Commission for the Conservation of
Southern Bluefin Tuna

みなみまぐろ保存委員会

CCSBT-EC/1710/15

Kobe Process
Kobe プロセス

Purpose　目的

This is a standing item on the CCSBT agenda to provide an update on activities associated with the Kobe Process[1] and to provide the opportunity for CCSBT Members to review progress with Kobe Process recommendations that require actions by the CCSBT.
本件は CCSBT 会合における常設の議題項目であり、Kobe プロセス [1] 関連活動についてのアップデートを行うとともに、CCSBT メンバーに対して、CCSBT による対応が求められている Kobe プロセス勧告の進捗状況をレビューする機会を提供するものである。

Kobe Steering Committee Meetings　Kobe プロセス運営委員会

There have been no meetings of the Kobe Process Steering Committee (KSC) since CCSBT 23. The report from the previous KSC meeting (July 2016) is provided at **Attachment A** for information. The current Chair of the KSC is Mr. Stefaan Depypere. The Chair hopes to launch a limited number of initiatives in the course of 2018. There are no current plans to initiate any big Kobe events, such as Kobe IV in the near future. Instead, it might be effective to continue advancing existing initiatives.
CCSBT 23 以降、Kobe プロセス運営委員会（KSC）の会合は開催されていない。参考情報として、前回の KSC 会合（2016 年 7 月）の報告書を**別紙 A** に示した。現在の KSC 議長であるステファン・デピペレ氏は、2018 年中に少数のイニシアティブに着手する意向である。近い将来において、Kobe IV のような大規模な Kobe プロセスのイベントの開始予定はない。その代わりに、既存のイニシアティブを引き続き進めていくこととなるだろう。

Joint Tuna RFMO Activities　まぐろ類 RFMO 合同の活動

The main joint tuna RFMO activities of relevance to the CCSBT that are underway are in relation to the following technical groups and projects:
CCSBT が関連する現在進行中の主なまぐろ類 RFMO 合同活動は、以下の技術作業部会及びプロジェクトに関連するものである。

[1] A cooperative process involving joint meetings of members of the five tuna RFMOs, The first meeting was held in Kobe, Japan.　5 つのまぐろ類 RFMO のメンバー国による合同会合を含む協力プロセスであり、第一回会合が日本の神戸市で開催された。

- Joint Tuna RFMO Meeting on Implementation of Ecosystems Based Fisheries Management (EBFM)
  生態系ベースの漁業管理（EBFM）の実施に関するまぐろ類 RFMO 合同会合

  A joint meeting on implementation of EBFM was held in Rome, Italy from 12-14 December 2016[2]. The Report of the meeting was provided to Members in CCSBT Circular #2017/017. The Chair of the CCSBT's Ecologically Related Species Working Group (ERSWG) attended the meeting. The ERSWG Chair provided a report of the key outcomes of the EBFM meeting to the ERSWG in March 2017 (see paper CCSBT-ERS/1703/09). The ERSWG Chair will also report on the outcome of the EBFM meeting at agenda item 7 of the present meeting.

  A second joint tuna RFMO EBFM meeting is expected to be held during late 2017 or early 2018

  EBFM の実施に関する合同会合は、2016 年 12 月 12－14 日にローマ（イタリア）で開催された。同会合の報告書は、CCSBT 回章 #2017/017 によりメンバーに提供された。CCSBT の生態学的関連種作業部会（ERSWG）議長が同会合に参加した。ERSWG 議長は、2017 年 3 月に開催された ERSWG において、EBFM 会合の主な結果に関する報告を行った（文書 CCSBT-ERS/1703/09 を参照）。また、ERSWG 議長は、拡大委員会会合の議題項目 7 において、EBFM 会合の結果について報告する予定である。

- Management Strategy Evaluation Working Group (MSE WG)
  管理戦略評価作業部会（MSE WG）

  A meeting of the Kobe Process' Management Strategy Evaluation Working Group meeting was scheduled for 1-3 November 2016. The Secretariat has not received a report from this meeting. More information is available at: http://www.tuna-org.org/mse.htm.

  *Kobe プロセスの管理戦略評価作業部会会合は 2016 年 11 月 1-3 日の開催が予定されていた。事務局は同会合の報告書を受領していない。さらなる情報は、*http://www.tuna-org.org/mse.htm *から入手可能である。*

- Joint Technical Bycatch Working Group (TBWG)
  合同混獲技術作業部会（TBWG）

  There have been no meetings or significant activity of the Kobe Process' joint Technical Bycatch Working Group since CCSBT 23 that the Secretariat is aware of.

  事務局は、CCSBT 23 以降、Kobe プロセスの合同混獲技術作業部会の会合又は主だった活動が行われたとは認識していない。

- Consolidated List of Authorised Vessels (CLAV)
  統合許可船舶リスト（CLAV）

  The CLAV was established through the Kobe Process and it has continued to be updated on a daily basis[2]. The latest monthly Report on the CLAV (July 2017) is provided at ***Attachment B****. Maintenance of the CLAV requires substantial work and this is currently being conducted with funding from the Common Oceans ABNJ Tuna Project. However, this funding ceases during 2019[3].*

[2] With funding from the Common Oceans ABNJ Tuna Project. 公海 ABNJ まぐろプロジェクトによる資金を受けたもの。

[3] Further details in relation to funding of the CLAV are provided at the end of the Report from the Secretariat (CCSBT-EC/1710/04). CKAV の資金に関する詳細は、事務局からの報告（CCSBT-EC/1710/04）の末尾に示したとおり。

*CLAV は Kobe プロセスを通じて設立されたものであり、日々更新されている[2]。CLAV の最新の月別報告書（2017 年 7 月）は**別紙 B** のとおりである。CLAV の維持管理には多大な作業を要し、現在、CLAV は公海 ABNJ まぐろプロジェクトからの資金により運営されている。しかしながら、この資金は 2019 年中に終了することとなっている[3]。*

- Tuna Compliance Network (TCN)
  まぐろ遵守ネットワーク（TCN）

  This network did not arise though the Kobe process, but nevertheless, it is an important joint tuna RFMO activity. The first meeting of the network was held in Spain during March 2017[2]. The CCSBT's Compliance Manager attended this meeting. A second meeting of the network is planned for early 2018[2]. Further details are provided in paper CCSBT-CC/1710/17 to the Compliance Committee.
  このネットワークは Kobe プロセスを通じて設立されたものではないが、まぐろ類 RFMO による重要な合同活動である。第一回ネットワーク会合は、2017 年 3 月にスペインで開催された。同会合には CCSBT のコンプライアンス・マネージャーが参加した。第二回ネットワーク会合は、2018 年初頭の開催が計画されている。詳細については、遵守委員会の文書 CCSBT-CC/1710/17 のとおりである。

Although not of direct interest to the CCSBT, a successful first meeting of the Joint tuna RFMO FADs Working Group was held during April 2017. The report of this meeting is available from the Tuna-org web site.
CCSBT に直接関連するものではないが、2017 年 4 月において、第一回まぐろ類 RFMO 合同 FAD 作業部会が成功裏に開催された。同会合の報告書は、Tuna-org のウェブサイトから入手可能となっている。

To facilitate enhanced communicate and cooperation between the CCSBT and the various joint tuna RFMO committees/working groups/networks, the Secretariat invites the Extended Commission to consider providing long-term observer status to the Chairs of the joint tuna RFMO groups as follows:
CCSBT と様々なまぐろ類 RFMO 合同委員会／作業部会／ネットワークとの間の意思疎通及び協力関係を強化及び促進していくため、事務局は、拡大委員会に対し、以下のまぐろ類 RFMO 合同作業部会の議長に対し、CCSBT 長期オブザーバーの地位を与えることを求める。

Joint Tuna RFMO Committee/Working Group/ Network まぐろ類 RFMO 合同委員会／作業部会／ネットワーク	Relevant Chair to be provided with Long-Term observer status to the following CCSBT meetings: 長期オブザーバーの地位を与えるべき CCSBT の会合
Kobe Process Steering Committee Kobe プロセス運営委員会	• Extended Commission 拡大委員会
Management Strategy Evaluation Working Group 管理戦略評価作業部会	• Operating Model & Management Procedure Technical Group オペレーティング・モデル及び管理方式に関する技術会合 • Extended Scientific Committee 拡大科学委員会
Joint Technical Bycatch Working Group 合同混獲技術作業部会	• Ecologically Related Species Working Group 生態学的関連種作業部会

