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Tuna RFMO Authorised Vessel Lists

A comparative analysis to identify best practices

Prepared for the International Seafood Sustainability Foundation (ISSF)

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Executive Summary

The International Seafood Sustainability Foundation (ISSF) has undertaken to review the authorised and active vessel lists implemented by tuna Regional Fisheries Management Organisations (t-RFMOs).

The review demonstrates that the requirements of the t-RFMOs are largely consistent, but that further harmonisation of t-RFMOs authorised vessel lists measures is likely to support MCS activities, including in the identification of IUU fishing activities, both within a single region and globally. The Review considers merit in implementing an active vessel list, including enhancing its functionality or, where applicable, introducing a measure creating an active vessel list to enable verification of fleet capacity and monitoring the use of vessels listed on the list of authorised vessels. In t-RFMOs that have implemented an active vessel list there is a secondary way to verify the compliance of members and in other instances the active list is being used to manage overall fishing capacity. Suggested best practices and minimum standards are provided in Section VI.

I. Introduction

1. The t-RFMOs 'authorised' and 'active' vessel lists both underpin the legal operation of fishing vessels. The 'Authorised' vessel list creates a positive list of vessels that are permitted to fish in the respective RFMO convention area. The 'Active' vessel list provides verification or cross-referencing of those vessels authorised to fish and *those that conducted fishing activities*. In doing so, the active vessel list enables measurement of a flag States fishing effort/capacity against some pre-agreed or approved baseline capacity and it could potentially be used to verify legal fishing vessels if it is used to cross-reference those vessel permitted to be operating and which vessel actually used their permit in a given year. However the requirements of these lists are not applied consistently between the t-RFMOs, probably due in part to the different purposes and uses of the lists. Agreement of the purpose and use of the lists among t-RFMOs could enhance the utility and benefits available from these lists both internally in a specific t-RFMO, and globally across all t-RFMOs for fishing capacity evaluation and as another way to combat IUU fishing.

2. This technical paper reviews the IATTC, ICCAT, IOTC and WCPFC measures establishing authorised vessels lists and the relationship with any active vessel lists in each of these t-RFMOs. Using this comparative analysis, recommendations and best practices for t-RFMO authorised vessel list measures (Section III) have been identified. This paper is not an analysis of how the t-RFMOs are actually implementing their authorized vessel list measures, or the degree to which RFMO members are complying with these measures, however.

II. Comparison of t-RFMO Authorised Vessel List measures

3. Each of the t-RFMOs have adopted applicable measures that create a record of fishing vessels that have been authorised by a member of the t-RFMO to fish in the t-RFMO area of competence and for species covered by the relevant Convention - the authorised vessel list. For IATTC and WCPFC the content of the measure is derived directly from the relevant treaty text. Table 2 (a and b) provides a list of the measures relevant to this discussion, with the primary measure shown in bold.

Table 1(a): Applicable measures establishing the authorised vessel list for each t-RFMOs.

IATTC – iattc.org	Authorised Vessel Lists: Antigua Convention Article XII, para 2(k) and Annex 1 **Res 14-01 Regional Vessel Register** Res 12-07 Transshipments Res 11-05 Large Longline Vessels Active Vessel List: Resolution C-02-03 Capacity Management, in particular paragraphs 5 and 9
ICCAT – iccat.int	Authorised Vessel Lists: Rec 14-01 Tropical tunas Rec 14-04 Eastern Atlantic and Mediterranean bluefin Rec 13-04 Mediterranean Swordfish vessels **Rec 13-13 Authorised vessel list in conjunction with** **Rec 14-10 Implementation of ICCAT vessel listing requirements** Rec 13-14 Charter vessels Rec 12-06 Record of carrier vessels 2015 Guidelines for information submission on the ICCAT Record of Vessels Active Vessel List: No specific measure

Table 2(b): Applicable measures establishing the authorised vessel list for each t-RFMOs

IOTC – iotc.org	Authorised Vessel Lists: **Res 14-04 Record of authorised fishing vessels** Res 14-05 Concerning a Record of Licensed Foreign Fishing Vessels Fishing for IOTC Species in the IOTC Area of Competence and Access Agreement Information Res 14-06 On Establishing a Programme for Transhipment by Large-scale Fishing Vessels Active Vessel List: Resolution 10/08 Concerning a record of active vessels fishing in the IOTC Area of Competence
WCPFC – wcpfc.int	Authorised Vessel Lists: WCPFC Convention Part V, Article 24, para 4 and 7, Annex IV CMM 14-03 Standards, Specifications and Procedures for the record of fishing vessels CMM 13-04 Unique vessels identifiers **CMM 13-10 Record of fishing vessels and authorisation to fish** CMM 04-03 Marking and identification CMM 12-05 Charter Notification Scheme Active Vessel List: Paragraphs 9 and 13 of CMM 13-10 Record of fishing vessels and authorisation to fish

i. Purpose of the authorised vessel list

4. Authorising vessels to fish is fundamental for flag State control and forms the primary basis for enforcement in fisheries. However, depending of the nature of the data collected, the authorised vessel list may also provide critical information for scientists undertaking fishery stock assessments. The preambular language of ICCAT cites the *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas*[2] (FAO High Seas Fishing Compliance Agreement) and all of the t-RFMOs, except WCPFC, cites the Food and Agriculture Organization's of the United Nations (FAO) International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU)

[2] Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas opened for signature 24 November 1993, entered into force 24 April 2003.

Fishing[3]. The preambular language for WCPFC goes a step further referencing Part V of the WCPFC Convention, which refers generally to flag State duties and obligations including to authorise, monitor and manage those vessels flying their flag. Despite a lack of explicit purpose included in the measures, each of the t-RFMOs have established their respective authorised vessels lists for management, enforcement and compliance purposes, that is the creation of a positive vessel list.

5. Understanding the purpose for creating authorised vessel lists has implications for differences in the type of data collected and reported by flag States regarding their authorised vessels, and what vessels must be included on an RFMO's vessel record. The international framework establishing minimum data collection programs for vessels flying the flag of a specific flag State includes the *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and management of Straddling Fish Stocks and Highly Migratory Fish Stocks*[4] (UNFSA) and the FAO High Seas Fishing Compliance Agreement. Article 4 of Annex 1 of UNFSA (Standard Requirements for the Collection and Sharing of Data) specifies the type of vessel data and information to be collected to enable standardisation between fleets regarding fishing power and for converting effort into a comparable unit. In contrast, the suggested data collection identified in Article IV, paragraphs 1-5 of the FAO High Seas Fishing Compliance Agreement is for the sole purpose of promoting compliance among States. The differences between the suggested data requirements of these two overarching frameworks, together with the summary of the data collection and reporting requirements of each of the four t-RFMOs is provided in Table 3.

