposed to electronic logbooks) and requires that the logbook complies with certain features that are in line with IOTC requirements as set out in Resolution 15/04.⁴²

The term “**vessel monitoring system**” and its abbreviation “**VMS**” have been used 7 and 26 times respectively, mainly in Resolution 15/03 on the vessel monitoring program, and the term “**vessel monitoring device**” 8 times exclusively in that Resolution. The term “VMS” is well-known among fisheries practitioners and generally well understood. Therefore, introduction of a specific definition of that term is not warranted. However, there are instances in IOTC CMMs where this term has been used in lieu and place of the term “vessel monitoring device” to refer to the equipment to be fitted on board authorized vessels.⁴³ Furthermore, two additional terminologies have been used to make reference to that equipment in Resolution 15/03, namely, “satellite tracking device” and “satellite monitoring device”. Given that vessel monitoring systems may use other technology than satellite communications, it is advisable to use a terminology that does not mention a particular technology. The best practices glossary uses the terminology “mobile transceiver unit” which reflects best practice in the Pacific region but not necessarily best international practice. Therefore, one may keep using the term “vessel monitoring device” in the Indian Ocean Region. Introduction of a definition of that term in Resolution 15/03 may help restore clarity and consistency in the use of that term and that of “VMS”. It should be noted that this term is intended of being of general application but that, to date, it has been used in Resolution 15/03 only.

Recommendation 9

It is recommended to:

- (1) use the terminology “fishing logbook” rather than “logbook” in IOTC CMMs to avoid any confusion with any other logbooks that may be required to be kept by the master of a fishing vessel (e.g. FAD logbook and vessel logbook) and with electronic logbook systems and to introduce a definition of that term in the IOTC Glossary of Terms (see table 5 in Annex 5);

³⁹ See Annex 2.

⁴⁰ See Annex 2

⁴¹ *Supra* footnote 13

⁴² Resolution 15/04, paragraph 4, requires that each CPC ensures that fishing vessels flying its flag keep a bound national fishing logbook with consecutively numbered pages”.

⁴³ See comments on Resolution 15/03 in Annex 2

- (2) restore consistency in the use of terms in Resolution 15/03 by deleting the expressions “satellite tracking device” and “satellite monitoring device” and by replacing them by the expression “vessel location device” (see table 6 of Annex 5);
- (3) introduce a definition of the expression “vessel location device” in Resolution 15/03. Should this term be used more broadly in several CMMs, it would have to be moved into the IOTC glossary of Terms.

5. Conclusions and way forward

For many years, little attention was paid to ensure the global coherence of IOTC CMMs. With the growing number of CMMs over the years, the need to clarify the state of these measures was recognized. Efforts to do so started with the adoption of Resolution 13/01, which provided for the removal of obsolete CMMs, and with the publication of a Compendium of Active Conservation and Management Measures for the Indian Ocean with CMMs arranged in reversal chronological order. While a number of key terms have been defined to facilitate the understanding of certain CMMs, no record of these definitions is available. To date, one has to search through each individual CMM to determine whether specific terms have been defined. Additionally, there is uncertainty for a number of definitions as to whether they were intended to be of global application or were merely drawn up for the purpose of a particular CMM. The absence of an approved set of definitions of key terms combined with the lack of rigor in the terminology used within and throughout CMMs affects the good and universal comprehension of these measures, which, in turn, is also likely to undermine the effectiveness of their implementation.

The proposed set of key terms along with their definitions in table 5 of Annex 5 is based on best international practice and is adapted to the IOTC context. It was opted not to include certain terms in the IOTC Glossary of Terms based on the fact that, up to now, these terms were used only within the context of one specific CMM, though, it was recognized that their definitions were of general application (e.g. vessel monitoring device). Should these terms be introduced in more than one CMM, their definition should then be moved into the IOTC Glossary of Terms. The definitions of scientific terms to be included in the IOTC Glossary of Terms have to be vetted by the SC and for some to be developed in consultation with it (e.g. bycatch).

The adoption of a set of key terms along with their definitions should be seen as the first step in the process of strengthening the global coherence of IOTC CMMs. To be effective, it should be supplemented by additional measures:

- agree on a mechanism to introduce new definitions by defining clear-cut criteria to determine whether specific terms should be defined and whether they should be included in the IOTC Glossary of Terms;
- specify for each definition whether it is of global or limited application;
- apply a common practice for the introduction of new definitions in CMMs so as to make it easy for readers to find them. In this regard, it is recommended to stop introducing new definitions through footnotes. One may opt, for instance, to introduce new definitions in a dedicated paragraph at the beginning of a CMM;

- upon adoption of recommendations provided in this document, carefully review each CMM to adjust its wording accordingly;
- make clear that the purpose of keywords listed at the beginning of each CMM since 2015 are research tools.

The IOTC would have to discuss and determine whether the devising of the IOTC Glossary of Terms and its placing on the IOTC website is a first step that should lead to the formulation of an integrated set of IOTC CMMs. This would certainly contribute to clarify the rules applicable in the Indian Ocean with respect to fishing activities targeting species under the IOTC mandate. There have been precedents in other RFMOs, in particular the Northwest Atlantic Fisheries Organization (NAFO). NAFO has adopted an integrated set of conservation and enforcement measures that incorporates all NAFO conservation and enforcement measures currently in force. These measures are revised every year by NAFO. Amendments, which were adopted at the latest annual meeting, are listed along with the reference documents in the pages preceding the consolidated version of the Conservation and Enforcement Measures. The first article of this integrated set of measures provides definitions of key terms.

Annex 1 – Existing definitions found in IOTC CMMs and other terms that may require to be defined

Table 1 – Key terms defined in IOTC CMMs

Terms	Definitions	Reference/scope⁴⁴
Abandoned FADs	“FADs without a beacon or which have drifted outside the fishing zone”	Res. 15/08, par.15 NS
Artisanal fisheries	This term is indirectly defined through the definition of the concept of “coastal fisheries” (see below). Even though it is not expressly mentioned, it is likely that this definition was intended to be applicable only in the context of Resolution 15/02.	Res. 15/02, footnote 1 NS
Authorized fishing vessel or AFV	The term “authorized fishing vessels” or “AFVs” is defined as “vessels that are: a) 24 meters in length overall or above; OR b) in case of vessels less than 24 meters, those operating outside the EEZ of the flag State; AND c) authorized to fish for tuna and tuna-like species in the IOTC area of competence.”	Res. 15/04, par. 1 FPR
BMSY	“The biomass level for the stock that would produce the Maximum Sustainable Yield.”	Res. 15/10, par. 1 FPR
Coastal fisheries	“Fisheries other than longline or surface, as defined above, also called artisanal fisheries”	Res. 15/02, footnote 1 NS
Configured	“having on board assembled gear that collectively would allow the vessel to deploy and retrieve large-scale driftnets”	Res. 12/12, footnote 2 FPR
CPCs	This acronym refers collectively to Contracting Parties and Cooperating Non-Contracting Parties. It is introduced through brackets in many CMMs. For ease of writing, it is used extensively throughout IOTC CMMs.	FPR
Data buoys	“Floating devices, either drifting or anchored, that are deployed by governmental or recognised scientific organisations or entities for the purpose of electronically collecting and measuring environmental data, and not for the purpose of fishing activities”	Res. 11/02, par. 1 FPR
Field sampler	“A person who collects information on land during the unloading of fishing vessels.” The definition is accompanied by explanatory notes stipulating that field sampling programmes can be used for quantifying catch, retained bycatch, collecting tag returns, etc.	Res. 11/04, footnote 2 NS
Fish	“All species of highly migratory fish stocks covered by the IOTC Agreement”	Res. 10/11, par. 1 (a) FPR
Fish Aggregating Device or FAD	“Drifting (DFAD) or anchored floating or submerged objects (AFAD) deployed for the purpose of aggregating target tuna species”	Res. 15/08, par. 11 FPR
Fishing	“Searching for, attracting, locating, catching, taking or harvesting fish or any activity which can reasonably be expected to result in the attracting, locating, catching, taking or harvesting of fish”	Res. 10/11, par. 1 (b) FPR
Fishing related activities	“Any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transshipping or transporting of fish that have not been previously landed at a	Res. 10/11, par. 1 (c) FPR

⁴⁴ The term “scope” in this table is used to provide information on whether the definition was intended to apply only for the purpose of this particular resolution (FPR) or whether it was not specified (NS).