Tuna Compliance Network まぐろ遵守ネットワーク	• Compliance Committee 遵守委員会

Progress with Kobe Process Recommendations
Kobe プロセス勧告の進捗状況

A list of Kobe recommendations for which the CCSBT has made limited progress is provided at **Attachment C**. Some of these items are either not a high priority for the CCSBT or are items where consensus has not been achieved on a way forward. The list is the same as that provided to CCSBT 23, except that one item has been removed from the list. The removed item was to "*Encourage RFMO Members to consider signing and ratifying the FAO Port State Measures Agreement at their earliest opportunity*". It was removed because all CCSBT Members that are eligible to sign and ratify/approve or accede to the FAO Port State Measures Agreement have now done so.
Kobe 勧告の一覧は**別紙 C** のとおりであり、CCSBT における進捗状況は限定的である。これらの項目のうちの一部は、CCSBT にとっては優先度が高くないか、又は CCSBT として取り組んでいくことにコンセンサスが得られなかった項目である。提示したリストは、リストから項目を一つ削除した以外は、CCABT 23 に示したものと同様である。削除した項目は、「*RFMO メンバーに対し、できるだけ速やかな FAO 寄港国措置協定への署名及び批准を検討するよう奨励する*」との項目であり、FAO 寄港国措置協定に署名し、批准／承認し、又は加盟する資格を有する CCSBT の全メンバーがこれを行ったので、これを削除したものである。

Prepared by the Secretariat
事務局作成文書

KOBE STEERING COMMITTEE MEETING

FAO Headquarters
Rome, Italy
July 11, 2016

Draft Meeting Report

I. Opening of Meeting

The Chair of the Kobe Steering Committee thanked the participants for attending the meeting. Participants included the following:

- Mr. Russell Smith (USA), Chair of Steering Committee
- Mr. Driss Meski, Executive Secretary, ICCAT
- Mr. Robert Kennedy, Executive Secretary, CCSBT
- Mr. Guillermo Compean, Director, IATTC
- Mr. Alejandro Anganuzzi. Executive Secretary, IOTC
- Mr Feleti Teo OBE, Executive Director, WCPFC
- Mr. Stefaan Depypere (EU), ICCAT representative
- Mr. Jean Francois Pulvenis IATTC Senior Policy Adviser
- Ms. Shelley Clarke, WCPFC Technical Coordinator-Sharks and Bycatch
- Ms. Chiaki Mizugaki, (Japan)
- Ms. Nicole Glineur, GEF
- Ms. Cheri McCarty (USA), assistant to the Chair

II. Adoption of Agenda

The attached agenda was adopted without change.

III. Review of progress in implementing Kobe recommendations

a. Updated Questionnaire

The Chair noted that the partially updated questionnaire on implementation of the recommendations from Kobe I, II and has been circulated to participants prior to this meeting. He asked those that those tRFMOs that have not updated the questionnaire to please update their section as soon as possible so that a fully updated questionnaire could be circulated to the Steering Committee for sharing with the t-RFMO members. The Chair also asked that the Kobe process be included on each of the t-RFMO's agendas in order to provide the respective Members with updates on progress in implementing the Kobe recommendations.

The Participants expressed concern that the questionnaire hasn't evolved to take into account new information. There was a recommendation that the questionnaire be linked to the performance reviews of each of the t-RFMOs and that metrics should be built to measure the success of the implementation of the recommendations. Concern was also raised that the information provided in response to the questionnaire was based on a self-assessment by the relevant t-RFMO, and was not necessarily objective.

The Participants agreed that the Kobe process was successful and there was a need for the process to continue but that the work of the Kobe group needed to be publicized more and conducted in a more

efficient manner. The Chair noted that the full Kobe meeting not the Steering Committee must make changes to the recommendations identified in the questionnaire. It was also agreed that the future mandate of the Steering Committee should be decided by the Members. The Chair agreed to draft a paper to be circulated to the entire group outlining future options.

b. Joint tRFMO Technical Working Group on MSE

The work of the Technical Working Group on Management Strategy Evaluation was discussed. While the Working Group has done a lot of its work virtually, it is planning to meet in person this fall. Some participants in the Steering Committee meeting expressed concern that the meeting was not open to all interested persons. The ICCAT Executive Secretary, explained that the WG was created at the Third Joint Tuna RFMO, when it was recognized that Management Strategy Evaluation (MSE) needed to be widely applied in order to implement the Precautionary Approach for tuna fisheries management. The WG would be coordinated by the ICCAT Secretariat, and all 5 t-RFMOs have nominated the relevant experts to work electronically. Following discussions of the Steering Committee of the Kobe Process it was agreed that a physical MSE workshop would be held at the ICCAT Secretariat offices (Madrid, Spain) from November 1st to 3rd 2016. A list of experts was provided by each tRFMOs. Registration is open to interested parties. Information about the meeting has already been circulated to all of the t-RFMO Executive Directors/Secretaries.

Additional information and a link for registration may be found on the tuna-org website (can be accessed via http://tuna-org.org/mse.htm).

c. Joint Technical Bycatch Workgroup

There was a proposal to hold the joint bycatch working group in December back-to-back with the ecosystem working group that will be held in Rome. The participants supported the proposal. A request was made for the Technical Working Group Chair to circulate information about the joint meeting, including how to participate and obtain financial assistance. The Participants also agreed that there should be more fulsome reporting of the work that has been done to date by the Joint Technical Bycatch Workgroup in order to share with Members at the t-RFMO meetings. There was also a request for the Bycatch working group report to be circulated. The Kobe Steering Committee Chair ensured that this will occur.

d. CLAV

It was noted that the CLAV is currently hosted on a server located at the IOTC Secretariat, but that it would be better to transfer it to the same location as the tuna-org.org server to consolidate Kobe process materials and initiatives and increase the bandwidth available for those seeking to use the CLAV. The CLAV requires maintenance work one month/per quarter for quality control. While there are plans to provide this service for the duration of FAO ABNJ Tuna project, there is a need to discuss what to do when the project ends. Reports will continue to go to the compliance officers of each t-RFMO. It was reported that the funding runs out in 2018 (middle to end). The Executive Secretary of IOTC will re-distribute a report on the status of the CLAV and also propose a business plan on costs. The Participants also agreed that the work that has been done to date on the CLAV should be shared with Members at the t-RFMO meetings.

IV. Discussion of key challenges and areas for potential collaboration

a. Potential Collaboration on Fish Aggregating Devices

The Chair noted that there was a decision point to create a FAD working group and discussions are happening between the Executive Directors. ICCAT circulated a letter inviting the t-RFMOs to participate in its FAD Working Group meeting this year. It was noted that the EU offered to finance a joint meeting in 2016. It was suggested that the meeting take place in conjunction with the IOTC meeting. IOTC noted that they can collaborate on this and provide some funding for the FAD meeting, but could not finance the entire meeting. Some additional funding could be obtained from the FAO ABNJ Tuna Project. The ICCAT Executive Secretary offered to coordinate the meeting. A letter will be circulated in October about the meeting and it will be an open working group. The participants agreed that the process for the FAD meeting could proceed.

V. Next steps in Kobe process

The Chair noted that the Steering Committee coordinates the Kobe work, but that there hasn't been a cohesive process. The Steering Committee meetings have been productive with the Executive Directors/Secretaries of each of the t-RFMOs present, but that most of the t-RFMO Chairs and Vice Chairs have not been participating. There was a desire expressed to make the Steering Committee meeting work better and the Chair requested ideas to improve the process. It was also noted that there was going to be another Steering Committee Chair needed within the next 6 months (early 2017). The Chair noted that he would be stepping down at the end of the year. The Participants noted the need for continuity and asked for a transition plan. There was a request for an interim person to Chair the Steering Committee and a request will be made to the entire Steering Committee. In this regards, The ICCAT Executive Secretary suggested that Mr. Stefaan Depypere be the Chair of the SC after Russell Smith leaves. There were no objections to this proposal.