6. Directly related to defining the purpose of the authorised vessel measures is the lack of definitions for critical terms such as *'fishing'*, *'fishing vessel'*, *'fisheries support activities'* and *'transhipment'*. There is a clear need to standardise critical definitions across the t-RFMOs including for example employing the FAO definitions. For example the IOTC Agreement does not include any definitions for these terms although some of the IOTC Resolutions do have definitions (see for example Resolution 10-11 On port State measures to prevent, deter and eliminate IUU fishing). This discrepancy continues to cloud decision-making on issues such as alleged IUU fishing (for example, refer to the 2014 IUU case regarding the Cambodian flagged, Chinese owned, carrier vessel who was not considered to be supporting fishing activities as the carrier vessel was only supplying consumables such as food and water to fishing vessels).

7. The need for t-RFMOs, together with their non-tuna RFMO counterparts, to adopt a single approach to definitions for *'fishing'*, *'fishing vessel'*, *'support'* or *'supply vessel'*, *'transhipment'* (and possibly other terms) is essential. It is recommended that these terms be as inclusive as possible to support scientific analysis and enable better identification of legal fishing activities. Suggest definitions are provided below:

> *'fishing'* should include *all activities including searching for, attracting, locating, catching, taking or harvesting of fish or any activity which can reasonably be expected to result in the attracting, locating, catching, taking or harvesting fish*;
>
> *'fishing vessel'* would be any vessel, gears and/or craft used or intended for use for the purpose(s) of undertaking commercial *fishing or fisheries related activities* as defined above, including FADs, helicopters, etc;

[3] Food and Agricultural Organisation of the United Nations (2001). *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing.* Rome, Food and Agriculture Organization of the United Nations.

[4] Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Seas of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, (1995), opened for signature 4 August 1995, United Nations Treaty Series 88 entered into force 11 December 2001.

'fisheries support activities' should be defined as relating to *any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transhipping, transporting of fish, or fish products, that have not been previously landed at a port, as well as the provisioning of personnel, fuel, gear and other supplies at sea;*

'transhipment' should include *any activity that enables a fishing vessel to remain at-sea and/or away from its home port or facilitating fishing operations including, but not limited to, the loading, transfer or offloading, of fish, fish products, supplies, fuel, machinery, FADs, or crew in-port or at-sea*.

ii. Application of the measure

8. Each t-RFMO has unique rules regarding the vessels that are to be included in the Record of Fishing Vessels (Table 3). Key differences relate to a specifying the size of the vessel (e.g., 20 meters length overall (LOA) in ICCAT), specifying a spatial area (e.g. in WCPFC it does not apply to vessels operating exclusively inside their flag's EEZ), or in the case of the IOTC, a combination of both a size and spatial restrictions. IOTC requires all vessels greater than 24 meters LOA, plus all vessels less than 24 meters LOA that operate on the high seas, to be included on the IOTC authorised vessel list. Only ICCAT does not require that all vessels operating on the high seas and/or outside their flag States EEZ be included in the record because of its size restriction (20 meters or greater LOA).

9. The application of the measure highlights that in ICCAT, IOTC and WCPFC the authorised vessels list does not provide a complete list of all the vessels authorised to operate in the t-RFMO area of competence. The IATTC measure appears to provide the most comprehensive list of vessels by requiring that IATTC members and cooperating non-contracting parties (collectively termed CPCs) provide a list of all fishing vessels authorised to fishing for IATTC species and in the IATTC area of competence. The issue of non-t-RFMO member and non-cooperating member vessels inclusion on the list of authorised vessels is a problematic area. Only members and cooperating non-contracting parties are bound by the decisions of the t-RFMO, but all parties to UNCLOS and UNFSA are also duty bound to either join the relevant RFMO or cooperate with the rules of these organisations and not undermine the conservation and management of the relevant fisheries resource. Each of the t-RFMOs measures calls for the inclusion of vessels under the flag of members and cooperating non-contracting parties, but does not allow for listing of non-cooperating non-members.

10. All t-RFMOs stipulate that vessels not entered into the respective authorised vessel list are deemed unauthorised to fish for, retain onboard, tranship, or land tuna and tuna-like species. This correlates directly to the identification of vessels as engaging in IUU fishing[5]. The WCPFC record of fishing vessels measure makes this very clear: (a) that it is the responsibility of the flag State to ensure its vessels are included on the WCPFC Record of Fishing, (b) that it must be done consistent with the requirements of the measure, (c) that any vessel found fishing that is not on the record is deemed to be not authorised to fish, etc, in the WCPFC area of competence, and (d) that such vessels shall be eligible to be considered for IUU listing (paragraph 17). In contrast, other t-RFMOs only make this reference in the IUU listing measure. If the intention of the authorised vessels list is to create a positive list of vessels authorised to be fishing for tuna and tuna-like species (and/or other species specific to the convention) in a specific area then there is a need to expand the application of the measure to include all vessels authorised irrespective of vessel size. Moreover, to effectively manage capacity there is a need to understand the vessels authorised to fish for tuna and tuna-like species that are operating solely within its own flag EEZ. Although this would be difficult for coastal States with a large artisanal fleet, it is increasingly imperative to have a clear understanding of the potential fishing mortality through understanding the size of the national fleets.

[5] The definition of IUU fishing is taken from the IPOA – IUU and reproduced at Appendix 1.

11. To facilitate the expansion of the authorised vessel list to all vessels permitted to fish for tuna and tuna-like species, t-RFMOs may consider the utility of requiring minimum data fields for all vessels (national vessels, chartered and /or joint venture vessels) that are (a) permitted by flag State members to conduct fishing and support activities on the high seas; and (b) all vessel authorised/permitted to conduct fishing activities for species covered by the relevant t-RFMO wholly within their flag State's exclusive economic zone (EEZ) and/or archipelagic waters.

Table 2: Comparison of the primary measure creating the authorised vessel list for the four t-RFMO's.