	port, as well as the provisioning of personnel, fuel, gear and other supplies at sea”	
FMSY	“The level of fishing mortality that produces the Maximum Sustainable Yield”	Res. 15/10, par. 1 FPR
Harvest control rules	“A rule that describes how harvest is intended to be controlled by management in relation to the state of some indicator of stock status”	Res. 12/01, footnote 2 NS
Improperly documented	“improperly documented means that the Bigeye Tuna Statistical Document is either missing from the shipment, incomplete, invalid or falsified”	Res. 03/03, Annex I, par. 4 FPR
Instrumented buoy	“A buoy with a clearly marked reference number allowing its identification and equipped with a satellite tracking system to monitor its position”	Res. 15/08, par. 2 FPR
IUU fishing	“refers to the activities set out in paragraph 1 of the Resolution 09/03 (superseded by Resolution 11/03)”	Res. 10/11, par. 1 (d) FPR
IUU fishing activities	<ul style="list-style-type: none"> a) Harvest tuna or tuna-like species in the IOTC area of competence and are neither registered on the IOTC Record of Vessels authorised to fish for tuna and tuna-like species in the IOTC area of competence, in accordance with Resolution 15/04, nor recorded in the Active list of Vessels of IOTC; or b) Harvest tuna or tuna-like species in the IOTC area of competence, when their flag State is without sufficient quotas, catch limit or effort allocation under IOTC Conservation and Management Measures where applicable; or c) Do not record or report their catches made in the IOTC area of competence in accordance with IOTC reporting requirements, or make false reports; or d) Take or land undersized fish in contravention of IOTC Conservation and Management Measures; or e) Fish during closed fishing periods or in closed areas in contravention of IOTC Conservation and Management Measures; or f) Use prohibited fishing gear in contravention of IOTC Conservation and Management Measures; or g) Tranship with, or participate in joint operations such as re-supplying or re-fuelling, vessels included in the IUU Vessels List; or h) Harvest tuna or tuna-like species in the waters under the national jurisdiction of a coastal State in the IOTC area of competence without authorisation and/or infringe the coastal State’s laws and regulations, (this is without prejudice to the sovereign rights of coastal States to take measures against such vessels); or i) Are without nationality and harvest tuna or tuna-like species in the IOTC area of competence; or j) Engage in fishing, including transshipping, re-supplying or re-fuelling, contrary to any other IOTC Conservation and Management Measures 	Res. 11/03, par. 1 FPR
Large-scale driftnets	“Gillnets or other nets or a combination of nets that are more than 2.5 kilometres in length whose purpose is to enmesh, entrap, or entangle fish by drifting on the surface of, or in, the water column”	Res. 12/12, footnote 1 NS
Large-scale fishing	“fishing vessels larger than 24 meters length overall”	Res. 03/01, par. 1

vessels		NS
Large-scale tuna vessels or LSTVs	“tuna vessels larger than 24 meters length overall”	Res. 03/01, Preamble NS
Limit reference points	“the limit beyond which the state of a fishery and/or a resource is not considered desirable”	Res. 12/01, footnote 1 NS
Longline fisheries	“Fisheries undertaken by vessels in the IOTC Record of Authorized Vessels that use longline gear”	Res. 15/02, footnote 1 NS
Observer	“A person who collects information on board fishing vessels”. The definition is accompanied by explanatory notes stating that “observer programmes can be used for quantifying species composition of target species, bycatch, by-products and dead discards, collecting tag returns, etc.”	Res. 11/04, footnote 1 NS
Port	“Includes offshore terminals and other installations for landing, transshipping, packaging, processing, refueling or resupplying.”	Res. 10/11, par. 1 (e) FPR
Surface fisheries	“All fisheries undertaken by vessels in the IOTC Record of Authorized Vessels other than longline fisheries; in particular purse seine, pole-and-line, gillnet fisheries, handline and trolling vessels”	Res. 15/02, footnote 1 NS
Target reference points	“A state of a fishery and / or a resource which is considered desirable”	Res. 12/01, footnote 1 NS
Unfit for human consumption	Are “unfit for human consumption”, fish that: <ul style="list-style-type: none"> - “is meshed or crushed in the purse seine; or - is damaged due to depredation; or - has died and spoiled in the net where a gear failure has prevented both the normal retrieval of the net and catch, and efforts to release the fish alive.” 	Res. 15/06, par. 2 b) NS (only applicable to the purse seine fishery)
Vessel	“Any vessel, ship of another type or boat used for, equipped to be used for, or intended to be used for, fishing or fishing related activities”	Res. 10/11, par. 1 (f)

Table 2 – Frequently used terms and other important terms used in IOTC CMMS

Terms	Comments
Aircraft	<ul style="list-style-type: none"> • This term has been used twice in two different Resolutions (Res. 01/03, par. 1 and Res. 10/11, par. 8) • In Res. 01/03, it is used in the context of a reference to any means of observation or surveillance (any observation by a Contracting Party vessel or aircraft), whereas in Res. 10/11 it is used in the context of distress “for rendering assistance to persons, ships or aircraft in danger or distress”
Artisanal fishing	<ul style="list-style-type: none"> • This term has been used only once throughout the IOTC CMMs and solely in Resolution 10/11 on port State measures. • The concept of “artisanal fishing” in paragraph 3.1(a) is used to exclude vessels from a neighboring States that are engaged in “artisanal fishing for subsistence” from the scope of this resolution. It is subject to an agreement between the flag and port States to ensure that such vessels do not engage in IUU fishing or fishing related activities in support of such fishing. It closely reflects the wording of Article 3.1(a) of the PSMA.
Artisanal fishing vessel	This expression appears only twice throughout the IOTC CMMs in paragraph 4 of Resolution 11/04 on a Regional Observer Scheme.
Auxiliary vessel	This term is used only once throughout the IOTC CMMs in Resolution 15/04, paragraph 1, to specify that the notion of “fishing vessels” includes auxiliary, support and supply vessels.
Bycatch	<ul style="list-style-type: none"> • The term “bycatch” is used 60 times throughout the IOTC CMMs. • A definition of the term “bycatch” is provided in the IOTC Glossary of scientific terms.

	<ul style="list-style-type: none"> • In Resolution 12/06 the expression “incidental bycatch” is used and in Resolution 13/06 reference to “incidental catch” is made. • In Resolution 12/06, the term “bycatch” is used at times in association with the term “incidental” and at other times without, giving the impression that there are different types of bycatches, incidental and others. • It is noteworthy that in Resolution 12/04 on the conservation of marine turtles the expression “incidental catch” is used but not the term “bycatch”, except in reference to the IOSEA MoU including the provisions of the Conservation and Management Plan in the implementation of bycatch mitigation measures for marine turtles.
Captain	<ul style="list-style-type: none"> • The term “captain” is used 9 times throughout the IOTC CMMs and only in Resolutions 14/06 and 15/06. • Of note is that both the terms “master” and “captain” are used in Resolution 14/06. While no definition of these terms is provided, it seems that they are interchangeable.
Cargo vessel	The term “cargo vessel” is used only once in Resolution 11/03, paragraph 16 a), requiring that CPCs take all the necessary measures to prevent their cargo vessels from participating in any transshipment with vessels on the IUU Vessels list.
Carrier vessel	<ul style="list-style-type: none"> • The notion of “carrier vessel” was first introduced in Resolution 06/02 on establishing a programme for transshipment by large-scale fishing vessels. This Resolution, which has been superseded several times, is now replaced by Resolution 14/06 on establishing a programme for transshipment by large-scale fishing vessels. • This notion has been used 36 times throughout the IOTC CMMs and only in Resolution 14/06. • It is clear that the notion of “carrier vessels” in the context of Resolution 14/06 refers to vessels that are authorized (and that have been registered with the IOTC Secretariat) to receive tuna and tuna-like species and sharks from large-scale tuna longline fishing vessels at sea (transshipment at sea). It is noteworthy that the term “receiving carrier vessel” is also used in Resolution 14/06, paragraphs 14 to 16, to refer to the same vessels. • Of note is the requirement for the Commission to establish a Record of Carrier Vessels authorized to receive tuna, tuna-like species and sharks at sea in the IOTC area of competence from the LSTLVs.
Discard(s) or discarding	<ul style="list-style-type: none"> • The term “discard(s)” or “discarding/discarded” is used 33 times throughout IOTC CMMs and in several Resolutions. • A definition of the term “discards” or “discarding” is contained in the IOTC Glossary of scientific terms.
Fishing vessel	<ul style="list-style-type: none"> • The term “fishing vessel” is used 114 times throughout the IOTC CMMs. • It is a key term that needs to be clearly defined so as to avoid any risk of misinterpretation. • While no definition of this term is provided, there is evidence, in a number of Resolutions, that it is construed broadly as including not only harvesting vessels but also vessels involved in activities in support of fishing operations: <ul style="list-style-type: none"> - in Resolution 15/07, paragraph 1, it is stipulated that “fishing vessels” include both support and supply vessels; - In Resolution 15/04, paragraph 1, the notion of “fishing vessels” includes auxiliary, support and supply vessels.
Flag of convenience or “FOC”	This concept was used inconsistently and improperly in Resolution 99/02 (see explanations in Annex 4). While reference to this concept was made in other CMMs, it is used mostly in Resolution 99/02.
IOTC Agreement	The term “IOTC Agreement” is used 79 times throughout the IOTC CMMs
IOTC area of competence	<ul style="list-style-type: none"> • The expression “IOTC area of competence” is used 120 times throughout the body of active IOTC CMMs. This terminology reflects the wording used in the IOTC Agreement. • Of note is the use of other terminologies to refer to the same area:

	<ul style="list-style-type: none"> - “IOTC Convention area” in Resolution 03/01 and in Resolution 05/01; - “area of competence” in Resolution 07/01; and - “IOTC area” in Resolution 10/11.
IOTC Record of fishing vessels	<ul style="list-style-type: none"> • There is a lack of consistency in the terminology used to refer to the IOTC Record of Fishing Vessels established by Resolution 15/04, paragraph 1, <i>inter alia</i>: <ul style="list-style-type: none"> - “IOTC Record of Authorized Vessels” in Resolutions 13/06 and 15/02; - “IOTC Record” in Resolution 15/04; - “IOTC Record of Vessels” in Resolution 14/06.
IUU fishing vessel(s)	<ul style="list-style-type: none"> • This expression is used only twice throughout the body of active IOTC CMMs, in the preamble of Resolution 14/06 and in paragraph 12 of Resolution 15/04. • There is also a reference to “IUU large-scale tuna vessels” in the preamble of Resolution 05/07.
Logbook (fishing)	<ul style="list-style-type: none"> • The term “logbook” is used 48 times, including 3 times to refer to electronic logbook system and 4 times to refer to FAD logbook. • In paragraph 16 of Resolution 15/04, it is required that each CPC ensures that its flagged vessels “keep a bound national fishing logbook with consecutively numbered pages”. • A definition of the term “logbook” has been devised in the IOTC Glossary of scientific terms.
Master	<ul style="list-style-type: none"> • The term “master” is used 48 times throughout IOTC CMMs and in several IOTC CMMs, namely, 10/11, 11/03, 11/04, 13/04, 13/05, 14/06, 15/08, 15/03, and 15/01. • Of note is that both the terms “master” and “captain” are used in Resolution 14/06. While no definition of these terms is provided, it seems that they are interchangeable.
Mother ship	The term “mother ship” is used only once in Resolution 11/03, paragraph 16 a), requiring that CPCs take all the necessary measures to prevent their mother ships from participating in any transshipment with vessels on the IUU Vessels list.
Observer, IOTC observer, scientific observer	<ul style="list-style-type: none"> • While a definition of the term “observer” is provided in Resolution 11/04 (see table 1), two other terms are used in IOTC CMMs to refer to observers, namely, “IOTC observer” and “scientific observer”. • The term “IOTC observer” is used 7 times throughout the body of active IOTC CMMs, including 2 times in association with the term “programme” to designate the “IOTC observer programme” and 1 time in association with the term “scheme” to refer to the “IOTC observer scheme”. It is used 6 times in Resolution 14/06 and 1 time in Resolution 11/04 on a Regional Observer Scheme. • Res. 14/06 makes reference to “IOTC observer” whose main role is to ensure compliance with the provisions of this Resolution and in particular that the transhipped quantities are consistent with the reported catch in the IOTC transshipment declaration. It is noteworthy that the concept of “IOTC observer” was first introduced by Resolution 06/02 and had the same responsibility. No definition was provided. • The term “scientific observer” is used 6 times throughout the body of active IOTC CMMs. Tasks that can be undertaken by a “scientific observer” are laid down in Resolution 13/06, paragraph 7. • Of note is that the term “observer” is used in Resolution 13/04, par. 7, and Resolution 13/05, par. 7. While the task to be performed under these paragraphs is clearly of a scientific nature, the term “observer” is not qualified by the term “scientific”.
Operator	<ul style="list-style-type: none"> • The term “operator” has been used 23 times throughout the body of active IOTC CMMs. • It is often used with the term “owner” in relation to a fishing vessel or by itself in the expression “vessel operator”.
Supply vessel, support	<ul style="list-style-type: none"> • The term “supply vessel” is used 11 times in the body of active IOTC CMMs,

vessel	<p>including 6 times in Resolution 15/02. It is used in relation with the deployment and monitoring of FADs in association with purse seiners.</p> <ul style="list-style-type: none"> • The term “support vessel” is used 4 times throughout the body of active IOTC CMMs. • In the preamble of Resolution 15/08, the paragraph starting with the word “given” provides that the activities of “supply vessels” and the use of FADs are an integral part of the fishing effort exerted by the purse seine fleet. It is noteworthy that a similarly worded paragraph is included in the preamble of Resolution 15/02, except that the term “supply vessels” has been replaced by that of “support vessels”. This seems to demonstrate that the concepts of “supply vessel” and “support vessel” in the IOTC context are interchangeable. • In the preamble of Resolution 15/04, it is noted that “supply or support vessels can increase the fishing capacity of purse seine vessels in an uncontrolled manner”.
Tender vessel	<ul style="list-style-type: none"> • The concept of “tender vessel” is introduced in Resolution 15/08 Annex I, paragraph 2, point 1. • The term “tender vessel” is used only once throughout the IOTC CMMs.
Vessel monitoring device	<ul style="list-style-type: none"> • The term “vessel monitoring device” has been used 8 times and solely in Resolution 15/03 on the vessel monitoring programme. • Several terminologies have been used to refer to VMS equipment to be fitted on board fishing vessels in Resolution 15/03: a) vessel monitoring device; b) satellite-tracking device; c) satellite-monitoring device; and d) VMS.
Vessel monitoring system or VMS	<ul style="list-style-type: none"> • The term “vessel monitoring system” is used 7 times and the abbreviation “VMS” 26 times, including 19 times in Resolution 15/03 on the vessel monitoring system (VMS) programme. • The term VMS has been used improperly at times to refer to the VMS equipment to be fitted on board fishing vessels.

Annex 2 – Glossary in support of transposition of IOTC requirements into national legislation

“aircraft” means any craft capable of self-sustained movement through the atmosphere, and includes helicopters and unmanned or remotely operated airborne devices.

“authorised fishing vessel”, or AFV, is a fishing vessel on the IOTC Record of Fishing Vessels (defined below) that is:

- (a) larger than 24 metres in length overall; or
- (b) in case of vessels less than 24m, those operating in waters outside the economic exclusive zone of the flag state, and authorised to fish for tuna and tuna-like species in the IOTC Area. For the purposes of the establishing Resolution 14/04, vessels that are not entered into the record are deemed not to be authorised to fish for, retain on board, tranship or land tuna and tuna-like species.

“conservation and management measures” means measures to conserve and manage one or more species of living marine resources that are adopted and applied consistent with the relevant rules of international law, including the 1982 United Nations Convention on the Law of the Sea and the 1995 United Nations Fish Stocks Agreement;⁴⁵

“[Country] fishing vessel” means any fishing vessel that is registered, entitled to be registered or required to be registered in [country] pursuant to the [relevant law of country], and that does not hold a registration from or fly the flag of another State unless expressly permitted under the laws of the [country];

“electronic logbook system” means a computerised record of information and data relating to fishing or related activities and in such template as may be required, including pursuant to any international conservation and management measure(s), transmitted by the operator of a fishing vessel to the [required authorities];

“fish” means any water-dwelling aquatic or marine animal or plant, alive or not, and includes their eggs, spawn, spat and juvenile stages, and any of their parts, and includes all organisms belonging to sedentary species;

“fish aggregating device” means an object or group of objects of any size, whether anchored or deployed or not, that is natural, manufactured or a combination of both and includes inter alia buoys, floats, netting, webbing, plastics, metals, bamboo, logs and objects with electronic devices affixed floating or designed to float on or near the surface of the water with which fish may associate, and any natural floating object on which a device has been placed to facilitate its location;

“Fisheries Waters” means all waters over which [country] exercises sovereignty, jurisdiction and/or sovereign rights as declared in [relevant national laws- cite laws declaring maritime zones] or as are consistent with international law;

“fishery” or “fisheries” means:

- (a) one or more stocks of fish, or parts thereof, which can be treated as a unit for the purposes of conservation and management, taking into account geographical, scientific, technical, customary, recreational, economic and other relevant characteristics; or

⁴⁵ From the UNFSA.

(b) any fishing for such stocks;

“fishing” means searching for, attracting, locating, catching, taking or harvesting fish or any activity which can reasonably be expected to result in the attracting, locating, catching, taking or harvesting of fish, and includes the deployment, monitoring and retrieving of (drifting) Fish Aggregating Devices;

“fishing vessel” means any vessel used for, equipped to be used for, or of a type that is normally used for, fishing or related activities;

“gear” in relation to fishing means any equipment, implement or other item that can be used in the act of fishing, including any net, rope, line, float, trap, hook, fish aggregating device, winch, boat, or craft or aircraft carried on board a vessel, or aircraft or vehicle used in association with the act of fishing;

“IOTC” means the Indian Ocean Tuna Commission established in 1993 at the 105th Session of the Council of the Food and Agriculture Organization of the United Nations (FAO) under Article XIV of the FAO Constitution;

“IOTC area of competence” means the area designated in Article II and Annex A of the IOTC Agreement, based on FAO statistical areas 51 and 57 and including the Indian Ocean and adjacent seas, north of the Antarctic Convergence, insofar as it is necessary to cover such seas for the purpose of conserving and managing stocks that migrate into or out of the Indian Ocean.⁴⁶

“IOTC Conservation and Management Measure” means any measure adopted in accordance with Article IX of the IOTC Agreement;

“IOTC Record of Fishing Vessels” means the IOTC record of vessels authorised to operate in the IOTC area established under Resolution 14/04 Concerning the establishment of an IOTC Record of Fishing Vessels;⁴⁷

“large scale tuna vessels”, or “LSTVs”, has the meaning given by IOTC from time to time, and unless otherwise amended shall mean fishing vessels 24 metres in length overall or above and which are engaged in or equipped to engage in fishing or related activities in relation to tuna and tuna-like species and shark caught in association with tuna and tuna-like fisheries [in the IOTC area of competence];

“law” includes the national principal statute, law, act or other instrument in a country’s legislative system;

“legislation” includes laws, regulations, orders, notices and other instruments having the force of law in a country or regional economic integration organization;

“master”, in relation to a vessel, aircraft or vehicle, means the person in command or charge, or for the time being in charge, or apparently in command or in charge of the vessel, aircraft or vehicle, but does not include a pilot on board a vessel solely for the purpose of navigation;

“mobile transceiver unit” or “MTU” means a device approved by the [senior operational fisheries officer], which is installed on board a fishing vessel and is designed to automatically transmit, whether independently or in conjunction with another device or devices, information or data

⁴⁶ Note: The Commission, at its 4th Session in 1999 agreed to modify the western boundary of the IOTC area of competence from 30oE to 20oE, thus eliminating the gap between the areas covered by IOTC and ICCAT.

