

SCIENTIFIC DEFINITIONS

PREPARED BY: IOTC SECRETARIAT, 8 NOVEMBER 2015

PURPOSE

To request the Scientific Committee (SC) to consider the draft *List of scientific terms (and their definitions)* used or to be used in IOTC active Conservation and Management Measures and to provide alternatives if necessary.

BACKGROUND

A project facilitated by the IOTC Secretariat and undertaken by a consultant, entitled “*Development of Harmonised Terms and Definitions for the IOTC Conservation and Management Measures (CMMs)*” is currently being undertaken. The objectives of the study are to:

- Evaluate the consistency of all the key terms used in the existing CMMs, bearing in mind the context of their application.
- Propose definitions for the key terms used without affecting the spirit of the CMMs, however in cases where those definitions or terms used provide a different understanding these should be highlighted and alternatives proposed.
- Identify CMMs where there are lack of clarity in use of terms, responsibilities and reporting timeline inconsistency.
- Create a glossary of the terms and their definitions that can be incorporated into the IOTC Website to enhance the understanding of the CMMs.
- Document the work undertaken.

DISCUSSION

Expected outputs are:

- 1) Catalogue all the existing key terms and definitions and identify inconsistencies of use within and between CMMs
- 2) Draft a glossary of terms and definitions to be incorporated into the website. Where there are multiple definitions to terms used they should be provided as well.
- 3) Produce a draft final report for the consideration of the IOTC Commission and its relevant subsidiary bodies which should have a section summarising all the proposals and references accordingly, for ease of understanding the changes.

Noting output 2 above, the consultant has identified a number of inconsistencies in the scientific terms used in the Compendium and has draft a set points requiring clarification (Appendix I). In addition, as appropriate, the consultant has suggested clearer wording options for the Scientific Committee’s consideration.

RECOMMENDATION/S

That the Scientific Committee:

- 1) **NOTE** paper IOTC–2015–SC18–11 which included a request from the IOTC consultant hired to review all IOTC Conservation and Management Measures and develop standardised draft definitions for use by the Commission.
- 2) **CONSIDER** providing modified or alternative definitions as it deems appropriate.

APPENDICES

APPENDIX I: List of scientific terms (and their definitions) used or to be used in IOTC active CMMs

APPENDIX I

List of scientific terms (and their definitions) used or to be used in IOTC active CMMs

Terms	Definition provided in IOTC Resolutions	IOTC Glossary of scientific terms	IOTC legislative framework¹	Comments
Bycatch		All species, other than the 16 species listed in Annex B of the IOTC Agreement, caught or interacted with by fisheries for tuna and tuna-like species in the IOTC area of competence. A bycatch species includes those non-IOTC species which are (a) retained (byproduct), (b) incidentally taken in a fishery and returned to the sea (discarded); or (c) incidentally affected by interacting with fishing equipment in the fishery, but not taken.		<p>The term “bycatch” is used 60 times in the active IOTC CMMs</p> <p>The definition provided in the IOTC glossary of scientific terms is very practical/operational and cannot be reproduced as such in the IOTC glossary of terms</p> <p>Determine what would be the best general definition of the term “bycatch”.</p> <p>Note that in Res. 12/06 the expression “incidental bycatch” is used and in Res. 13/06 reference to “incidental catch” is made.</p>
Discard(s)		“Any part of the catch that is returned to the sea, whether dead or alive”		<ul style="list-style-type: none"> • The term “discards” has been used 20 times throughout the body of active IOTC CMMs and has not been defined • It is used in several resolutions and thus could be included in the Glossary of terms • It would seem that the definition contained in the Glossary of scientific terms could be included in the general Glossary of terms. Validate this definition.

¹ The definitions in this column were proposed in the so-called “IOTC Legislative Framework” that was devised to guide the transposition of IOTC requirements into IOTC CPCs’ domestic law. These definitions are based on international best practice as reflected in international fisheries instruments and national fisheries legislation.