IATTC	General application: **All vessels** authorised by a **contracting party or cooperating non-contracting party** who are authorised to fish for tuna and tuna like species (as identified in Annex I of UNCLOS) in the IATTC Area of Competence (Eastern Pacific Ocean). Restrictions: The authorised vessel list **applies to all vessels authorised to fish in both EEZs and high seas**. That is, there are no vessel size or spatial restrictions. Other Measures: Other IATTC measures create specific lists of vessels, e.g. a list of longline vessels greater than 24 metres. However the creation of these specific lists does not alter the requirements in the authorised vessel list measure itself. **CMM 12-07** outlines the requirements for the listing of all authorised carrier vessels.
ICCAT	General application: All vessels **20m LOA or greater** authorised to fish for tuna and tuna like species (as defined in Annex I of UNCLOS) in the ICCAT Area of Competence (HS and EEZ). Restrictions: The authorised vessel list **does not apply to vessels less than 20 meters.** That is, there are vessel size restrictions – only applicable to vessels 20m LOA or greater. **Flagged to a member or cooperating non-member** – there is no explicit reference to a requirement to be flagged to a contracting and/or cooperating non-contracting party, however this is implied. Other Measures: The general application applies *mutatis mutandis*, except for vessel sizes for: **Rec 2014-04** on **Eastern Atlantic and Mediterranean Bluefin** tuna requires that the Commission maintain a record of all catching and non-catching vessels (irrespective of size) authorised to fish actively or operate respectively for bluefin tuna in the eastern Atlantic and Mediterranean Sea. **Rec 2013-04** on **Mediterranean Swordfish** requires that a record of all fishing vessels (irrespective of size) authorized to catch swordfish be maintained.
IOTC	General application: All vessels **24 meters and greater** irrespective of the area of fishing activity **and** vessels **less than 24 meters if fishing outside their own flag State waters**, flagged to a contracting party or cooperating non-contracting party, authorised to fish for tuna and tuna-like species (as defined by Annex I of UNCLOS) in the IOTC Area of Competence (HS and EEZ). Restrictions: The authorised vessel list **does not apply to vessels less than 24 meters operating inside their flag EEZ**. That is, there are restrictions based on vessel size and spatially related to the area of operation – vessels less than 24 meters operating inside their own flags EEZ are not required to be included on the authorised vessel list, however some states include these vessels anyway. Other Measures: **CMM 14-05** on a **record of foreign flagged vessels and access agreements** requires the maintenance of a list of all foreign flagged vessels authorised by coastal States or those

	permitted under access arrangements. **CMM 14-06** on **transhipment by large-scale longline vessels** requires the establishment and maintenance of list of authorised carrier vessels authorised to receive tuna, tuna-like species and sharks in the IOTC Convention Area.
WCPFC	General application: **All vessels** flagged to a contracting party or cooperating non-contracting party and authorised to fish for WCPFC species (as per Annex I UNCLOS and other associated species as determined by the Commission) in the WCPFC Area of Competence **in the high seas or in another coastal States EEZ**. Restrictions: The WCPFC record of vessels **only requires that vessels authorised to fish outside of their flag EEZ be included on the record**. That is, an EEZ spatial restriction applies – vessels fishing for highly migratory species (tuna and tuna-like species) solely within their own flags EEZ do not have to be listed on the WCPFC AFV. However there is **a requirement for the flag State to retain a record of all their flag vessels authorised to fish for highly migratory species within the Convention Area** (Part A, paragraph 1(a)). Other Measures: **CMM 12-05** Charter notification Scheme requires that States entering into charter agreements register all vessels to be identified as chartered.

iii. Data requirements included in the primary measures for the authorised vessels lists of the four t-RFMOs

12. Table 4 provides a comparison of the data fields required in each of the t-RFMO authorised vessel list measures and also how they relate to the requirements set out in UNFSA and the FAO High Seas Fishing Compliance Agreement. There are 39 individual data fields across the UNFSA, the FAO High Seas Fishing Compliance Agreement and the four t-RFMO authorised vessel list measures. The comparison highlights that there are five data fields common to all t-RFMOs and the UNFSA and the FAO High Seas Fishing Compliance Agreement:

- name of vessel
- vessel length
- vessel tonnage
- fishing gear and
- reporting the international radio call sign

13. Among the t-RFMOs there are a further 10 data fields that are required, seven of these data fields are also recommended in the FAO High Seas Fishing Compliance Agreement (it does not include the RFMO identification number, the IMO number and the vessel type):

- IMO number
- previous name
- previous flag
- names of owners
- address of owners
- name of operators
- name of master
- the vessel type
- vessel tonnage and
- the t-RFMO identification number.

14. In addition to these 10, there are a further 17 data fields that are required by two or more t-RFMOs, or the UNFSA and FAO High Seas Fishing Compliance Agreement, but are not universal among them all. Particularly, with respect of the t-RFMOs, the requirement of these additional data fields has been agreed at the individual treaty level.

15. Finally one t-RFMO, WCPFC, specifies a further seven data fields for its authorized list of vessels, which are not required by either the UNFSA, the FAO High Seas Fishing Compliance Agreement or any of the other three t-RFMOs. WCPFC requires the collection and reporting of master's nationality, vessel crew size, communication equipment and five data fields related to information on active charter arrangements. In total WCPFC has 36 data fields in its authorised

vessel list measure; however, not all WCPFC data fields are required to be reported before the vessel is listed on the WCPFC List of Authorised Vessels. In 2013, the WCPFC amended its measure creating a list of minimum data fields for which data must be provided for the vessel to be included on the authorised vessel list. These minimum data fields are within the existing list of data fields (data fields in Table 4 marked with an asterisk are not included as minimum data fields).

16. In contrast to the 36 data fields required by WCPFC, ICCAT collects data on 29 individual elements, but not all of these data fields are obligatory (some are voluntary data fields) nor are they all made available on the public authorised vessel database; making the ICCAT authorised vessel list requirements opaque. For IOTC there are 17 data fields and IATTC 25; and as outlined above, most are consistent between all four t-RFMOs.

17. However, the number of data fields is not important if the data fields provide sufficient information to meet the intended purpose of the RFMO authorised vessel list. If, as highlighted in Section i, the purpose of adopting and implementing the authorised vessel list is to enable legal and illegal activities to be distinguished, then it is more important to consider the data required to effectively and efficiently identify vessels using surveillance assets and MCS tools, together with the data considered to be admissible in any legal proceedings. Moreover, the type of monitoring or surveillance asset being used for the MCS may also need to be considered. For example, inclusion of a photo of the vessel would assist most MCS assets to identify the target vessel, but moulded depth is not likely to be useful for MCS from an aerial surveillance asset. The same can be said for data fields on the authorised vessel list for scientific purposes. Careful consideration of the purpose of the authorised vessel list is important as it helps define the data fields for MCS purposes as distinct from those required for scientific purposes. Finally, the other relevant measures identified in Table 2 require a subset of the information collected by the primary measures creating the t-RFMO authorised vessel lists.

18. Like with other measures, t-RFMOs should review, and amend as required, the data requirements in their authorised vessel list measures. The increasing complexity of tuna management, including measures applicable to certain vessel size classes or related to spatial and/or temporal areas, and the ongoing prevalence of IUU fishing activities, may require specific data fields to facilitate effective and efficient MCS using a range of surveillance assets, tools and emerging technologies. For example it would be advantageous for t-RFMOs to collect more detailed information on the nature of the national authorisation of vessels: does it prescribe a specific time interval for authorisation for specific species or gears? Are there spatial and/or temporal restrictions, or is the vessel permitted to tranship at-sea and/or unload in prescribed ports?