⁴⁷ Note that Resolution has been superseded by Resolution 15/04 concerning the IOTC record of vessels authorised to operate in the IOTC area of competence.

concerning position, fishing, catch and such other activities as may be required, and allows detection and identification of the fishing vessel at all times;

“national fishing logbook”, or “fishing logbook” means a permanently bound logbook issued by the flag State of a vessel and required for any purpose relating to fishing or related activities, with irremovable pages, each of which is consecutively numbered and printed with an applicable serial number;

"operator" means any person who is in charge of, responsible for the operations of, directs or controls a vessel, including the owner, charterer, master and the beneficiary of the economic or financial benefit of the vessel's operations;

“related activities”, in relation to fishing, or “fishing related activities” includes any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transshipping or transporting of fish that have not been previously landed at a port, as well as the provisioning of personnel, fuel, gear and other supplies at sea;⁴⁸

“vessel" means any boat, ship, hovercraft or other watergoing craft, and includes fishing vessels.

⁴⁸ Drawn from Article 1 of the PSMA.

Annex 3 – Key terms defined in Tuna RFMOs and main international fisheries instruments

Table 3 – Definitions of key terms in tuna RFMOs

Terms/Definitions	ICCAT	WCPFC	IATTC
Auxiliary vessel	any vessel used to transport dead bluefin tuna (not processed) from a transport/farming cage, a purse seine net or a tuna trap to a designated port and / or to a processing vessel (Rec. 14-04)		
Configured (to use large-scale driftnets)		means having on board gear, either assembled or disassembled, that collectively would allow the vessel to deploy and retrieve large-scale driftnets (CMM 2008-04)	
Data buoys		are floating devices, either drifting or anchored, that are deployed by governmental or recognized scientific organizations or entities for the purpose of electronically collecting and measuring environmental data, and not for the purpose of fishing activities. (CMM 2009-05)	
FAD		any object or group of objects, of any size, that has or has not been deployed, that is living or non-living, including but not limited to buoys, floats, netting, webbing, plastics, bamboo, logs and whale sharks floating on or near the surface of the water that fish may associate with” (CMM 2009-02)	anchored, drifting, floating or submerged objects deployed and/or tracked by vessels, including through the use of radio and/or satellite buoys, for the purpose of aggregating target tuna species for purse-seine fishing operations. (Resolution C-13-04)
Fishing		(i) searching for, catching, taking or harvesting fish; (ii) attempting to search for, catch, take or	

		<p>harvest fish;</p> <p>(iii) engaging in any other activity which can reasonably be expected to result in the locating, catching, taking or harvesting of fish for any purpose;</p> <p>(iv) placing, searching for or recovering fish aggregating devices or associated electronic equipment such as radio beacons;</p> <p>(v) any operations at sea directly in support of, or in preparation for, any activity described in subparagraphs (i) to (iv), including transshipment;</p> <p>(vi) use of any other vessel, vehicle, aircraft or hovercraft, for any activity described in subparagraphs (i) to (v) except for emergencies involving the health and safety of the crew or the safety of a vessel (Art. 1 (d) of Convention)⁴⁹</p>	
Fishing vessel	<p>any powered vessel used or intended for use for the purposes of the commercial exploitation of bluefin tuna resources, including catching vessels, fish processing vessels, support vessels, towing vessels, vessels engaged in transshipment and transport vessels equipped for the transportation of tuna products and auxiliary vessels, except container vessels (Rec. 14-04)</p>	<p>any vessel used or intended for use for the purpose of fishing, including support ships, carrier vessels and any other vessel directly involved in such fishing operations (Art. 1 (e) of Convention)</p>	
Improperly documented			<p>“improperly documented” means that the Bigeye Tuna Statistical Document is either missing from the</p>

⁴⁹ Convention with respect to WCPFC refers to the Convention on the Conservation and Management of Highly migratory Fish Stocks in the Western and Central Pacific Ocean in 2000.

			shipment, incomplete, invalid or falsified (Resolution C-03-01)
Large-scale driftnets		“Large-scale driftnets” are defined as gillnets or other nets or a combination of nets that are more than 2.5 km in length whose purpose is to enmesh, entrap, or entangle fish by drifting on the surface of, or in, the water column. (CMM 2008-04)	
Large-scale tuna vessels			“Large-scale tuna fishing vessels” are defined as all vessels fishing beyond areas of national jurisdiction or beyond each CPC-controlled areas and targeting tuna or tuna-like species (Resolution C-11-09) and (Resolution C-06-04)
Master	the individual in charge of the vessel (Rec. 75-02)		
Operator		any person who is in charge of or directs or controls a vessel, or for whose direct economic or financial benefit the vessel is being used, including the master, owner, and charterer (CMM 2004-03)	
Support vessel	any other fishing vessel than referred to in 2a) (see definition of fishing vessel above in this column) (Rec. 14-04)		
Unfit for human consumption		a. “unfit for human consumption” includes, but is not limited to fish that: i. is meshed or crushed in the purse seine net; or ii. is damaged due to shark or whale depredation; or iii. has died and spoiled in the net where a gear failure has prevented both the normal retrieval of the net and catch and efforts to	

		<p>release the fish alive; and</p> <p>b. “unfit for human consumption” does not include fish that:</p> <p>i. is considered undesirable in terms of size, marketability, or species composition; or</p> <p>ii. is spoiled or contaminated as the result of an act or omission of the crew of the fishing vessel.</p> <p>(CMM 2009-02)</p>	
Vessel		<p>any fishing vessel, as defined in Article 1, paragraph (e) of the Convention and authorized by a member of the Commission to fish in the Convention area beyond areas of the member’s national jurisdiction, and includes a boat, skiff or craft (including aircraft) carried on board the fishing vessel and required for fishing operations.</p> <p>(CMM 2004-03)</p>	

Table 4 – Definitions of key terms in main international fisheries instruments

Definitions/key terms	1993 Compliance Agreement	1995 UNFSA	2009 PSMA
Fish		<p>includes molluscs and crustaceans except those belonging to sedentary species as defined in article 77 of the Convention</p>	<p>all species of living marine resources, whether processed or not</p>
Fishing			<p>searching for, attracting, locating, catching, taking or harvesting fish or any activity which can reasonably be expected to result in the attracting, locating, catching, taking or harvesting of fish</p>
Fishing related activities			<p>any operation in support of, or in preparation for, fishing, including the landing, packaging,</p>

			processing, transshipping or transporting of fish that have not been previously landed at a port, as well as the provisioning of personnel, fuel, gear and other supplies at sea
Fishing vessel	any vessel used or intended for use for the purposes of the commercial exploitation of living marine resources, including mother ships and any other vessels directly engaged in such fishing operations		
IUU fishing			refers to the activities set out in paragraph 3 of the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
Port			includes offshore terminals and other installations for landing, transshipping, packaging, processing, refuelling or resupplying
Vessel			any vessel, ship of another type or boat used for, equipped to be used for, or intended to be used for, fishing or fishing related activities

Annex 4 – Review of individual IOTC CMMs

This document outlines the findings derived from the review of individual IOTC CMMs. It examines active IOTC CMMs and follows a chronological order.

a) Resolution 99/02 calling for actions against fishing activities by large scale flag of convenience longline vessels

The concepts of “FOC fishing activities” and “FOC longline fishing operations” introduced in the preamble and paragraph 3 of Resolution 99/02 lack clarity. While these two concepts are not defined, they both seem to refer to IUU fishing activities, globally for the former and by longline fishing vessels for the latter. The particular focus of this resolution is on fishing vessels flying a flag of convenience and engaged in IUU fishing activities. It is noteworthy that this resolution pre-dates the IPOA-IUU and that the concept of “IUU fishing” had not yet been defined, even though reference to it is made in paragraph 1 of the Resolution.

In this resolution, in addition to the two expressions mentioned in the paragraph above, the expression “flag of convenience” or “FOC” is used to qualify the following terms: “vessels”, “fishing vessels” and “fishing”. Where used in conjunction with the term “fishing”, it seems fair to assume that it was intended to mean “IUU”. However, where used in conjunction with the terms “vessels” and “fishing vessels”, it appears to have a different meaning. Based on the phrasing of Recommendation 98/04, paragraphs 5 and 6, it would seem that, at the time, all large-scale fishing vessels (greater than 24 meters in LOA) operating in the IOTC area of competence and flying the flag of a State, which was not a Contracting Party or a Non-Contracting Party cooperating with IOTC, were generically referred to as “FOC” vessels.