VI. Other Matters

No other matters were discussed.

VII. Adjournment

The Chair thanked participants for their participation and adjourned the meeting.

ATTACHMENT:
KOBE STEERING COMMITTEE MEETING
July 11, 2014
5:00-6:00 p.m., Canada Room, FAO Headquarters
Rome, Italy

Draft Agenda

I. Opening of Meeting

II. Adoption of Agenda

III. Review of progress in implementing Kobe recommendations

- a. Updated Questionnaire
- b. Joint tRFMO Technical Group on MSE
  - i. Plans for Fall 2016 Meeting
- c. Joint Technical Bycatch Workgroup
- d. CLAV

IV. Discussion of key challenges and areas for potential collaboration

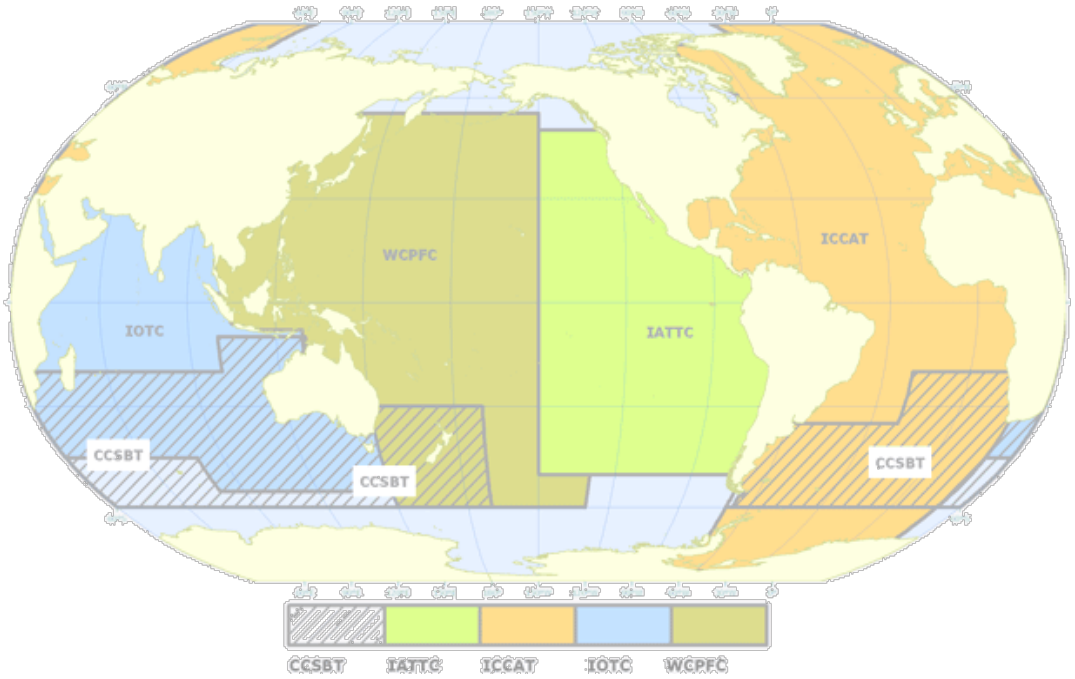
- a. Potential Collaboration on Fish Aggregating Devices

V. Next steps in Kobe process

VI. Other matters

VII. Adjournment

別紙 B



CLAV. The Consolidated List of Authorized Vessel

Monthly Report of the CLAV: July 2017

Fernando Jara and Fabio Fiorellato

8/6/2017

The main purpose of the CLAV is to make the information, pertaining authorized vessels, available to help fighting and deterring IUU activities. Efforts by the Secretariats of the five t-RFMOs to consolidate a list of all vessels authorized to fish tuna and tuna-like species go back a while now. A coordinated effort by all five t-RFMOS was expressed already at the 2007 Kobe meeting. A first consolidated list was created in 2009, a second list in 2010. Since 2011, updates of the CLAV were performed regularly (monthly or bimonthly). Two workshops, February 2011 and June 2012, on exchange of information and maintenance of the CLAV were convened at FAO HQ. That far the results were just mere snapshots requiring notable (manual) efforts. Since mid 2014, with the support of the Common Oceans Tuna Project, FAO has been providing the expertise and technical assistance to maintaining the CLAV updated at close-to-real time. This is done by daily communications between each t-RFMO and the CLAV. The public release of a fully operational CLAV was done on 17th December, 2014. Regular reports of the CLAV status have been produced and disseminated to interested parties since March 2015. http://clav.iotc.org/browser/search

CLAV Report as of July 31st, 2017

Contents.

9. **Flags represented in the CLAV**
   Table 8. Number of flags with registered vessels authorized in the CLAV at a single or multiple t-RFMOs, March 2015 to July 2017. (*n. d.* = no data).

10. **Flags reporting authorized vessels at a single and multiple t-RFMOs as of June 30, 2017**
    Table 9. Proportion of all vessels authorized by flag that were registered under a single or multiple t-RFMOs, at the end of July 2017.

11. **Degree of completion of minimum data requirements and benchmark analyses**
    Figure 8. Overall performance for the ten different data fields compiled in the CLAV, March 2015 to July 2017.
    Figure 9. IMO number performance for the five t-RFMOs, considering only those authorized vessels of length equal to 24 meters and over, March 2015 to July 2017.
    Figure 10. IRCS performance for all the vessels authorized by the five t-RFMOs, March 2015 to July 2017.
    Figure 11. Comparison of the overall performance of the five t-RFMOs, March 2015 to July 2017.

12. **Conclusions**

1. Introduction.

The consolidated list of authorized vessels (CLAV) aims at integrating the records reported by each t-RFMO into a single list where each authorized vessel would be represented uniquely, no matter if it is reported by only one or by all five t-RFMOs. Thus, the terms records and vessels, used distinctly throughout this report represent different figures indeed.

The CLAV work completed with the support of the Common Oceans Tuna Project at FAO is a continuation of efforts initiated previously by the t-RFMOs. The objective of the work was aimed at automating and maintaining regular close-to-real time updates of the consolidated list of all vessels authorized to fish for tunas and tuna-like species by t-RFMO member states.

The results presented here are a consequence of the joint efforts and close collaboration between the t-RFMO´s compliance officials, their database managers, and the CLAV Specialist supported by the Common Oceans Tuna Project at FAO.

The support from the Common Oceans Tuna Project to maintaining the CLAV was extended for another six-month (April – September 2017). The maintenance work aims at cleaning up (e.g., *editing*, *deleting*) the CLAV database from accumulated erroneous entries from the past, in addition to the regular maintenance tasks (e.g., *matching, linking, merging*).

The CLAV maintenance work is carried out with *ad-hoc* tools developed purposely to:

i) identifying and resolving duplicates within the CLAV (*matching and linking* redundant records across the t-RFMOs);
ii) identifying and resolving redundancies within the CLAV of records reported by each of the t-RFMOs (*merging* records within a given t-RFMO to retain history);
iii) clearing legacy records (remaining from historical consolidations) no longer existing at the t-RFMOs databases (*deletions*); and
iv) cleaning-up accumulated errors from the past by acting directly on individual attributes from vessel records in the CLAV database (*editing*).

Inconsistencies and errors detected in the course of the regular maintenance and ongoing analyses of the CLAV are communicated immediately to the respective t-RFMO. However, corrections will take time until they show up at the CLAV as the t-RFMOs need to raise the issues to the corresponding responsible flag, which in turn will take some time to respond.