19. Notwithstanding that flag State responsibility remain the primary vehicle for compliance of its vessels, in many instances multi-national MSC assets are being used to monitor the activity of fishing vessels on the high seas. To that end, the following additional data fields are suggested for t-RFMO authorised vessel list measures as they provide further means for rapid verification by multi-national assets undertaking MCS activities of a vessel's compliance with t-RFMO measures:

- Specific details of the nature of the authorised activities provided under the flag States authorisation, including any specific restrictions related to species, spatial, temporal or prescribed/prohibited activities (e.g., transhipment);
- Hold capacity and carrying capacity to verify reported landed catches;
- Navigation and position fixing aids to support efforts to identify the vessel;
- Recent, suggest within 6-12 months, high-resolution photographs of the vessel from the top, side and stern of the vessel[6];

[6] There have been instances, for example Australian MCS in Antarctica, where crew onboard a vessel were altering the vessels identification information while at sea. Including a range of high resolution photographs from different

- The reasons for all previous deletions from any national or RFMO authorised vessel lists; and
- If applicable, details of charter and joint venture arrangements, and including historical aspects of such arrangements to enable identified of the beneficial-owner of the vessel, including the name(s) and address(s) of the charterer, operator and the owner, the flag State, start and end dates of the charter. Understanding the details of the charter are also critical in terms of understanding who is responsible for maintaining the vessel records.

20. In relation to combating IUU fishing, it is important to be able to readily identify the real owner of the vessel. Historically there have been cases where unscrupulous fishing vessels either use a flag of convenience or an owner of convenience, for example the *FV Asian Rex*. In this case the previous owner was presumed to have conducted IUU activities, however the new owner was unaware of the ongoing investigation regarding the alleged IUU fishing activities, such that any penalty would have been brought against the new owner rather than against the old owner. In relation to the requirements of the authorised vessel list measures, it is important that this measure works in concert with other MCS measures, particularly the IUU fishing measures. To that end, it would be important to maintain historical information about the vessels ownership and flag, including these arrangements when under charter and/or joint venture or similar arrangement, together with the reasons for the removal/deletion from any national or RFMO authorised vessel list.

21. Of concern are the issues surrounding the 'authorisation period and/or start and end dates of authorisation'. Some flag States provide open-ended authorisations to vessels rather than specifying specific dates for the period of the authorisation. More effective flag State control and governance of fishing vessels would require a specific authorisation period for each vessel or all vessels in a specific fishery. There have been many instances in t-RFMOs where the vessel's authorisation to fish has expired while the vessel continues to fish. One way to resolve this issue is to mandate the specification of start/end dates for the authorisation to fish and to automatically remove all vessels from the authorised vessel list once the permit to fish has lapsed.

22. Finally, t-RFMO members may also consider reviewing data fields and classifying each of them regarding their purpose, scientific or related to MCS. In doing so there may also be opportunities to refine the data requirements or to generate minimum data fields and secondary data fields for each purpose. For example data fields such as nationality of the master (which may change regularly, generating either onus updates to the database and/or increasing false information for this field), moulded depth and the date and location where the vessel was built may be considered secondary MSC data, which if it was available can provide opportunities for verification. Some national authorities have used these data fields historically for MCS and investigative/analytical purposes and as such any review and/or refinement of authorised vessel data fields needs to be carefully considered and assessed against a range of considerations.

23. In addition there may other data fields may not need to be collected directly as they can be inferred from other data fields, for example, construction material can be inferred from the IMO number (wooden hulled vessels are not eligible for IMO numbers). Knowing the hull construction can be useful for targeted MCS using radar technology as the radar scatter is stronger from harder materials such as steel. In these instances the t-RFMO members could look to remove these data fields thereby focusing national authority data collection programs on collecting the most relevant data fields; however, this should be assessed in light of other needs, such as for safety-at-sea or another purposes and considering the other monitoring tools and resources available to the t-RFMO members themselves and how these data fields can support global MSC activities.

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vessel angles can be used to verify the identity of the vessel. In the Australian example, the previous vessel name was clearly visible beneath the newly painted name on the bow of the vessel.

Table 3: Required data fields for the t-RFMO measures compared with the United Nations Fish Stocks Agreement and the FAO High Seas Fishing Compliance Agreement (CA). The numbers represent the data fields from UNFSA/CA; other data fields have been added by specific t-RFMOs.

		UNFSA	CA	IATTC	ICCAT	IOTC	WCPFC
1	Name of fishing vessel	✓	✓	✓	✓	✓	✓
2	Flag of Vessel & flag State	✓	–	–[7]	–[8]	–[8]	✓
3	National registration number	–	✓	✓	✓	✓	✓
	RFMO Registration number[8]	–	–	✓	✓	✓	✓
	IMO/LR number (if the vessel is eligible)	–	–	✓	✓	✓	✓
4	Previous name (if known)	–	✓	✓	✓	✓	✓
5	Previous flag State (if any)	–	✓	✓	✓	✓	✓
	Reason for deletion (from flag States registration or other list)	–	–	–	✓	✓	✓*
6	Port of Registration	✓	✓	✓	–	✓	✓
7	Name of owner(s)	–	✓	✓	✓	✓	✓
8	Address of owner(s)	–	✓	✓	✓	✓	✓
9	Name of operator(s)/ master(s)	–	✓	✓	✓	✓	✓
10	Address of operator(s)/ master(s)	–	✓	✓	✓	✓	✓
	Nationality of master	–	–	–	–	–	✓*
11	Vessel type	✓	–	✓	✓	✓	✓
12	Construction material	✓	–	–	–	–	–
13	Date/Year built	✓	✓	✓	–	–	✓*
14	Location built	–	✓	✓	–	–	✓
15	Vessel length[9]	✓	✓	✓	✓	✓	✓
16	Tonnage: gross registered tonnage (GRT) and/or gross tonnage (GT)	✓	✓	✓	✓	✓	✓
17	Moulded depth	–	✓	✓	–	–	✓*
18	Vessel Beam	–	✓	✓	–	–	✓
19	Power of the main engine(s)	✓	✓	✓	–	–	✓
20	Hold capacity/ carrying capacity (including the freezer hold (capacity and number) and the fish hold capacity)	✓		✓	–	–	✓*
21	Catch storage method (e.g. brine, frozen, etc)	✓	–	✓	–	–	✓
22	Fishing gear(s)/ fishing method(s) description, including the type used/authorised, specifications and number	✓	✓	✓	✓	✓	✓
23	Navigation aids and position fixing aids	✓	–	–	–	–	–
24	Communication equipment: type and number	✓	–	–	–	–	✓
25	International radio call sign	✓	✓	✓	✓	✓	✓
26	Crew size	✓	–		–	–	✓
	Photo of vessel	–	–	✓	–	–	✓
	Nature of the authorisation (e.g. authorisation number, permitted species, area, and/or activities, name of the authorising authority)	–	–	✓	–	–	✓*
	Authorisation period and/or start and end dates of authorisation	–	–	–	✓	✓	✓
	Charter-CCM flagged vessel	–	–	–	[10]	–	✓
	Charter-non-CCM flagged carrier or bunker vessel	–	–	–	–	–	✓
	If Chartered, the host CCM	–	–	–	–	–	✓
	Name of charterer	–	–	–	–	–	✓
	Address of Charterer	–	–	–	–	–	✓
	Start/end dates of charter	–	–	–	–	–	✓*