To restore clarity to this Resolution, it is recommended to:

- (i) replace the expressions “FOC fishing activities” and “FOC longline fishing operations” by the expression “IUU fishing activities” in paragraphs 3, 5, 6, and 7;
- (ii) substitute the phrase “fishing activities diminishing the effectiveness of measures adopted by IOTC” by the term “IUU fishing activities” in paragraphs 2 and 6;
- (iii) delete the phrase “fishing activities diminishing the effectiveness of IOTC measures” in paragraph 3, bullet 2;
- (iv) delete the reference to “FOC fishing” in paragraph 8 and replace it by the term “IUU fishing”;
- (v) delete the acronym “FOC” in the expression “FOC vessels” and “FOC fishing vessels” in paragraphs 2 and 6 respectively.

As demonstrated above, the expressions “FOC vessels” or “FOC fishing vessels” have been used improperly. Use of this terminology is limited to early-days CMMs and restricted to references in the titles of Recommendations 98/04 and 99/01 and in the preamble of Resolution 99/03.

The concept of “flag of convenience” is used to refer to flag States, which keep an open registry and/or do not or are not willing to exercise control over vessels flying their flags allowing them to not comply with applicable rules of national and/or international law. Unlike the lists of IUU fishing vessels established by RFMOs, which have received legal status, there is no widely recognized lists of FOC countries with legal authority. Therefore, it is better not to use the terminology “FOC” in the IOTC CMMs.

b) Resolution 01/06 concerning the IOTC bigeye tuna statistical document programme

Note that reference to the notion of “flag of convenience fishing operations” is made in the preamble of this Resolution.

c) Resolution 03/01 on the limitation of fishing capacity of Contracting Parties and Cooperating Non-Contracting Parties

The notion of “large-scale tuna vessels” (LSTVs) is used in the preamble and that of “large-scale fishing vessels” (LSFVs) in paragraph 1. While no formal definitions are provided for these two notions, there is no doubt that they refer to tuna fishing vessels or fishing vessels greater than 24 meters in length overall. Each time these terms are used, they are accompanied with an explanation to ensure good comprehension of these notions. In the context of this Resolution, the expressions “large-scale tuna vessels” and “large-scale fishing vessels” are synonymous and thus interchangeable.

In paragraph 4, reference is made to the term “IOTC Convention area”. This term is improper as Article II of the Agreement for the establishment of the Indian Ocean Tuna Commission makes reference to the “area of competence”.

d) Resolution 03/03 concerning the amendment of the forms of the IOTC statistical documents

This Resolution introduces a definition of the term “improperly documented” in paragraph 4 of Annex I and in paragraph 5 of Annex II, which means “that the Bigeye Tuna Statistical Document is either missing from the shipment, incomplete, invalid or falsified”.

e) Resolution 05/07 concerning a management standard for the tuna fishing vessels

The expression “IUU large-scale tuna vessels” is used in the preamble of this Resolution. It should be noted that this expression is used only once throughout the body of active CMMs.

While “flag hopping” and fishing vessels flying a flag of convenience are clearly targeted by this resolution, it is interesting to note that the term “FOC” is not used.

f) Resolution 05/05 concerning the conservation of sharks caught in association with fisheries managed by IOTC

Use of the term “artisanal fisheries” is made in paragraph 12 (generic term). This provision applies to artisanal fisheries, but no definition is provided.

The term “artisanal fisheries” has been used 7 times throughout the IOTC CMMs, including in Resolution 15/02 where it is used as a synonym of “coastal fisheries”. The latter (footnote 1) is defined as: “fisheries other than longline and surface, as defined above, also called artisanal fisheries”.

The notion of “full utilisation” is defined in paragraph 3 and applies only to this particular resolution. It means “retention by the fishing vessel of all parts of the shark excepting head, guts and skins, to the point of first landing”.

g) Resolution 05/03 relating to the establishment of an IOTC Programme of inspection in port

In paragraph 3, the phrase “when such vessels are voluntarily in its ports or at its offshore terminals” is used. The wording of this phrase would have to be modified by deleting “or at its offshore terminals”, should the definition of the term “port”, included in Resolution 10/11, be retained as such to be included in the IOTC glossary of terms.

The definition of the term “port” included in Resolution 10/11 is taken from the PSMA (Art. 1) and reads as follows: “includes offshore terminals and other installations for landing, transshipping, packaging, processing, refueling or resupplying.”

h) Resolution 05/01 on conservation and management measures for bigeye tuna

Consistency in the terminology used to refer to the IOTC area of competence is to be ensured. The IOTC area of competence is the geographical area upon which the Commission exercises its jurisdiction in accordance with Article II of the IOTC Agreement.

In paragraph 8 of Resolution 05/01, the term “IOTC Convention area” is used, whereas in the preamble of the same resolution reference is made to the “IOTC area of competence”. For sake of consistency, it is recommended to replace the term “IOTC Convention area” by the term “IOTC area of competence” in paragraph 8 of Resolution 05/01 and in any other resolution for that matter. It appears that this term is only used in one other resolution (Resolution 03/01). This issue has already been flagged as the term “IOTC area of competence” has been added in bracket next to the term “IOTC Convention area”.

It is also recommended to introduce a definition of the term “IOTC area of competence” in the IOTC Glossary of Terms.

i) Resolution 07/01 to promote compliance by nationals of Contracting Parties and Cooperating Non-Contracting Parties with IOTC conservation and management measures

In the preamble of this Resolution, replace references to the term “area of competence” made in the third paragraph starting with the word “aware” and in the fourth paragraph starting with the word “concerned” by the term “IOTC area of competence”.

In paragraph 2, the phrase “subject to the national laws of confidentiality” is poorly worded and lacks clarity. It is suggested to replace it by the phrase “subject to rules of confidentiality under national law”.

j) Resolution 10/11 on port State measures to prevent, deter and eliminate IUU fishing

Unlike other IOTC Resolutions, this resolution includes a section on use of terms that provides for the definitions of 6 terms, namely, “fish”, “fishing”, “fishing related activities”, “illegal, unreported and unregulated fishing”, “port” and “vessel”. These terms are drawn from Article 1 of the PSMA and are adapted to the IOTC context. They are basic terms that are commonly used throughout IOTC CMMs. Thus, these terms are of general application and should not be confined to Resolution 10/11.

In this Resolution, the term “IOTC Area” is used to refer to the “IOTC Area of competence”.

There is a reference to the notion of “artisanal fishing” in section 3.1(a) to exclude vessels from a neighboring States that are engaged in “artisanal fishing for subsistence” from the scope of this resolution, provided that there is an agreement between the flag and port States to ensure that such vessels do not engage in IUU fishing or fishing related activities in support of such fishing. Since there

is no recognized universal definition of the concept of “artisanal fishing”, it is not advisable to introduce such a definition in the IOTC Glossary of Terms.

In this Resolution, use of the generic term “Conservation and Management Resolutions” is made in section 11.2(c). This terminology is unusual as the generic term commonly used to refer to the body of decisions taken by the IOTC is “IOTC Conservation and Management Measures”. This term embodies both resolutions (which are binding on CPCs which have not opted out) and recommendations (which are not binding on CPCs). In this particular point, there is little doubt that the term “Conservation and Management Resolutions” refers to IOTC Resolutions. As shown in the Compendium of Active IOTC CMMs, IOTC CMMs are presented by year and are not classified into different categories as may be the case in other tuna RFMOs (e.g. ICCAT). Thus, the terminology should not refer to any particular category or subset of CMMs. Consequently, it would seem logical to use the generic term “IOTC CMMs” when referring to all CMMs, including recommendations, and to use the term “IOTC Resolutions” when referring to binding measures adopted by the Commission. It is important to add the word “IOTC” to qualify the term “Resolutions” so as to ensure good comprehension and avoid any ambiguity as to which Resolutions reference is made.

It is therefore recommended:

- (a) for sake of consistency throughout the CMMs, to replace the term “IOTC Area” by the term “IOTC Area of competence”;
 - (b) not to include the term “artisanal fishing” in the IOTC Glossary of Terms;
 - (c) to replace the “Conservation and Management Resolutions” by that of “IOTC Resolutions” in section 11.2(c);
 - (d) to use the generic term “IOTC Conservation and Management Measures” to refer to the entire body of measures taken by IOTC and that of “IOTC Resolutions” to refer to Resolutions adopted by IOTC.
- k) **Resolution 10/08 concerning a record of active vessels fishing for tunas and swordfish in the IOTC area**

Reference is made to the economic exclusive zone of Member States. There is no need to define this term as it is well-known and understood. The term “economic exclusive zone” has been used three times throughout the body of CMMs and the abbreviation “EEZ” 28 times.

l) **Resolution 11/04 on a Regional Observer Scheme**

This resolution provides definitions for the following two terms: “observer” and “field sampler”. These definitions have been introduced through footnotes and apply to this particular resolution only. Note that if the term “observer” is a term often defined in national fisheries legislation, this is not the case for the term “field sampler”. The latter is generally used in fisheries policy documents.

“Observer” is defined as “a person who collects information on board fishing vessels. Observer programmes can be used for quantifying species composition of target species, bycatch, by-products and dead discards, collecting tag returns, etc.”

“Field sampler” is defined as “a person who collects information on land during the unloading of fishing vessels. Field sampling programmes can be used for quantifying catch, retained bycatch, collecting tag returns, etc. “

Note that these definitions are not limited to the terms “observer” and “field sampler”, but also include explanatory notes about the objectives of observer and field sampling programmes.