It is expected that once the support provided by the Common Oceans Tuna Project to maintaining the CLAV ends (September 2017), the five t-RFMOs owners of the CLAV would assume the CLAV operation and maintenance, on some agreed-upon operational scheme. Responses, from the t-RFMO´s compliance officials and/or database managers, regarding the

[1] In the report that follows, both tables and figures containing the same information are presented in some instances. This duplicity is intended on purpose as a way to providing both, an idea of the numbers involved as well as a visual, more intuitive, representation of their magnitudes.

usefulness of the CLAV unanimously indicated that *maintaining the CLAV is a worthwhile effort, and that the additional time and efforts dedicated to resolve issues detected by the CLAV ultimately resulted in data quality improvements to the benefit of both the t-RFMOs themselves and the flag members.*

2. Maintenance performed to keep the CLAV updated at close to real time.

The maintenance tasks needed to keep the CLAV updated at close to real time are shown in **Table 1** below. The process starts with the daily updates performed automatically by uploading the data from each t-RFMO to the CLAV. Some control of key attributes (such as unacceptable IMO numbers, non-chronological date sequences for previous flags and previous names) at upload are applied to prevent introduction non-compliant information. If something like that occurs, the uploader automatically sends an error message to the t-RFMO´s data provider indicating the nature of the issue.

Once the upload to the CLAV is successfully completed and the data have been updated, the detection of duplicates begins. Matching of newly updated records against those already uploaded to the CLAV allows detecting redundancies that are resolved in two ways. If the duplicates are among different t-RFMOs the action performed will be linking them and assigning all of them the same TUVI (Tuna Unique Vessel Identifier). If, on the other hand, the duplicates are from the same t-RFMO they will be merged, adding the information from the oldest record to the newest one, whose TUVI will prevail. Thus, with this action the historical elements of the vessel are preserved. The detection of an intra t-RFMO duplicate is communicated immediately to the corresponding Organization, before applying any merging at the CLAV; a task that will be performed only upon confirmation from the compliance official or database manager from the source.

In the early stages of the CLAV maintenance, up to April 2016, the tasks of deleting some records, and matching, linking and merging duplicates were performed. There was then a period (May – September 2016) without CLAV maintenance. The maintenance was resumed in October 2016, adding to the main former tasks (matching, linking and merging) the CLAV database cleaning-up of accumulated errors. Thus, editing and deletion of individual attributes were added tasks aimed at contributing a cleaner and more reliable CLAV, including its historical elements.

An *ad-hoc* console, which allows for the remote access to, and modification of the CLAV database records, was developed, and is used to complete these added maintenance tasks, complementing the other tools designed to maintaining the CLAV. The IMO number and the IRCS are the attributes demanding the greatest number of actions, followed by names and identifiers. The category indicated as *Other editing and deletions*, includes the modification of attributes such as vessel type and gear type (**Table 1**).

Table 1. Maintenance tasks performed to keep the CLAV updated at close to real time, March 2015 to July 2017.

Maintenance actions	Mar'15	Apr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dec	Jan'16	Feb
Deleted records	7	8	6	9	16	30	6					1
Matching and Linking	623	246	145	472	241	96	69	18	158	25	76	19
Matching and Merging	32	27	16	92	31	23	39	81	38	38	32	56
Editing and Deleting attributes												
Names												
Identifiers												
Flags												
IMO												
IRCS												
NRN												
Physical dimensions												
Tonnage												
Authorizations												
Registrations												
Other editing and deletions												
Communications with t-RFMOs	27	15	29	18	37	25	4	49	7	11	19	7
Total actions performed	**689**	**296**	**196**	**591**	**325**	**174**	**118**	**148**	**203**	**74**	**127**	**83**

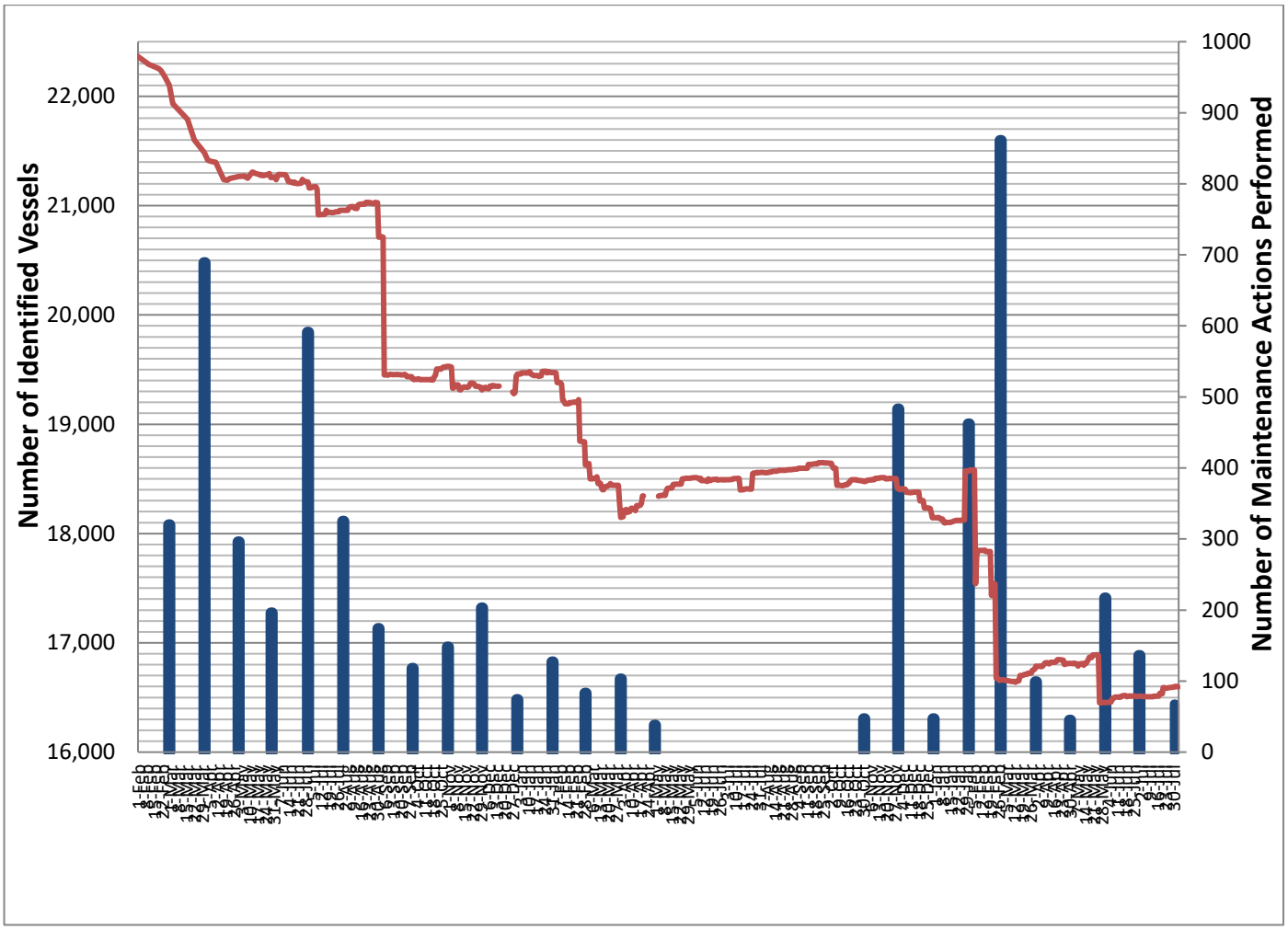
Maintenance actions	Mar'16	Apr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dec	Jan'17	Feb
Deleted records								1	1		1	
Matching and Linking	15	7						32	10	4	47	22
Matching and Merging	63	16						6	130	29	68	22
Editing and Deleting attributes												
Names									8			12
Identifiers									6		4	14
Flags									2		1	
IMO									47	1	1	11
IRCS									230		316	694
NRN												
Physical dimensions												12
Tonnage												9
Authorizations												11
Registrations									2		1	7
Other editing and deletions												13
Communications with t-RFMOs	25	15						9	48	13	24	34
Total actions performed	**103**	**38**	**0**	**0**	**0**	**0**	**0**	**47**	**483**	**47**	**462**	**861**

Maintenance actions	Mar'17	Apr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dec	Jan'18	Feb
Deleted records				2	1							
Matching and Linking	1	13	57	9	18							
Matching and Merging	28	18	27	32	33							
Editing and Deleting attributes												
Names	1		3	11								
Identifiers	3	1		3								
Flags				1								
IMO	7	2	43	11	3							
IRCS	5		67	50	2							
NRN												
Physical dimensions	1			3								
Tonnage	3		2	4								
Authorizations	10			1	1							
Registrations	2		1	3								
Other editing and deletions	2											
Communications with t-RFMOs	36	11	17	8	11							
Total actions performed	**99**	**45**	**217**	**136**	**68**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

3. Authorized vessels identified by TUVIs.

The evolution of the number of vessels identified uniquely by TUVIs during the period when the CLAV has been automatically updated from the five t-RFMOs, February 1, 2015 to July 31, 2017 is illustrated below (**Figure 1**).