[7] 'Flag State' is not a requirement in the relevant measure, however, it is collected by virtue of the fact that the flag State provides the list of the vessels, plus the information is provided on the authorized vessel database.
[8] Automatically assigned by the t-RFMO; there may or may not be a specific requirement in the measure for this to be provided.
[*] Although all data fields are required to be provided by the flag State in respect of its vessels authorised to fish on the high seas, WCPFC has differentiated its data requirements to generate a list of minimum requirements for inclusion on the AFV. To that end the asterisk denotes data fields that are not included as minimum data fields.
[9] Length Overall (LOA) used in ICCAT, IOTC & WCPFC. WCPFC also allows other length types, but requires the length type to be specified. The unit of length is not specified in the IATTC measure requirements for flag States to report against.
[10] This information is required under ICCATs Recommendation 13-14 On Vessel Chartering.

iv. Modifications to the list

24. All t-RFMO authorised vessel list measures make provisions for modifications to this list, including addition or deletion of vessels and/or amendment to the data originally provided for a specific vessel. There are two key differences among the t-RFMO measures:

1. IATTC alone does not require the flag State to specify the reason for previous deletions of the vessel from other registries. ICCAT, IOTC and WCPFC require flag States to provide details of historical deletions from other registries, which would signify a removal of historical authorisations to fish by the flag State or other flag States. For example, voluntary relinquishment/non-renewing of the licence or that the vessel is no longer entitled to fly the flag of the member.

2. Prior to the commencement of fishing, in ICCAT and WCPFC flag States are required to provide notification of any modifications, additions or deletions of information regarding its authorised vessels. ICCAT requires that any modification to the authorised vessel list be provided at least 45 days prior to the commencement of fishing. In addition, all fishing and support vessels fishing for Eastern Atlantic and Mediterranean bluefin are required to provide notification 15 days prior to fishing. WCPFC prescribes that any information regarding modification of the authorised vessel list must be provided a minimum of 72 hours prior to the commencement of the vessel's fishing activities, however this seems to contradict the 'within 15 days' component of the same paragraph (paragraph 7). There could be further confusion regarding this clause in relation to modifications to the vessel's information; it is unclear if all information is required 72 hours prior to the commencement of fishing or within 15 days of the change. IATTC and IOTC simply require members to 'promptly notify' the Secretariat of any modification, but do not prescribe a time period or whether this should be prior to the commencement of the fishing activity.

25. Again, if the purpose of the authorised vessel list is for the identification and verification of legal and illegal fishing vessels, then ensuring, at minimum, that all new fishing vessels are entered into the record is paramount. Likewise, to effectively fight IUU fishing, understanding the reason for the amendment to the data could indirectly provide intelligence for other flag States about the good standing of the operator to hold another licence and relates to the common ownership requirements of some RFMO's IUU vessel listing measures[11].

26. One critical aspect related to the modifications to the data held by the t-RFMO is that only the flag State can modify the data for each vessel flying its flag. This may not be an effective way of facilitating accuracy of data held for each vessel. For example some vessels spend the majority of the year or years away from their home port reducing the ability of the flag State to verify the information on the vessel. Importantly, there are alternative mechanisms whereby the vessel's data can be verified and/or updated, such as high-sea boarding and inspection regimes, port monitoring, or using emerging technologies such electronic reporting or electronic monitoring systems, or those being trialled through PEW's Eyes on the Sea program.

27. If data can be verified using alternative means such as those identified above, then it is equally important that this information is provided directly to both the flag State and to the t-RFMO Secretariat. Equally, it is important that this information is also used to update the t-RFMO authorised vessels list to ensure that the database remains as up-to-date as possible. To that end, it would be beneficial for t-RFMOs to make provisions for the Executive Secretary (or equivalent role) to either question the flag State regarding the vessel's information or to update the record with the new information accordingly. Furthermore, it would be beneficial for the Secretariat to be empowered with two additional tasks: 1) to query flag States when the minimum data requirements for its vessels are not met and not commence listing of such

[11] See ISSF Technical Report 2014-10: Combating IUU Fishing: Continual Improvement And Best Practices For IUU Vessel Listing Measures In Tuna RFMOS (http://iss-foundation.org/resources/downloads/?did=545)

vessels until after the minimum data requirements have been provided, and further noting that said vessel is not authorised to operate in the RFMO Area of Competence until so listed; and 2) enable the automatic removal of any IUU listed vessel from all t-RFMO vessel lists consistent with the RFMO IUU vessel listing measures.

v. Publication of the Authorised Vessel List

28. Consistent with their need for transparency, three of the four t-RFMOs specify that the authorised vessel list be publically available including using electronic means and on the RFMO's website. IATTC does not specify this requirement explicitly but does however provide information on its authorised vessels on its website. Each of the t-RFMOs have two distinct pages regarding authorised vessel information:

1. the primary page that provides summary information on vessels on the authorised vessel list, and

2. the vessel specific page that provides additional data on each vessel.

29. For the most part, the information collected in accordance with the data fields listed in the t-RFMO authorised vessel list measure (that is the information provided by the flag State regarding its vessels against the data fields in the measure) is consistent with the information they make publically available on the authorised vessel list page of their website. However, there is no assessment of the accuracy of this information. It is possible that there are mistakes and/or inconsistencies within the t-RFMO vessel records due to either handling mistakes in transferring data, or due to errors with the records held by the flag State authorities or indeed from the vessel itself.