Reference is made to “artisanal fishing vessels” but no definition of this notion is provided. There is clearly no need to provide a definition of this concept as it is defined in national legislation. The concept of “artisanal fishing vessels” is used only twice throughout the body of CMMs (and in this Resolution)

m) Resolution 11/03 on establishing a list of vessels presumed to have carried out IUU fishing in the IOTC Area of competence

This resolution provides a definition of the concept of “IUU fishing activities” in the IOTC context (section 1). Based on the wording of Resolution 11/03, this definition is intended to apply only for the purposes of this Resolution. However, it also applies to Resolution 10/11 on port State measures as paragraph 1(d) of that Resolution states that “IUU fishing” refers to the fishing activities set out in Resolution 11/03. It should be noted that the list of activities regarded as being IUU fishing activities in section 1 of Resolution 11/03 is not exhaustive (use of the word “*inter alia*”).

In paragraph 16 a), use of the terms “fishing vessels”, “mother-ships” and “cargo vessels” is made. No definition of any of these terms is provided. One will have to decide how the term “fishing vessel” should be defined for the purpose of IOTC CMMs. Considering international best practice and definitions in international fisheries instruments (PSMA, term “vessel” is defined), the trend is to define the term “fishing vessel” (or “vessel”) broadly as including vessels harvesting the fish and vessels involved in “fishing related activities”. As a result, the definition of the notion of “fishing vessel” is closely related (intertwined with) to the definitions of the terms “fishing” and “fishing related activities”. These two terms have been defined in IOTC Resolution 10/11 and reproduce the definitions contained in the PSMA. As a result, the term “mother ship” (this term is used only once in the IOTC CMMs) would be covered by the definition of “fishing vessel”. As for the notion of “cargo vessel”, one will have to determine the extent of its scope. The definition of “fishing related activities” covers the transportation of fish to its first point of landing. This means that further transport of fish (after landing) is not covered by this definition. Thus cargo vessels or container vessels are not included in the definition of “fishing vessel”. One may need to distinguish between “cargo vessel” or “reefers” (the term reefer is not used at all in the IOTC CMMs) that are equipped to transport fish and container vessels that transport any type of goods. It should be noted that the term “cargo vessel” is used only once throughout the body of IOTC active CMMs. Therefore, should there be a need to define this term, it could be defined only in the context of Resolution 11/03.

In paragraph 16 d), use is made of the terms “owner” and “operator”. One will have to decide whether to introduce a definition of the term “operator” modelled after best international practice in national legislation. It may be useful as the name of the “operator” is required in the IOTC Reporting Form for Illegal Activity in Annex I to Resolution 11/03 (see item h). In item k) of this Form the word “fishing” is missing and should be added so as to read “Summary of alleged IUU fishing activities”. Note that the identity of the “operator” is also required in the information to be included in the all IOTC IUU Vessels Lists (see item 4).

Ensure consistency between the wording used in paragraph 16 d) and paragraph 19 d) to determine whether the use of the term “operator” is necessary. The wording in paragraph 16 d) reproduces almost *verbatim* the wording of section 36.1 of the IPOA-IUU which uses the term “operator” without defining it.

n) Resolution 11/02 on the prohibition of fishing on data buoys

Paragraph 1 of this Resolution introduces, for the purpose of this particular Resolution, a definition of the term “data buoy” as referring to “floating devices, either drifting or anchored, that are deployed by governmental or recognized scientific organizations or entities for the purpose of electronically collecting and measuring environmental data, and not for the purpose of fishing activities”.

o) Resolution 12/12 to prohibit the use of large-scale driftnets on the high seas in IOTC area

This Resolution introduces the definitions of two terms through footnotes, namely, “large-scale driftnets” and “configured”, which are defined as follows:

“Large-scale driftnets” are defined as gillnets or other nets or a combination of nets that are more than 2.5 kilometers in length whose purpose is to enmesh, entrap, or entangle fish by drifting on the surface of, or in, the water column.

“Configured” to use large-scale drift-nets means having on board assembled gear that collectively would allow the vessel to deploy and retrieve large-scale driftnets.

While the term “large-scale driftnets” could be of global application throughout IOTC active CMMs, the term “configured” obviously applies only to Resolution 12/12. The term “large-scale driftnets” is in line with international law.

p) Resolution 12/10 to promote implementation of CMMs already adopted by IOTC

No specific comments.

q) Resolution 12/09 on the conservation of Thresher Sharks (Family Alopiidae) caught in association with fisheries in the IOTC area of competence

This resolution uses the term “bycatch” without providing a definition.

r) Resolution 12/06 on reducing the incidental bycatch of seabirds in longline fisheries

This Resolution focuses on seabird bycatch in longline fisheries in the IOTC area of competence. The term bycatch is used at times in association with the term “incidental” and at other times without, giving the impression that they may be different types of bycatches, incidental and others. This is unlikely to be the case. Thus, for sake of clarity, it is recommended to introduce a definition of the term “bycatch” in the IOTC Glossary of Terms (different from that provided in the Glossary of scientific terms).

s) Resolution 12/04 on the conservation of marine turtles

This Resolution requires that CPCs take all measures necessary to mitigate the incidental catch of marine turtles in longline, gillnet and purse seine fisheries.

In this resolution reference is made to “incidental catch”. The word “bycatch” is not used except in reference to IOSEA MoU including the provisions of the Conservation and Management Plan in the implementation of bycatch mitigation measures for marine turtles.

The terms “logbook” and “FAD” are also used.

t) **Resolution 12/02 data confidentiality policy and procedures**

No specific comments

u) **Resolution 12/01 on the implementation of the precautionary approach**

This Resolution provides definitions for the terms “target reference points”, “limit reference points” and “harvest control rules”. These definitions are introduced through footnotes. These definitions are drawn from the FAO Fisheries Glossary.

v) **Resolution 13/09 on the conservation of albacore caught in the IOTC area of competence**

No specific comments.

w) **Resolution 13/06 on a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries**

The term “artisanal fisheries” in paragraph 3 is used to exclude artisanal fishing vessels fishing for sharks for local consumption within their respective EEZ from the scope of the measure contained in paragraph 3. This term is not defined, but in this particular context, it clearly refers to artisanal fishing vessels (or the artisanal fleet segment) and seems to have been used improperly.

CPCs are required to encourage their fishers to record incidental catch of whitetip sharks (paragraph 5). The term “bycatch” is not used.

The term “scientific observer” is used in paragraph 7. Use of both the terms “observer” and “scientific observer” is made throughout the body of active CMMs. Does this indicate that when the term “observer” is used without being qualified as “scientific”, that observers can also be “compliant” observer? It is unclear whether there is a well-established rationale behind the use of these two different terms.

x) **Resolution 13/05 on the conservation of whale sharks (*Rhincodon typus*)**

The expression “artisanal fisheries” is used in paragraph 1 to exclude artisanal fishing vessel or the artisanal segment of the fleet operating exclusively in their respective EEZ from the scope of this Resolution. This term seems to have been used improperly as “artisanal fisheries” do not operate but “fishing vessels” do.

In paragraph 7, reference is made to “observer” in relation to the reporting of data and information relating to the incidental catch and release of whale sharks. This is a scientific task, even though the text of the Resolution does not refer to the concept of “scientific observer”.

y) **Resolution 13/04 on the conservation of cetaceans**

As for the previous two resolutions, the expression “artisanal fisheries” is used to exclude the artisanal fishing vessels operating exclusively within their respective EEZ from the scope of this Resolution (par. 1).

This Resolution also contains similar provisions to those of Resolution 13/05 with respect to “observer” (par. 7).

z) **Resolution 14/06 on establishing a programme for transshipment by large-scale fishing vessels**

No definition of the term “large-scale tuna longline fishing vessel” (LSTLV) and of the term “large-scale tuna vessel” (LSTV) is provided in this Resolution. While there is a definition of the latter under Resolution 03/01, no reference to it is made. The term “carrier vessel” is introduced in paragraph 3. While no definition is provided, it is clear that, in the context of this particular Resolution, it refers to vessels authorized to receive tuna and tuna-like species and sharks at sea from LSTLVs in the IOTC area of competence (transshipment at sea). It is noteworthy that, in paragraphs 14, 15 and 16, reference is made to the expression “receiving carrier vessel” to refer to the “carrier vessel”.

Carrier vessels are required to install and operate a vessel monitoring system (VMS).

The notion of “IOTC observer” is introduced in paragraph 17. The role of this observer is to “observe the compliance of this Resolution, and notably that the transhipped quantities are consistent with the reported catch in the IOTC transshipment declaration”.

In Annex I and III, use of the term “captain” and “master” is made. These terms are interchangeable. To avoid misunderstanding or misinterpretation, it is advisable to use only one single term. Practice shows that the term “master” is commonly used in international fisheries instruments. At national level, it varies from one country to the next. The term “captain” is commonly used in French speaking countries, whereas the term “master” is the term of choice in most English speaking countries, at least in reference to industrial fishing vessels.

aa) **Resolution 14/05 concerning a record of licensed foreign fishing vessels for IOTC species in the IOTC area of competence and access agreement information**

The concept of “private access agreement” used in this resolution is unclear.

What are "private access agreements"? This terminology is often used during discussions but is not found in international fisheries instruments or national laws and regulations.