Figure 1. Number of vessels identified by TUVI in the CLAV (*solid line*), and summary of the monthly number of maintenance actions performed (*solid bars*) from February 1, 2015 to July 31, 2017.



There were 16,600 authorized vessels at the end of July 2017, a slight increase from the 16,511 at the end of June.

The maintenance actions (mostly linking, merging and deleting of records) performed initially (February - August 2015) had an important impact in reducing the number of authorized vessels stored in the CLAV database. The period in which there was no maintenance (May to September 2016) experimented a slight increase of the number of authorized vessels. Once

the maintenance was resumed in October 2016, the number of authorized vessels dropped due to the linking and merging of duplicate records accumulated during the unmaintained period (**Figure 1**).

Later on, from October 2016 onwards, the maintenance actions have been oriented primarily to cleaning-up historical accumulated errors in the CLAV database (editing and deleting of erroneous attributes). Several significant reductions of the number of vessels through this period resulted from termination of their authorizations. Such is the case of 1,200 Indonesian vessels at IOTC in early February 2017, about 300 USA vessels at ICCAT by mid- February, about 450 Philippine and 370 Indonesian vessels at WCPFC in late February, and 440 USA vessels from IATTC at end of May.

Thus, as of late, the decreases of the number of authorized vessels respond primarily to some drastic reductions of the number of authorized vessels at some of the t-RFMOs, in particular ICCAT, IOTC, WCPFC, and IATTC (**Table 2, Figure 2**, below).

4. Authorized records in the CLAV.

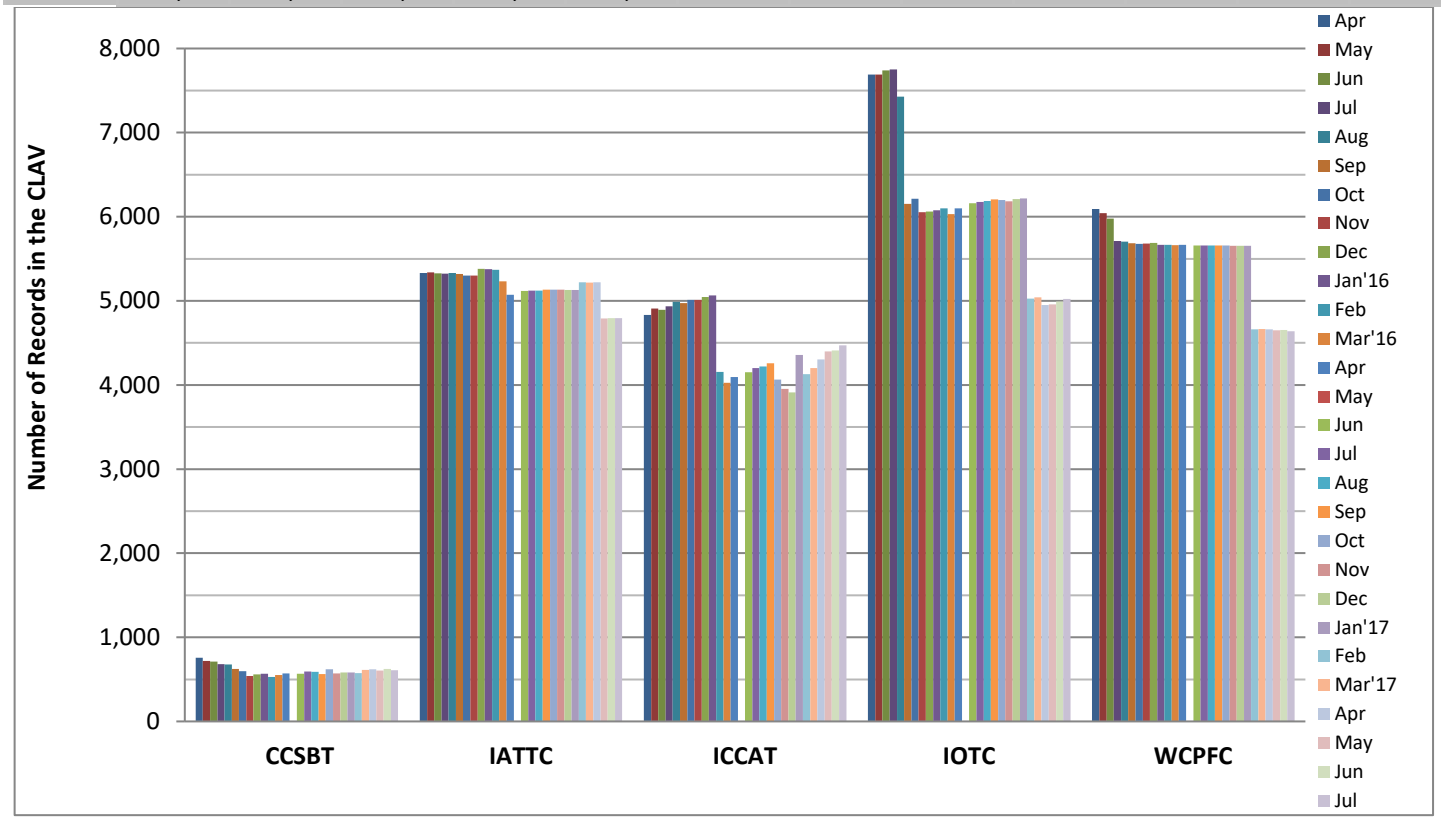
The total number of authorized records, at the end of each month, for each of the five t-RFMOs in the CLAV is illustrated below.

Table 2 and **Figure 2.** Total number of authorized records in the CLAV, March 2015 to July 2017. (*n. d.* = no data).

Source	Mar'15	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'16	Feb
CCSBT	751	758	719	712	680	677	624	596	540	559	565	527
IATTC	5,302	5,332	5,340	5,328	5,324	5,329	5,321	5,302	5,302	5,379	5,377	5,368
ICCAT	5,219	4,834	4,907	4,894	4,936	4,990	4,972	5,011	5,010	5,045	5,064	4,156
IOTC	7,555	7,692	7,691	7,739	7,750	7,427	6,151	6,214	6,052	6,063	6,075	6,099
WCPFC	6,088	6,093	6,042	5,979	5,713	5,702	5,683	5,677	5,681	5,690	5,667	5,664
Total	**24,915**	**24,709**	**24,699**	**24,652**	**24,403**	**24,125**	**22,751**	**22,800**	**22,585**	**22,736**	**22,748**	**21,814**

Source	Mar'16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'17	Feb
CCSBT	553	571	*n. d.*	566	595	588	564	620	570	583	583	575
IATTC	5,233	5,071	*n. d.*	5,116	5,121	5,120	5,134	5,133	5,132	5,131	5,131	5,222
ICCAT	4,026	4,095	*n. d.*	4,153	4,202	4,221	4,256	4,063	3,955	3,912	4,358	4,128
IOTC	6,030	6,101	*n. d.*	6,160	6,174	6,186	6,205	6,198	6,182	6,208	6,218	5,025
WCPFC	5,662	5,665	*n. d.*	5,657	5,657	5,657	5,657	5,657	5,656	5,656	5,656	4,663
Total	**21,504**	**21,503**	**no data**	**21,652**	**21,749**	**21,772**	**21,816**	**21,671**	**21,495**	**21,490**	**21,946**	**19,613**

Source	Mar'17	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'18	Feb
CCSBT	612	621	605	624	608							
IATTC	5,218	5,222	4,791	4,793	4,795							
ICCAT	4,201	4,302	4,399	4,409	4,472							
IOTC	5,042	4,952	4,957	4,994	5,021							
WCPFC	4,665	4,660	4,650	4,655	4,640							
Total	**19,738**	**19,757**	**19,402**	**19,475**	**19,536**							