30. The data fields displayed on each of the t-RFMO websites are largely consistent, albeit it may be on the primary page or on each of the vessel specific pages. Only minimal data fields for which data are required by the measure are not made publically available on the website (Table 5). The difference may be related to balancing the confidentiality rules with the need for transparency. It is unclear to the author whether Commission members have access to a greater level of detail regarding individual vessels than what is displayed in on the t-RFMO's website due to the different data access levels under the specific confidentiality rules. However, advice has been received from IOTC that they include all data collected on the public database. This may also be the situation in the other t-RFMOs.

Table 4: Data collected in accordance with the t-RFMOs authorised vessel measure, but not shown on the public electronic database.

IATTC	ICCAT	IOTC	WCPFC
• Operators name • Operators address • Catch storage method • Photo of the vessel • Nature of the Authorisation	• Reason for deletion	• Reason for deletion • IMO number • Port of Registration (termed 'Operating Port') The last two are available on the downloadable file but not the database)	• Operators address

31. Recognising the highly mobile and global nature of the tuna fishing fleet, it is essential for MCS purposes to be able to effectively and rapidly identify vessels. This includes determining the permissible activities for that vessel (e.g., transhipment) and what species to harvest, as well

as any limitations and prohibitions on the vessel's activities. Although this information can be obtained via that flag State authority, near real-time access to this information is more likely to result in the identification of non-compliance and IUU activities. Establishing minimum MCS data fields to enable inclusion in the t-RFMO authorised vessel list (Section iii) (rather than currently requiring all data fields irrespective of the role in supporting MCS activities) is likely to enable more effective and efficient vessel identification, thereby enhancing the detection of possible non-compliant and/or IUU activities. Equally, effective MCS requires access to a certain level of data in order to facilitate verification of the vessel's identify and the legitimacy of the vessel's activities and the species retained onboard relative to the permitted activities and/or areas of operation, etc provide for by the flag State. In essence, a consolidated list of t-RFMO authorised vessel lists could become the single location of information for MCS assets to refer to for information regarding the legitimate activities of vessels flagged to the t-RFMO members and cooperating non-contracting parties who are fishing on the high seas or, where relevant, inside EEZs.

32. It is important that sufficient information from the authorised vessel list is made publically available so as to facilitate and support the identification of non-compliance and IUU activities. It would be prudent that t-RFMOs undertake a review of what information is made publically available and provide a rationale for any limitations on this information. The data fields in t-RFMO authorised vessels lists are largely harmonious. Any future refinements regarding the data fields, particularly those related to MCS, should continue to facilitate global action against illegal fishing activities. Further harmonisation of these data fields is likely to support the detection of non-compliance by national, sub-regional and multilateral MCS activities. This is particularly important given the increased sharing of MCS assets between countries or at sub-regional levels for cross-jurisdiction surveillance and compliance activities and highlights the need for the continued development of a single interactive online vessel database of all authorised vessels permitted to operate in a given area. However, any consolidated list of vessels across t-RFMOs, or globally, would need to be maintained in near real-time and for it to be useful. The accuracy of the information in the database would also need to be maintained; currently maintaining the information is the sole responsibility of the flag State, but there is a need to consider utilising other sources of information to verify the accuracy of data held for each vessel. For example port monitoring could provide new pictures, verify the vessels hold capacity, etc., and this information could be provided to the flag State and to the t-RFMO for inclusion in the vessel profile.

33. Work on creation of such a single vessel database is underway by the FAO through its Consolidated List of Authorised Vessels (CLAV) project[12]. The CLAV is a searchable online database that includes data on the physical attributes of the vessels that is collected through the t-RFMO authorised vessel lists. It includes vessel data for all five t-RFMOs, including vessels authorised by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). Moreover, the Pew Charitable Trusts, in partnership with Satellite Applications Catapult, is also continuing to develop 'Eyes on the Seas' another online platform for fishing vessels[13]. Unlike the CLAV, the Eyes on the Seas program utilises data from multiple sources, including satellite data, enabling layering of multiple sources of data to monitor and track vessel movements. These are cross-referenced with the fishing vessel database maintained by Trygg Mat Tracking (TMT) that is built on a large number of public and private data sources. The Eyes on the Seas program is also being used to support the 'fingerprinting' of vessels by collecting and verifying the physical attributes of individual vessels which can then be updated in real-time to the database. New and emerging technologies such as this continue to be developed and it is important that future t-RFMO measures support the use of such technologies for MCS purposes.

[12] For more information on the CLAV please refer to: http://clav.iotc.org/browser/search/en
[13] For more information on the PEW Eyes on the Sea program please refer to: http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/03/project-eyes-on-the-seas

34. Overall, there is likely to be benefit in identifying the data fields that provide the greatest support to MCS activities and finding way to facilitate the use of this data by MCS assets in near real-time. A single database of vessel information may be one way to support this outcome as well as harmonising the data fields. Improving and integrating the t-RFMO authorised and active vessel lists supports global level action regarding the identification of legal and IUU fishing vessels. Database development and refinement will be ongoing work, but it would be beneficial to link the newly developed databases, such as the CLAV and Eye on the Seas, with the existing databases, for example Marine Traffic (http://marinetraffic.com), and in collaboration and partnership with other international organisations such as the International Maritime Organisation and HIS Fairplay, to further enhance the available data, provide greater detail on the vessels and to cover a greater proportion of the global fishing fleet.

III. Relationship with t-RFMO Active Vessel lists

35. As previously noted, the authorised vessel list forms a positive register of vessels authorised/permitted to fish for tuna in the area under the auspices of that t-RFMO. In contrast, there is no clear purpose of the '*active vessel list*'. In fact the purpose of the active vessel list differs between the t-RFMOs, as does the meaning of the term 'active' vessel. All t-RFMOs identify if the vessel was active in the RFMO, but not all t-RFMOs have measures requiring such information to be reported and as highlighted above, there are differences in relation to what is actually meant by 'active'. The approach taken by each of the t-RFMOs is outlined below.

i. IATTC

36. In IATTC authorised vessel database, the vessels are identified as being '*authorised to fish*' and separately as '*active'*. In IATTC the reference to 'active' vessel relates to the management of fishing capacity. Under the IATTC Resolution C-02-03 Capacity Management, only member's flagged purse seine vessels, with their capacity, registered prior to 28 June 2002 can be included in the authorised vessel register; thereby forming a definitive positive list of purse seine vessels (paragraph 5). Paragraph 9 of the resolution allows flag States to give prior notification if the vessel will be 'inactive' for that fishing season and if so for that capacity to be substituted by another vessel such that the total capacity for that flag State remains within the predetermined limits. There is no requirement for reporting the active operation of vessels in IATTC, although this information is included in the vessel database.

ii. ICCAT

37. In ICCAT the '*active'* vessel component of the authorised vessel database refers to the current status of the vessel, that is, if the vessel is *currently authorised to fish in the ICCAT* area and for ICCAT species. However, there is no assessment on whether the vessels actually used its authorisation to fish in a given year. For IACCT where a vessel is shown as being 'inactive' this means that the vessel is no longer authorised to fish under the ICCAT Convention, but the vessel can be re-activated if the vessel was to be re-authorised by an ICCAT member. Information is retained on all vessels for historical reference.

iii. IOTC

38. The IOTC has the most explicit rules pertaining to the 'active vessel list', prescribed in Resolution 10-08 *Concerning a record of active vessels fishing in the IOTC Area of Competence*. This resolution requires that flag States submit to the Secretariat by 15 February each year the list of vessels flying their flag that were active, and that used their authorisation to fish for IOTC species in the IOTC area of competence, in the previous year.