Generally, access to a coastal State’s fisheries by foreign flagged vessels is subject to an agreement between the coastal State and another State (Government to Government Agreement), a regional economic integration organization that has the power to negotiate fisheries agreements on behalf of its Member States (e.g. EU), or a fishing association (or similar body or entity) representing the tuna industry (e.g. ANABAC, OPAGAC). The latter and agreements that may be concluded with fishing companies are collectively referred to as "private access agreements". In addition, individual licenses are issued to fishing companies or individual foreign-flagged fishing vessels outside the framework of any agreement. In this Resolution, there is no reference to agreements concluded with fishing association or similar body or with fishing companies.

Based on the above, it would seem that the first heading should refer to "individual licenses" issued in respect of foreign-flagged fishing vessels rather than “private access agreements”. Provisions under the first heading should be extended to include access agreements concluded with fishing associations (or similar bodies or entities) representing the tuna industry and with fishing companies. Should additional provisions be included in the Resolution to cover these agreements, thus the first heading could be entitled “agreements with fishing associations or other entities and fishing companies”.

One should note that there is no obligation to provide a copy of a “private access agreement” as is required for “government-to-government” access agreements.

The latter type of agreements does not cover agreements concluded with regional economic integration organizations. As a result, EU agreements are not covered even though they are very important in the region. However, information on these agreements is easily accessible as they are in the public domain and are published in the Official Journal of the European Union.

It is noteworthy that the subject matter of this Resolution is about a “record of licensed foreign fishing vessels”, but that there is no provision on the establishment of such a record in the body of the Resolution.

bb) Resolution 14/03 on enhancing the dialogue between fisheries scientists and managers

The expression “target and limit reference points” is used in this Resolution.

The concepts of “target reference points” and “limit reference points” are defined in Resolution 12/01 (see above).

The concept of “harvest control rules” is also used in this Resolution. This concept is also defined in Resolution 12/01.

cc) Resolution 14/02 for the conservation and management of tropical tuna stocks in the IOTC area of competence

The expression “tuna artisanal fisheries sector” is used to indicate that there is a need to strengthen catch statistics reporting from this sector and that of “artisanal tuna fisheries” to advise on best reporting requirement from that sector.

dd) Resolution 14/01 on the removal of obsolete conservation and management measures

No specific comments

ee) Resolution 15/11 on the implementation of a limitation of fishing capacity of contracting parties and cooperating non-contracting parties

No specific comments

ff) Resolution 15/10 on target and limit reference points and a decision framework

This Resolution deals with target reference points and limit reference points (see Resolution 12/01 above). It also introduces definitions of the scientific terms “B_{MSY}” and “F_{MSY}” to explain the figures in Table 1 on interim target and limit reference points. It stipulates that B_{MSY} refers to “the biomass level for the stock that would produce the Maximum Sustainable Yield” and that F_{MSY} refers to “the level of fishing mortality that produces the Maximum Sustainable Yield”. While these definitions do not reproduce *verbatim* those found in the IOTC Glossary of scientific terms, they are clearly drawn from it.

It should be noted that the concept of MSY is not defined.

gg) Resolution 15/09 on a Fish Aggregating Devices (FADs) Working Group

There is a reference to the activities of “supply vessels” in Annex I, paragraph 1, 1st bullet point. It is used in relation to the use of FADs. In the penultimate bullet point of Annex I, paragraph 1, reference to the activities of “support vessel” is made and is used in relation to the use of FADs. While no definition of the notions of “supply vessel” and “support vessel” is provided, it would seem that, in the particular context of Resolution 15/09, these terms are synonymous and thus interchangeable.

hh) Resolution 15/08 procedures on a Fish Aggregating Devices (FADs) Management Plan, including a limitation on the number of FADs, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species

In the preamble, the paragraph starting with the word “given” provides that the activities of “supply vessels” and the use of FADs are an integral part of the fishing effort exerted by the purse seine fleet. It is noteworthy that a similarly worded paragraph is included in the preamble of Resolution 15/02, except that the term “supply vessels” has been replaced by that of “support vessels”. This seems to demonstrate that the concepts of “supply vessel” and “support vessel” in the IOTC context are interchangeable.

It introduces the notion of “instrumented buoy”, which is defined as “a buoy with a clearly marked reference number allowing its identification and equipped with a satellite tracking system to monitor its position” (paragraph 2). Other buoys, such as radio buoys, are to be phased out by 1 January 2017.

A definition of the notion of “FAD” is provided for the particular purpose of this resolution in paragraph 11. It provides that the term FAD means “drifting or anchored floating or submerged objects deployed for the purpose of aggregating target tuna species”.

In paragraph 15, a definition of the expression “abandoned FAD” is provided as referring to a FAD without a beacon or which has drifted outside the fishing zone. It is unclear whether the use of the term “beacon” is an indirect reference to a “radio buoy” (mentioned in paragraph 2). The meaning of the term “fishing zone” is unclear. Is this a reference to the IOTC area of competence, the EEZ of a CPC or any other area?

In paragraph 16, reference to the notion of “artificial FADs” is made but no explanation is given. What is an “artificial FAD” (as opposed to a “natural FAD”)? It should be noted that the term “natural FAD” is used in Annex I, paragraph 8, point b) iv. Only artificial FADs are required to be marked with a unique identification number. The reference to the term “vessel operator” in paragraph 16, point 2, is too vague as it may refer to the master of the purse seine vessel or the master of the supply/support vessel.

In Annex I, paragraph 2, point 1, reference to support and tender vessels is made. What is the difference between a “tender” and a “support” vessel”, if any?

ii) Resolution 15/07 on the use of artificial lights to attract fish to drifting fish aggregating device

In paragraph 1, it is stipulated that “fishing vessels” include “support and supply vessels”. Therefore, it is clear that, at least for the purpose of this Resolution, the concept of “fishing vessel” is to be interpreted broadly. It is not expressly specified whether this interpretation is valid only for the

purpose of this particular Resolution. However, it does not shed any light on the meaning of the terms “support vessel” and “supply vessel” and on whether they refer to different types of vessels.

jj) Resolution 15/06 on a ban on discards of bigeye tuna, skipjack tuna, yellowfin tuna, and a recommendation for non-target species caught by purse seine vessels in the IOTC area of competence

No definition of the term “discards” is provided.

The term “captain” is used in paragraph 2, point b). For sake of consistency and good comprehension of the CMMs, it is advisable to use only one term to refer to the person in charge of the vessel, as these two terms seems to be interchangeable.

This Resolution introduces a definition of the expression “fit for human consumption”. It is defined in the context of the purse seine fishery and is only applicable to that fishery.

kk) Resolution 15/05 on conservation measures for striped marlin, black marlin and blue marlin

No specific comments except for improved wording of this Resolution (see comments made directly in the text of the Resolution).

ll) Resolution 15/04 concerning the IOTC Record of vessels authorized to operate in the IOTC area of competence

In the preamble, it is stated that “[N]oting that supply or support vessels can increase the fishing capacity of purse seine vessels in an uncontrolled manner”. It is worthy to note that in this sentence, the notions of “support vessels” and “supply vessels” seem to have the same meaning.

In paragraph 1 of this Resolution, the notion of “fishing vessel” is used in its broad sense (but only for the purpose of this Resolution) as including “auxiliary, supply and support vessels”.

The term “authorized fishing vessels or AFVs” is defined as vessels that are:

1. a) 24 meters in length overall or above; or b) in case of vessels less than 24 meters (in length overall), those operating outside the EEZ of the flag State;

and

2. authorized to fish for tuna and tuna-like species in the IOTC area of competence.

It should also be noted that, in this Resolution, two terminologies are used to refer to “the IOTC Record of fishing vessels”: “IOTC Record of fishing vessels” and “IOTC Record”. If an abbreviation is to be used, it should be clearly established at the beginning of the Resolution. It can also be included in the IOTC Glossary of terms.

Information to be provided by CPCs for inclusion in the IOTC Record of fishing vessels includes the “name of operator”.

In paragraph 12, the expression “IUU fishing vessels” is used. It is unclear whether this is a reference to vessels listed on an IUU list of vessels established by a RFMO.

In paragraph 16, it is required that each CPC ensures that its flagged vessels “keep a bound national fishing logbook with consecutively numbered pages”. This requirement is to be taken into consideration when discussing the definition of the term “fishing logbook”.

mm) **Resolution 15/03 on the vessel monitoring system (VMS) programme**

The term VMS is well known and understood and thus does not warrant the introduction of a specific definition. However, it appears that the expression “VMS” is at times used to refer to the vessel monitoring system and at others to refer to the “vessel monitoring device(s)” to be fitted on board fishing vessels (e.g. paragraph 3).

There is a need to restore consistency in use of terminology with respect to VMS equipment to be fitted on board fishing vessels: in paragraph 8, the expression “vessel monitoring device(s)” is used, whereas in paragraph 9 the expression “satellite-tracking devices” is used to refer to the same devices. Same applies to Annex I. In Annex I, paragraph B), points b) and c), the expression “satellite monitoring device” is used.

nn) **Resolution 15/02 mandatory statistical reporting requirements for IOTC CPCs**

Definitions of the different types of fisheries (surface fisheries, longline fisheries and coastal fisheries) are provided in paragraph 4 through a footnote, which is attached to the wrong term:

Longline fisheries: “Fisheries undertaken by vessels in the IOTC Record of Authorized Vessels that use longline gear”;

Surface fisheries: “All fisheries undertaken by vessels in the IOTC Record of Authorized Vessels other than longline fisheries; in particular purse seine, pole-and-line, gillnet fisheries, handline and trolling vessels”; and

Coastal fisheries: “Fisheries other than longline or surface, as defined above, also called artisanal fisheries”.