5. Authorized vessels registered under a single or multiple t-RFMOs.

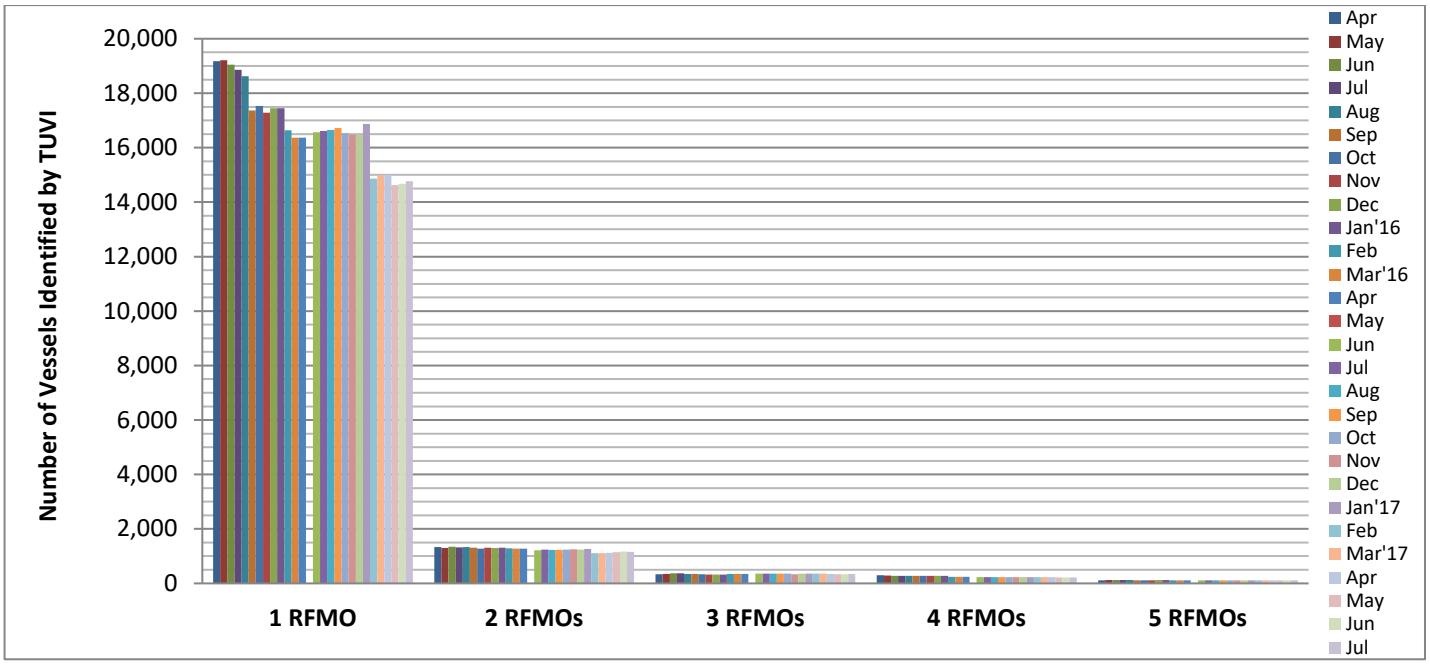
The total number and the proportion (*percent*) of authorized vessels that were registered under a single or multiple t-RFMOs, at the end of each month, is illustrated below.

Table 3 and **Figure 3.** Number and proportion (*percent*) of authorized vessels registered under a single or multiple t-RFMOs, March 2015 to July 2017. (*n. d.* = no data).

	Number and *Percent* of authorized vessels identified by TUVI											
Number of RFMOs	**Mar'15**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan'16**	**Feb**
1 RFMO	19,317	19,174	19,209	19,045	18,858	18,619	17,367	17,525	17,289	17,444	17,446	16,637
	90.2%	*90.2%*	*90.3%*	*90.0%*	*90.0%*	*89.9%*	*89.4%*	*89.7%*	*89.5%*	*89.6%*	*89.6%*	*89.3%*
2 RFMOs	1,344	1,340	1,294	1,343	1,323	1,340	1,315	1,270	1,308	1,294	1,308	1,282
	6.3%	*6.3%*	*6.1%*	*6.3%*	*6.3%*	*6.5%*	*6.8%*	*6.5%*	*6.8%*	*6.6%*	*6.7%*	*6.9%*
3 RFMOs	347	340	349	367	376	352	342	339	322	326	327	351
	1.6%	*1.6%*	*1.6%*	*1.7%*	*1.8%*	*1.7%*	*1.8%*	*1.7%*	*1.7%*	*1.7%*	*1.7%*	*1.9%*
4 RFMOs	298	295	287	280	280	281	279	279	277	277	273	244
	1.4%	*1.4%*	*1.3%*	*1.3%*	*1.3%*	*1.4%*	*1.4%*	*1.4%*	*1.4%*	*1.4%*	*1.4%*	*1.3%*
5 RFMOs	119	117	125	128	120	119	116	117	117	119	119	114
	0.6%	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*
Total	**21,425**	**21,266**	**21,264**	**21,163**	**20,957**	**20,711**	**19,419**	**19,530**	**19,313**	**19,460**	**19,473**	**18,628**

Number of RFMOs	**Mar'16**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan'17**	**Feb**
1 RFMO	16,363	16,367	*n. d.*	16,564	16,612	16,652	16,714	16,527	16,474	16,469	16,869	14,865
	89.2%	*89.2%*		*89.6%*	*89.5%*	*89.6%*	*89.7%*	*89.5%*	*89.5%*	*89.5%*	*89.6%*	*89.2%*
2 RFMOs	1,270	1,272	*n. d.*	1,221	1,240	1,232	1,231	1,245	1,258	1,237	1,265	1,110
	6.9%	*6.9%*		*6.6%*	*6.7%*	*6.6%*	*6.6%*	*6.7%*	*6.8%*	*6.7%*	*6.7%*	*6.7%*
3 RFMOs	350	353	*n. d.*	360	361	359	355	363	341	357	358	356
	1.9%	*1.9%*		*1.9%*	*1.9%*	*1.9%*	*1.9%*	*2.0%*	*1.9%*	*1.9%*	*1.9%*	*2.1%*
4 RFMOs	244	242	*n. d.*	234	234	234	232	229	226	226	225	225
	1.3%	*1.3%*		*1.3%*	*1.3%*	*1.3%*	*1.2%*	*1.2%*	*1.2%*	*1.2%*	*1.2%*	*1.3%*
5 RFMOs	111	110	*n. d.*	111	111	111	111	112	112	112	112	111
	0.6%	*0.6%*		*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.6%*	*0.7%*
Total	**18,338**	**18,344**	**no data**	**18,490**	**18,558**	**18,588**	**18,643**	**18,476**	**18,411**	**18,401**	**18,829**	**16,667**

Number of RFMOs	**Mar'17**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan'18**	**Feb**
1 RFMO	14,981	15,002	14,631	14,670	14,772							
	89.2%	*89.2%*	*88.9%*	*88.8%*	*89.0%*							
2 RFMOs	1,113	1,119	1,148	1,175	1,160							
	6.6%	*6.7%*	*7.0%*	*7.1%*	*7.0%*							
3 RFMOs	355	352	340	336	342							
	2.1%	*2.1%*	*2.1%*	*2.0%*	*2.1%*							
4 RFMOs	225	225	222	217	213							
	1.3%	*1.3%*	*1.3%*	*1.3%*	*1.3%*							
5 RFMOs	113	112	113	113	113							
	0.7%	*0.7%*	*0.7%*	*0.7%*	*0.7%*							
Total	**16,787**	**16,810**	**16,454**	**16,511**	**16,600**							



6. Authorized records at each t-RFMO, registered under a single or multiple t-RFMOs.

The total number of authorized vessels registered, at the end of each month, under a single or multiple t-RFMOs at each t-RFMO, is illustrated below.

Table 4. Number of authorized records registered under a single or multiple t-RFMOs, at each t-RFMO, March 2015 to July 2017.