39. The IOTC Active vessel list highlights those vessels that used their authorisation (or permit) to fish in the previous year. And as such can only provide retrospective information about

which vessels used their authorisation to fish; a simple confirmation of either 'yes the vessel fished' or 'no the vessel did not fish', rather than making a significant contribution to understanding the nature of the fishing activities in the previous year.

iv. WCPFC

40. In WCPFC the notification of a vessel's activity is undertaken through operative paragraphs in the authorised vessel list measure. Paragraphs 5 and 13 of CMM 2013-10 requires flag States to report whether the vessel (a) fished or (b) did not fish in the Convention area beyond their flag State's EEZ. Like IOTC, the WCPFC active vessel list provides a retrospective list of all vessels that used their authorisation/permit to fish versus those that did not use their authorisation to fish.

v. Utility of the Active Vessel lists

41. The above section shows that there are different approached to the 'active' vessel list among the t-RFMOs. For IACCT, IOTC and WCPFC the active vessel lists can be used to enable the t-RFMO to measure fishing capacity as there is a clear link between the positive list of vessels (the authorisation vessel list) and if the vessels used their authorisation (whether it was active or in-active). Furthermore, there is potential for the active vessel list, when coupled with other MCS tools such at port monitoring, observer coverage and/or high seas boarding and inspection, to be used as a retrospective tool to compare a flag State's authorised vessels versus those active in the t-RFMO by comparing the authorised vessel list with the active vessel list; however this would be an onerous task and even if it is undertaken it may not generate action by parties.

42. However, for ICCAT the term is 'active' vessel this actually refers to the vessels authorisation or permission to fish in the convention area and for the highly migratory species. So in ICCAT, the active vessel list forms the positive list of vessel permitted to be fishing, but there is no ability for ICCAT to make an assessment of fishing capacity.

IV. Other issues

43. Further issues of note for this discussion is that there are no real ramifications for failing to provide all information for all data fields for vessels on the authorised vessel lists. Although WCPFC marks States as non-compliant in its compliance assessment process, WCFPC, like other t-RFMOs are yet to implement incentives or punitive measures for flag States who fail to provide data for vessels flying its flag in accordance with the data fields prescribed in the relevant measure(s). Like all other measures, as a contracting party to the specific t-RFMO, States are duty bound to implement the mandatory measures in their entirety. Given the importance of these measures as a mechanism to identify vessels on the positive list, it is critical that flag States provide data in accordance with the requirements of the measure. Moreover, a flag State's compliance with the data requirements of the authorised vessel list measure underpins its ability to assert flag State control of its vessels, a fundamental aspect of international fisheries law. There is some review of the compliance with the data requirements of the authorised vessel list in the compliance processes of some t-RFMOs, including providing some information on whether all data fields are provided or not. However, a detailed review of this information during compliance committee discussions coupled with a clear requirement for flag States to meet the minimum requirements and the authority of the Executive Secretary to not list any vessels that do not meet these requirements, would add valuable rigor and transparency.

44. Another consideration for this discussion on authorised vessel lists is that all t-RFMOs share management of fisheries resources in a specific geographical area with other RFMOs. Although these RFMOs are mandated to manage different species - non-highly migratory straddling

stocks and/or discrete high seas stocks - they also authorise vessels to conduct a range of fishing related activities. The issues associated with overlapping geographical mandates has been previously highlighted, but not resolved. Willock and Lack[14] highlight issues between the vessels authorised by the Commission for the Conservation of Southern Bluefin Tuna, which were operating in the area of competence governed by the Commission for the Conservation of Antarctic Marine Living Resources. More recently, the 2014 IOTC Compliance Committee considered an alleged IUU case of a Cambodian flagged carrier vessel operating in the IOTC Area of Competence. The vessel was transhipping food and other similar supplies but it was argued that the activities of the vessel did not constitute transhipment under the IOTC definitions, again highlighting the need for consistent and rigorous definitions of key terms such as 'transhipment', 'fishing' and 'support/supply vessels'. Furthermore, the vessel was neither authorised by the IOTC, nor is Cambodia a member of either the IOTC or the Southern Indian Ocean Fisheries Agreement (SIOFA) that shares part of the same geographical area of competences as the IOTC. In the CCSBT case there was no clear primacy of who had the mandate as between the RFMOs, and in the second case, there was no easy way to verify if the vessel was permitted to operate in SIOFA, as this organisation has not yet established an authorised list of vessels and the vessel was not flagged or owned by a SIOFA party.

45. The issue of overlapping jurisdiction issues has been raised historically, including by the Ministerial Level Lead Task Force on IUU fishing on the High Seas[15] and the Recommended Best Practices for RFMOs[16]. These reports recommended the establishment of a global information system for fishing vessels. A single global database of fishing vessels, particularly for fishing vessels operating on the high seas, is likely to support MCS efforts. In light of the current actions in relation to the development of the FAO Consolidated List of Vessels (CLAV) fishing for tuna, it would also be beneficial for vessels in non-tuna RFMOs to also be included on a single consolidated online database, for example a Global Record of Fishing Vessels. Together with the physical attribute data of the vessels, the database could also hold details of the vessel's permits regarding allowable species and spatial restrictions together with permits for transhipment or to act as a carrier vessel for other vessels.

VI. Recommended best practices for t-RFMO authorised vessel list measures

46. As a result of this survey of tuna RFMO authorized vessel list measures, below sets out a range of suggested improvements and best practices for t-RFMO authorised vessel lists.

1. Members of t-RFMOs need to undertake a review of the data requirements for listing a vessel on the authorised vessel list, including seeking specific MCS expertise to ensure that the authorised vessel list integrates with and works in concert with the t-RFMO's other MCS measures, particularly the IUU measures.
2. <u>Purpose</u>
    a. Clearly define the purpose(s) of the authorised vessel list, or at minimum be mindful of the purpose(s) of the list, and amend the list of required data fields that meet this purpose.
    b. Agree a standardised definitions of *'fishing'*, *'fishing vessel'*, *'fisheries support activities'* and *'transhipment'* to facilitate greater transparency regarding the use of these vessels.