Terms	Definition provided in IOTC Resolutions	IOTC Glossary of scientific terms	IOTC legislative framework ¹	Comments
Field sampler	“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.” (Res. 11/04)			<ul style="list-style-type: none"> • Validate this definition • The definition of the term “field sampler” is used in Resolution 11/04 only and thus specifically defined for the purpose of this particular Resolution. NOT to be included in the general IOTC glossary of terms
Fish aggregating device ²		“Buoys and platforms used to attract and ‘hold’ pelagic fishes to enhance fishing. Can be as simple as a floating log or bamboo raft, but tuna fishers setting purse seine nets around tuna schools now deploy sophisticated FADs that allow satellite tracking and interrogation of information, such as sea surface temperature.”	“an object or group of objects of any size, whether drifting, 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”	<ul style="list-style-type: none"> • What would be an acceptable definition for the term “FAD”? Is the definition proposed under the IOTC Legislative Framework satisfactory? Can a simpler definition be proposed? • For sake of comparison, see footnote 2 reproducing the definitions of the notion of “FAD” by WCPFC and IATTC

² Definition of the notion of “FAD” by WCPFC: in footnote 1 to CMM 2008-01 shall be interpreted as including: “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” (Conservation and Management Measure 2009-02). Definition of the notion of “FAD” by IATTC: “Fish-Aggregating device” (FAD) means 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 05-07).

Terms	Definition provided in IOTC Resolutions	IOTC Glossary of scientific terms	IOTC legislative framework ¹	Comments
Harvest control rules or 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)	“Agreed responses that management must make under pre-defined circumstances regarding stock status. Also called ‘harvest control rules’ and ‘decision rules’.”		<ul style="list-style-type: none"> This definition is introduced by Resolution 12/01 and is sourced from the FAO Fisheries Glossary. It is different from the definition provided in the IOTC Glossary of scientific terms Should the definition provided under Res. 12/01 be replaced by that contained in the IOTC Glossary of scientific terms or is it fine as it is? It is used in several active IOTC CMMs and thus could be included in the general IOTC Glossary of terms
(fishing) Logbook		“Official record of catch and record data made by fishers. (in many fisheries a licence condition makes the return of logbooks mandatory)”	“any 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”	The two definitions of the term “(fishing) logbook” reproduced in this table are very different. While the one in the glossary of scientific terms is too general, the other one might be too detailed. What would be a satisfactory definition of the term “(fishing) logbook” for inclusion in the IOTC Glossary of terms?
observer	“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.” (Res. 11/04)			<ul style="list-style-type: none"> It is unclear whether a definition of the term “observer” should be included in the IOTC Glossary of terms as it might be too controversial, particularly with respect to the role of observers (scientific vs. compliance). Note that the term “observer” is used 87 times (excluding when qualified by the term “scientific”) throughout the body of active IOTC CMMs, whereas the expression “scientific observer” is

Terms	Definition provided in IOTC Resolutions	IOTC Glossary of scientific terms	IOTC legislative framework ¹	Comments
				<p>used 6 times.</p> <ul style="list-style-type: none"> It is unclear whether the use of the term “observer” (as opposed to “scientific observer”) indicates that this term should be construed as including “scientific observer” and other types of observers (which would justify the use of two separate terms in IOTC CMMs) What would be a good definition of the term “observer” in the IOTC context?
Target reference points	The term “Target reference points” means: a state of a fishery and / or a resource which is considered desirable; Limit Reference Points indicates the limit beyond which the state of a fishery and / or a resource is not considered desirable (Res. 12/01)	TRP means: “A benchmark which assesses the performance of management in achieving one or more operational management objectives”		<ul style="list-style-type: none"> The definition of this term was introduced by Res. 12/01 and is sourced from the FAO Fisheries Glossary. It is different from the definition provided in the IOTC Glossary of scientific terms Should the definition provided under Res. 12/01 be replaced by that contained in the IOTC Glossary of scientific terms or is it fine as it is? It is used in several active IOTC CMMs and thus could be included in the general IOTC Glossary of terms