Source	Period	1 RFMO	2 RFMOs	3 RFMOs	4 RFMOs	5 RFMOs	Total Auth.
CCSBT	Mar'15	200	287	84	61	119	**751**
	Apr'15	214	286	81	60	117	**758**
	May'15	199	241	93	61	125	**719**
	Jun'15	192	236	96	60	128	**712**
	Jul'15	184	206	106	64	120	**680**
	Aug'15	189	197	107	65	119	**677**
	Sep'15	179	165	101	63	116	**624**
	Oct'15	174	145	95	65	117	**596**
	Nov'15	142	156	60	65	117	**540**
	Dec'15	168	144	66	62	119	**559**
	Jan'16	161	155	67	63	119	**565**
	Feb'16	159	149	66	39	114	**527**
	Mar'16	175	159	67	41	111	**553**
	Apr'16	187	167	66	41	110	**571**
	Jun'16	195	140	78	42	111	**566**
	Jul'16	202	159	81	42	111	**595**
	Aug'16	204	150	81	42	111	**588**
	Sep'16	195	139	77	42	111	**564**
	Oct'16	242	147	76	43	112	**620**
	Nov'16	221	136	58	43	112	**570**
	Dec'16	225	129	74	43	112	**583**

	Jan'17	206	148	73	44	112	**583**
	Feb'17	213	132	76	43	111	**575**
	Mar'17	244	133	78	44	113	**612**
	Apr'17	254	132	79	44	112	**621**
	May'17	239	130	79	44	113	**605**
	Jun'17	242	146	79	44	113	**624**
	Jul'17	237	134	80	44	113	**608**
IATTC	Mar'15	3,907	743	243	287	119	**5,299**
	Apr'15	3,943	740	245	284	117	**5,329**
	May'15	3,944	751	243	272	125	**5,335**
	Jun'15	3,876	798	259	265	128	**5,326**
	Jul'15	3,865	808	262	267	120	**5,322**
	Aug'15	3,870	835	236	267	119	**5,327**
	Sep'15	3,872	836	229	266	116	**5,319**
	Oct'15	3,880	807	232	264	117	**5,300**
	Nov'15	3,879	789	247	262	117	**5,294**
	Dec'15	3,956	790	241	265	119	**5,371**
	Jan'16	3,961	794	238	260	119	**5,372**
	Feb'16	3,965	791	262	231	114	**5,363**
	Mar'16	3,831	793	262	231	111	**5,228**
	Apr'16	3,672	790	264	230	110	**5,066**
	Jun'16	3,734	785	260	221	111	**5,111**
	Jul'16	3,737	788	259	221	111	**5,116**
	Aug'16	3,738	788	257	221	111	**5,115**
	Sep'16	3,748	799	252	219	111	**5,129**
	Oct'16	3,745	798	258	215	112	**5,128**
	Nov'16	3,744	800	259	212	112	**5,127**
	Dec'16	3,745	800	258	212	112	**5,127**
	Jan'17	3,743	804	257	211	112	**5,127**
	Feb'17	3,871	773	252	211	111	**5,218**
	Mar'17	3,868	773	252	211	113	**5,217**
	Apr'17	3,871	780	247	211	112	**5,221**
	May'17	3,427	808	235	207	113	**4,790**
	Jun'17	3,430	816	232	202	113	**4,793**
	Jul'17	3,431	818	235	198	113	**4,795**
ICCAT	Mar'15	4,330	247	218	284	119	**5,198**
	Apr'15	3,972	247	208	281	117	**4,825**
	May'15	4,019	261	208	274	125	**4,887**
	Jun'15	4,005	265	220	269	128	**4,887**
	Jul'15	4,046	269	220	269	120	**4,924**
	Aug'15	4,102	267	221	270	119	**4,979**
	Sep'15	4,107	257	217	269	116	**4,966**
	Oct'15	4,167	235	219	269	117	**5,007**
	Nov'15	4,161	231	229	267	117	**5,005**
	Dec'15	4,183	238	231	267	119	**5,038**
	Jan'16	4,209	242	226	263	119	**5,059**
	Feb'16	3,337	223	246	235	114	**4,155**
	Mar'16	3,238	196	241	233	111	**4,019**
	Apr'16	3,314	193	246	231	110	**4,094**
	Jun'16	3,348	193	238	223	111	**4,113**
	Jul'16	3,389	195	236	223	111	**4,154**
	Aug'16	3,408	196	234	223	111	**4,172**
	Sep'16	3,447	191	236	221	111	**4,206**
	Oct'16	3,255	196	235	218	112	**4,016**
	Nov'16	3,195	197	231	215	112	**3,950**
	Dec'16	3,154	199	232	215	112	**3,912**
	Jan'17	3,591	208	232	214	112	**4,357**
	Feb'17	3,365	210	226	215	111	**4,127**
	Mar'17	3,435	214	224	215	113	**4,201**
	Apr'17	3,533	215	226	216	112	**4,302**
	May'17	3,627	233	213	213	113	**4,399**
	Jun'17	3,630	232	213	208	113	**4,396**
	Jul'17	3,709	228	218	204	113	**4,472**
IOTC	Mar'15	6,334	519	242	297	119	**7,511**
	Apr'15	6,478	518	242	293	117	**7,648**

	May'15	6,523	461	251	287	125	**7,647**
	Jun'15	6,577	444	266	280	128	**7,695**
	Jul'15	6,633	415	274	280	120	**7,722**
	Aug'15	6,345	405	248	281	119	**7,398**
	Sep'15	5,114	386	241	279	116	**6,136**
	Oct'15	5,209	369	237	279	117	**6,211**
	Nov'15	5,015	426	215	277	117	**6,050**
	Dec'15	5,041	403	221	277	119	**6,061**
	Jan'16	5,037	414	230	273	119	**6,073**
	Feb'16	5,082	403	254	244	114	**6,097**
	Mar'16	5,027	390	256	244	111	**6,028**
	Apr'16	5,093	397	256	242	110	**6,098**
	Jun'16	5,176	348	267	234	111	**6,136**
	Jul'16	5,173	363	269	234	111	**6,150**
	Aug'16	5,191	353	269	234	111	**6,158**
	Sep'16	5,216	348	267	232	111	**6,174**
	Oct'16	5,189	358	279	229	112	**6,167**
	Nov'16	5,216	370	256	226	112	**6,180**
	Dec'16	5,248	347	273	226	112	**6,206**
	Jan'17	5,239	364	277	224	112	**6,216**
	Feb'17	4,149	257	283	225	111	**5,025**
	Mar'17	4,166	258	280	225	113	**5,042**
	Apr'17	4,077	261	277	225	112	**4,952**
	May'17	4,084	261	277	222	113	**4,957**
	Jun'17	4,112	282	270	217	113	**4,994**
	Jul'17	4,150	268	277	213	113	**5,021**
WCPFC	Mar'15	4,546	892	254	263	119	**6,074**
	Apr'15	4,567	889	244	262	117	**6,079**
	May'15	4,524	874	252	254	125	**6,029**
	Jun'15	4,395	943	260	246	128	**5,972**
	Jul'15	4,130	948	266	240	120	**5,704**
	Aug'15	4,113	976	244	241	119	**5,693**
	Sep'15	4,095	986	238	239	116	**5,674**
	Oct'15	4,095	984	234	239	117	**5,669**
	Nov'15	4,092	1,014	215	237	117	**5,675**
	Dec'15	4,096	1,013	219	237	119	**5,684**
	Jan'16	4,078	1,011	220	233	119	**5,661**
	Feb'16	4,094	998	225	227	114	**5,658**
	Mar'16	4,092	1,002	224	227	111	**5,656**
	Apr'16	4,101	997	227	224	110	**5,659**
	Jun'16	4,111	976	237	216	111	**5,651**
	Jul'16	4,111	975	238	216	111	**5,651**
	Aug'16	4,111	977	236	216	111	**5,651**
	Sep'16	4,108	985	233	214	111	**5,651**
	Oct'16	4,096	991	241	211	112	**5,651**
	Nov'16	4,098	1,013	219	208	112	**5,650**
	Dec'16	4,097	999	234	208	112	**5,650**
	Jan'17	4,090	1,006	235	207	112	**5,650**
	Feb'17	3,267	848	231	206	111	**4,663**
	Mar'17	3,268	848	231	205	113	**4,665**
	Apr'17	3,267	850	227	204	112	**4,660**
	May'17	3,254	864	216	202	113	**4,649**
	Jun'17	3,256	874	214	197	113	**4,654**
	Jul'17	3,245	872	216	193	113	**4,639**

The authorized vessels shared by all five t-RFMOs, in all possible combinations from one to five are shown below. In addition to the total number of the vessels authorized, the main vessels types, such as liners, seiners, gillnetters, trawlers, etc. are also represented. The largest number of vessels authorized are reported as liners and they are shared by up to all five t-

RFMOs, while gillnetters, trawlers, and multipurpose vessels are hardly shared among the t-RFMOs. The largest proportion of fish carriers (about 81 percent) are registered at a single t-RFMO.