[14] Willock, A. and M. Lack (2006). Follow the Leader: Learning from Experience and Best Practice in Regional Fisheries Management Organisations, WWF International and TRAFFIC International.
[15] High Seas Task Force (2006). *Closing the Net: Stopping Illegal Fishin on the High Seas*, Governments of Australia, Canada, Chile, Nambia, New Zealand and the United Kingdom, WWF, IUCN and the Earth Institute at Colombia University.
[16] Lodge, M., et al. (2007). Recommended Best Practices for Regional Fisheries Management Organisations. London, Chatham House.

3. Application

   a. t-RFMOs must expand the application of the t-RFMOs authorised vessel list measures to include all vessels involved in the commercial harvest of tuna, including carrier/supply vessels and other support vessels (as defined by the Compliance Agreement or similar[17]) permitted to fish outside their national jurisdiction, that is, on the high seas or in another State's EEZ in a publically accessible database.

   b. Require that flag States with an EEZ adjacent to, or as part of the t-RFMO area of competence, develop and maintain a list, including minimum data fields, for all vessels flying their flag and authorised to fish for species under the auspice of the t-RFMO within their exclusive economic zone.

4. Data fields

   a. Review, in consultation with subject matter and technical experts, taking into account the technical work being undertaken by the CLAV, and consistent with international law, the information needed to meet the purpose of the measure, as distinct from non-essential information.

      i. Clearly articulate the data field format and description for all data fields to facilitate harmonised data submissions and compliance by flag States; and

      ii. Consider prioritising data fields into minimum and secondary requirements in relation to MCS and analytical purposes and require 100 per cent compliance with these minimum standards for a vessel to be included on the authorised vessel list.

   b. Taking into account the ability to utilise new and emerging technology to identify, or 'fingerprint' a vessel's identification, to provide opportunities to verify the data held in the t-RFMO authorised vessel list, amend, as necessary, the measure and consider the utility of the following data fields:

      i. Specific details of the nature of the authorised activities, including any specific restrictions related to species, spatial and/or temporal closures or activities (e.g., transhipment);

      ii. Hold capacity and carrying capacity to verify reported landed catches;

      iii. Navigation and position fixing aids to support efforts to identify the vessel;

      iv. Recent high-resolution photographs of the vessel from the top, side and stern of the vessel;

      v. The vessel beam and construction material;

      vi. Require a mandated time period (start/end dates) for the authorisation to fish and to automatically remove all vessels from the authorised vessel list once the permit to fish has lapsed;

      vii. Nationality of the master;

      viii. The date and location where the vessel was built;

      ix. The reasons for previous deletions from any national or RFMO authorised vessel list, at minimum for the previous five years; and

      x. If applicable, details of charter and joint venture arrangements and any historical information related to these arrangements, including the name and address of the charterer, operator and the owner, the flag State, start and end dates of the charter.

[17] The FAO Compliance Agreement defines 'fishing' vessel' as 'any vessel used or intended to be used for the commercial exploitation of living marine resources, including mother ships, and any other vessel directly engage in such fishing operations'.

c. Establish that non-compliance with the minimum data requirements of authorised vessel list measures is a serious compliance breach by a flag State, and ensure such non-compliance is assessed in detail and addressed using incentives followed by punitive measures for flag States who are persistently non-compliant or are non-compliant in consecutive years. Incentives for a first offence could include allowing inclusion on the t-RFMO authorised vessel list and providing additional time to submit the remaining information. Punitive measures for second or ongoing non-compliance could include not posting on the list of Authorised vessels such that the vessel could be considered under the IUU vessel list measure.

5. Modifications to the authorised vessel list

   a. All new vessels to the authorised vessel database and, to the greatest extent possible, any modifications to the data must be made prior to the commencement of activity in the t-RFMO, and the reasons for the removal of the vessel from that flag State's authorised vessel list should be provided to facilitate combating IUU fishing activities.

   b. Provide mechanisms for the vessel's details held on the authorised vessel list to be updated with information collected during high-sea boarding and inspections, in-port monitoring or other compliance programs and have this information provide directly to the flag State for their follow-up and to the t-RFMO Secretariat to enable them to follow up directly with the vessel's flag State.

   c. Provide authority to the t-RFMO Executive Secretaries to update a vessel's data held in the vessel database with updates collected through official compliance activities such as the high-sea boarding and inspection regime and/or in-port monitoring.

   d. Maintain historical information about the vessels ownership and flag, including these arrangements when under charter and/or joint venture or similar arrangement.

6. Publication of the authorised vessel list

   a. Ensure all relevant fields required for MCS activities are included on the public database, including, for example, details of the vessel's authorisation(s) to support MCS activities.

   b. Harmonise the data fields made public between t-RFMOs and, to the extent possible, with other non-tuna RFMOs with competence in the same/overlapping area and with existing global vessel databases, such as the CLAV, Eyes on the Seas program, etc, to support identification of legitimate fishing.

   c. Consider the merits of linking newly developed databases with the existing databases to enhance the collection, collation and cross-referencing of available data, provide greater detail on vessels and to cover a greater proportion of the global fishing fleet. Include, to the greatest extent, possible information on spatial boundaries applicable to each vessel as a mechanism to facilitate the identification and verification of vessels authorised to be in a specific area, particularly for when using aerial MCS assets.

7. Use of the active vessel list

   a. T-RFMOs should develop specific active vessel lists to enable effective measurement of the fishing capacity in the t-RFMO and allow for the possibility of comparing the authorised vessel list data with the active vessel list data to identify any possible infractions.

VII. Acknowledgments

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VIII. Appendices

vi. Appendix 1 – Definition of IUU Fishing reproduced from the IPOA-IUU.

'Illegal' refers to:

a. activities conducted by a national or foreign vessel in the waters under the jurisdiction of a State without the permission of that State or in contravention of its laws, or
b. activities conducted by vessels flying the flag of States that are parties to a relevant RFMO but operate in contravention of the conservation and management measures adopted by that organisation and by which States are bound, or relevant provisions of the applicable international law, or
c. activities in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant RFMO.

'Unreported' refers to:

d. activities which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations, or
e. activities undertaken in the area of competence of a relevant RFMO which have not been reported or have been misreported, in contravention of the reporting procedures or that organisation.

'Unregulated' refers to:

f. activities in the area of application of a relevant RFMO that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organisation, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organisation, or
g. activities in areas of for fish stocks in relations to which there are no applicable conservation and management measures and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation for living marine resources under international law.