It should be noted that the notions of “longline fisheries” and “coastal fisheries” are not defined in the IOTC Glossary of scientific terms. However, the notion of “surface fishery” is defined as: “Fishing with pole and line, bait vessel, troll or purse seine to target surface-swimming species”.

The term “coastal waters” is also defined in the IOTC Glossary of scientific terms as: “the waters adjacent to the land territory of a State, extending seaward from the territorial sea baseline to a distance of three nautical miles”.

According to the definition of the notion of “coastal fisheries”, the notions of “coastal fisheries” and “artisanal fisheries” are interchangeable.

The term “artisanal fishing” is defined in the IOTC Glossary of scientific terms as: “Fishing for subsistence using traditional methods”.

It should also be noted that in the definitions of the notions of “longline fisheries” and “surface fisheries”, the expression “IOTC Record of Authorized Vessels” is used to refer to the IOTC Record of Fishing Vessels.

In paragraph 4, point a), the expression “floating objects” is used to refer to “FADs”.

Use of the term “supply vessels” is made in paragraph 6 to refer to vessels assisting purse seiners in the deployment, monitoring and retrieving of FADs. The term “supply vessel” is used 6 times out of 12 throughout IOTC CMMs in this Resolution. It should be noted that in the preamble part in the consideration starting by the word “given” the term “support vessel” is used in association with the use of FADs. This sentence is similar to that used in paragraph 6 showing that the terms “support vessel” and “supply vessel” are interchangeable.

In paragraph 7, point c), use of the notion “historical data” is made, but no period of reference is provided. Therefore, there may be a need to provide a definition of the expression “historical data” in the particular context of this provision.

oo) Resolution 15/01 on the recording of catch and effort data by fishing vessels in the IOTC area of competence

The purpose of this Resolution is to subject all purse seine, longline, gillnet, pole and line, handline and trolling fishing vessels authorized to fish species managed by IOTC to a data recording system (paragraph 1). The reference to fishing gears to qualify the term “fishing vessels” shows that this measure is not applicable to all fishing vessels, but to fishing vessels harvesting the fish only. Hence, the term “fishing vessels” in this resolution should be construed broadly as meaning any fishing vessels including vessels harvesting the fish and any other vessels supporting fishing operations (support, supply, auxiliary etc.).

Paragraph 11 recognizes the special need of developing CPCs and grants them additional time (gradual implementation from 1st July 2016) for implementing data recording systems for their vessels less than 24 meters length overall operating inside their EEZ.

Annex 5 – Proposed definitions

Table 5 - Proposed definitions of key terms to be introduced in the IOTC Glossary of terms

Key terms	Definitions
Authorized vessels	“vessels that are: d) 24 meters in length overall or above; OR e) in case of vessels less than 24 meters, those operating outside the EEZ of the flag State; AND f) authorized to fish for tuna and tuna-like species or to carry out fishing related activities in the IOTC area of competence.”
Bycatch	“all species other than those listed in Annex B of the IOTC Agreement, caught or interacted with by fisheries for tuna or tuna-like species in the IOTC area of competence”
Coastal fisheries	“any fishing activity undertaken by a fishing vessel, including small-scale fisheries for subsistence or local markets, not required to be registered on the IOTC Record of Authorized Vessels (i.e. with a LOA less than 24 meters), targeting tuna and tuna-like species or catching tuna and tuna-like species as bycatch and operating exclusively in the waters under the sovereignty or jurisdiction of the flag State, including sport fishing”
CPCs	“Contracting Parties and Cooperating non-Contracting Parties”
Discard(s)	“any part of the catch that is returned to the sea, whether dead or alive”
Fishing	“searching for, attracting, locating, catching, taking or harvesting fish or any activity which can reasonably be expected to result in the attracting, locating, catching, taking or harvesting of fish”
Fishing aggregating device or FAD	“any drifting (DFAD) or anchored floating or submerged object (AFAD), which is natural or artificial and equipped with a monitoring device (or an instrumented buoy), deployed or not for the purpose of aggregating target tuna species”
Fishing logbook	“a permanently bound logbook issued by the flag State of a vessel and required for any purpose relating to fishing or fishing related activities, with irremovable pages, each of which is consecutively numbered”
Fishing related activities	“Any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transshipping or transporting of fish that have not been previously landed at a port, and the provisioning of personnel, fuel, gear and other supplies at sea, as well as the deployment, monitoring and retrieving of drifting Fish Aggregating Devices” ⁵⁰
Fishing vessel	“any vessel used for, equipped to be used for, or intended to be used for, fishing”
Harvest control rules	“a rule that describes how harvest is intended to be controlled by management in relation to the state of some indicator of stock status”
IOTC Agreement	“the 1993 Agreement for the establishment of the Indian Ocean Tuna Commission”
IOTC Area of competence	“the area of competence of the Indian Ocean Tuna Commission as defined in Article II of, and Annex A to, the IOTC Agreement”
IOTC Record of Authorized Vessels	“the Record established under Resolution 15/04 or subsequent Resolution”
IUU fishing	“any fishing activity set out in Resolution 11/03” ⁵¹
Large-scale fishing vessel	“any fishing vessel 24 meters in length overall or above”
Limit reference points	“the limit beyond which the state of a fishery and / or a resource is not considered desirable”
Port	“Includes offshore terminals and other installations for landing,

⁵⁰ One may also consider whether a reference to instrumented buoys should be made therein.

⁵¹ This wording of this definition will have to be adjusted if Resolution 11/03 is superseded.

	transshipping, packaging, processing, refueling or resupplying”
Scientific observer	“a person who collects information on board authorized vessels for scientific purposes”
Supply vessel	“any vessel used for, equipped to be used for, or intended to be used for, fishing related activities”
Support vessel	“any vessel used for supporting fishing vessels in the purse seine fishery using drifting FADs, including deploying, monitoring, modifying and retrieving drifting FADs”
Target reference points	“a state of a fishery and / or a resource which is considered desirable”
Vessel	“any vessel, ship of another type or boat used for, equipped to be used for, or intended to be used for, fishing or fishing related activities”

Table 6 – Proposed modifications to existing definitions of terms in specific IOTC CMMs and proposed definitions of terms to be introduced for the purpose of a specific resolution

Term	Definition	Reference
Abandoned FAD	“FADs without a beacon or which have drifted outside the fishing zone” – <i>Clarify the meaning of the term “fishing zone” in the context of this definition.</i>	Res. 15/08, par. 15
Field sampler	“a person who collects information at landing sites or fishing ports during the offloading of catch by fishing vessels engaged in coastal, longline or surface fisheries”	Res. 11/04, footnote 2
Fish	“all species listed in Annex B to the IOTC Agreement”	Res. 10/11, par. 1(a)
IOTC observer	“an observer appointed by the IOTC Executive Secretary under the IOTC Regional Observer Programme established under Resolution 14/06 or any subsequent resolution”	Definition to be introduced in Res. 14/06
Vessel location device	“a device which is installed on board an authorized vessel and is designed to automatically transmit, whether independently or in conjunction with another device or devices, information or data concerning position, fishing, catch and such other activities as may be required, and allows detection and identification of the fishing vessel at all times”	Definition to be introduced in Res. 15/03

Table 7 – Existing definitions of terms that remain unchanged and are kept in specific CMM

Term	Definition	Reference
BMSY	“the biomass level for the stock that would produce the Maximum Sustainable Yield”	Res. 15/10, par. 1
Configured	“having on board assembled gear that collectively would allow the vessel to deploy and retrieve large-scale driftnets”	Res. 12/12, footnote 2
Data buoys	“floating devices, either drifting or anchored, that are deployed by governmental or recognised scientific organisations or entities for the purpose of electronically collecting and measuring environmental data, and not for the purpose of fishing activities”	Res. 11/02, par. 1
FMSY	“the level of fishing mortality that produces the Maximum Sustainable Yield”	Res. 15/10, par. 1
Improperly documented	“improperly documented means that the Bigeye Tuna Statistical Document is either missing from the shipment, incomplete, invalid or falsified”	Res. 03/03, Annex I, par. 4
Instrumented buoy	“a buoy with a clearly marked reference number allowing its identification and equipped with a satellite tracking system to monitor its position”	Res. 15/08, par. 2
Large-scale driftnets	“gillnets or other nets or a combination of nets that are more than 2.5 kilometers in length whose purpose is to enmesh,	Res. 12/12, footnote 1

	entrap, or entangle fish by drifting on the surface of, or in, the water column”	
Longline fisheries	“fisheries undertaken by vessels in the IOTC Record of Authorized Vessels that use longline gear”	Res. 15/02, footnote 1
Surface fisheries	“All fisheries undertaken by vessels in the IOTC Record of Authorized Vessels other than longline fisheries; in particular purse seine, pole-and-line, gillnet fisheries, handline and trolling vessels”	Res. 15/02, footnote 1
Unfit for human consumption	Are “unfit for human consumption”, fish that: <ul style="list-style-type: none"> - “is meshed or crushed in the purse seine; or - is damaged due to depredation; or - has died and spoiled in the net where a gear failure has prevented both the normal retrieval of the net and catch, and efforts to release the fish alive.” 	Res. 15/06, par. 2b)