Table 5a. Total number, and number by main types, of vessels authorized that were registered under a single or multiple t-RFMOs for all the possible combinations of t-RFMOs, at the end of June 2017.

Source	IATTC	ICCAT	IOTC	WCPFC	Number of RFMOs	All Vessels Authorized	Liners	Seiners	Gill-netters	Trawlers	Multi-purpose	Fish Carriers	Mother-ships
CCSBT					1	242	117	1	0	20	64	0	0
	IATTC				1	3,430	2,478	231	18	3	488	0	0
		ICCAT			1	3,630	1,055	929	22	705	52	36	2
			IOTC		1	4,112	1,144	81	1,305	3	1,547	12	0
				WCPFC	1	3,256	2,135	480	0	0	0	328	2
				Total	1 RFMO	**14,670**	**6,929**	**1,722**	**1,345**	**731**	**2,151**	**376**	**4**
CCSBT	IATTC				2	0	0	0	0	0	0	0	0
CCSBT		ICCAT			2	23	23	0	0	0	0	0	0
CCSBT			IOTC		2	112	110	2	0	0	0	0	0
CCSBT				WCPFC	2	11	5	0	0	0	0	6	0
	IATTC	ICCAT			2	90	67	21	0	2	0	0	0
	IATTC		IOTC		2	12	12	0	0	0	0	0	0
	IATTC			WCPFC	2	714	679	25	0	0	5	1	0
		ICCAT	IOTC		2	64	34	17	1	2	0	1	0
		ICCAT		WCPFC	2	55	11	7	0	0	0	34	0
			IOTC	WCPFC	2	94	32	38	1	0	1	19	0
				Total	2 RFMOs	**1,175**	**973**	**110**	**2**	**4**	**6**	**61**	**0**
CCSBT	IATTC	ICCAT			3	1	1	0	0	0	0	0	0
CCSBT	IATTC		IOTC		3	2	2	0	0	0	0	0	0
CCSBT	IATTC			WCPFC	3	15	15	0	0	0	0	0	0
CCSBT		ICCAT	IOTC		3	31	31	0	0	0	0	0	0
CCSBT		ICCAT		WCPFC	3	1	0	0	0	0	0	1	0
CCSBT			IOTC	WCPFC	3	29	22	4	0	0	3	0	0
	IATTC	ICCAT	IOTC		3	88	86	0	0	0	0	0	0
	IATTC	ICCAT		WCPFC	3	49	46	2	0	0	0	1	0
	IATTC		IOTC	WCPFC	3	77	74	3	0	0	0	0	0
		ICCAT	IOTC	WCPFC	3	43	2	24	0	0	0	17	0
				Total	3 RFMOs	**336**	**279**	**33**	**0**	**0**	**3**	**19**	**0**
CCSBT	IATTC	ICCAT	IOTC		4	20	20	0	0	0	0	0	0
CCSBT	IATTC	ICCAT		WCPFC	4	0	0	0	0	0	0	0	0
CCSBT	IATTC		IOTC	WCPFC	4	9	9	0	0	0	0	0	0
CCSBT		ICCAT	IOTC	WCPFC	4	15	9	0	0	0	0	6	0
	IATTC	ICCAT	IOTC	WCPFC	4	173	171	1	0	0	0	0	0
				Total	4 RFMOs	**217**	**209**	**1**	**0**	**0**	**0**	**6**	**0**
CCSBT	IATTC	ICCAT	IOTC	WCPFC	5	113	113	0	0	0	0	0	0
				Total	5 RFMOs	**113**	**113**	**0**	**0**	**0**	**0**	**0**	**0**
				Grand Total		**16,511**	**8,503**	**1,866**	**1,347**	**735**	**2,160**	**462**	**4**

Table 5b. Total number, and number by main types, of vessels authorized that were registered under a single or multiple t-RFMOs for all the possible combinations of t-RFMOs, at the end of July 2017.

Source	IATTC	ICCAT	IOTC	WCPFC	Number of RFMOs	All Vessels Authorized	Liners	Seiners	Gill-netters	Trawlers	Multi-purpose	Fish Carriers	Mother-ships
CCSBT					1	237	115	1	0	20	64	0	0
	IATTC				1	3,431	2,476	234	18	3	488	0	0
		ICCAT			1	3,709	1,050	995	22	702	51	37	2
			IOTC		1	4,150	1,164	82	1,305	3	1,564	12	0
				WCPFC	1	3,245	2,130	479	0	0	0	327	2
				Total	1 RFMO	**14,772**	**6,935**	**1,791**	**1,345**	**728**	**2,167**	**376**	**4**
CCSBT	IATTC				2	0	0	0	0	0	0	0	0
CCSBT		ICCAT			2	23	23	0	0	0	0	0	0
CCSBT			IOTC		2	101	99	2	0	0	0	0	0
CCSBT				WCPFC	2	10	5	0	0	0	0	5	0
	IATTC	ICCAT			2	88	67	19	0	2	0	0	0
	IATTC		IOTC		2	12	12	0	0	0	0	0	0
	IATTC			WCPFC	2	718	683	25	0	0	5	1	0
		ICCAT	IOTC		2	64	33	17	1	2	0	2	0
		ICCAT		WCPFC	2	53	11	7	0	0	0	32	0
			IOTC	WCPFC	2	91	32	38	1	0	1	16	0
				Total	2 RFMOs	**1,160**	**965**	**108**	**2**	**4**	**6**	**56**	**0**
CCSBT	IATTC	ICCAT			3	1	1	0	0	0	0	0	0
CCSBT	IATTC		IOTC		3	2	2	0	0	0	0	0	0
CCSBT	IATTC			WCPFC	3	15	15	0	0	0	0	0	0
CCSBT		ICCAT	IOTC		3	31	31	0	0	0	0	0	0
CCSBT		ICCAT		WCPFC	3	1	0	0	0	0	0	1	0
CCSBT			IOTC	WCPFC	3	30	23	4	0	0	3	0	0
	IATTC	ICCAT	IOTC		3	92	90	0	0	0	0	0	0
	IATTC	ICCAT		WCPFC	3	48	45	2	0	0	0	1	0
	IATTC		IOTC	WCPFC	3	77	74	3	0	0	0	0	0
		ICCAT	IOTC	WCPFC	3	45	2	24	0	0	0	19	0
				Total	3 RFMOs	**342**	**283**	**33**	**0**	**0**	**3**	**21**	**0**
CCSBT	IATTC	ICCAT	IOTC		4	20	20	0	0	0	0	0	0
CCSBT	IATTC	ICCAT		WCPFC	4	0	0	0	0	0	0	0	0
CCSBT	IATTC		IOTC	WCPFC	4	9	9	0	0	0	0	0	0
CCSBT		ICCAT	IOTC	WCPFC	4	15	10	0	0	0	0	5	0
	IATTC	ICCAT	IOTC	WCPFC	4	169	167	1	0	0	0	0	0
				Total	4 RFMOs	**213**	**206**	**1**	**0**	**0**	**0**	**5**	**0**
CCSBT	IATTC	ICCAT	IOTC	WCPFC	5	113	113	0	0	0	0	0	0
				Total	5 RFMOs	**113**	**113**	**0**	**0**	**0**	**0**	**0**	**0**
				Grand Total		**16,600**	**8,502**	**1,933**	**1,347**	**732**	**2,176**	**458**	**4**

7. Vessel Types

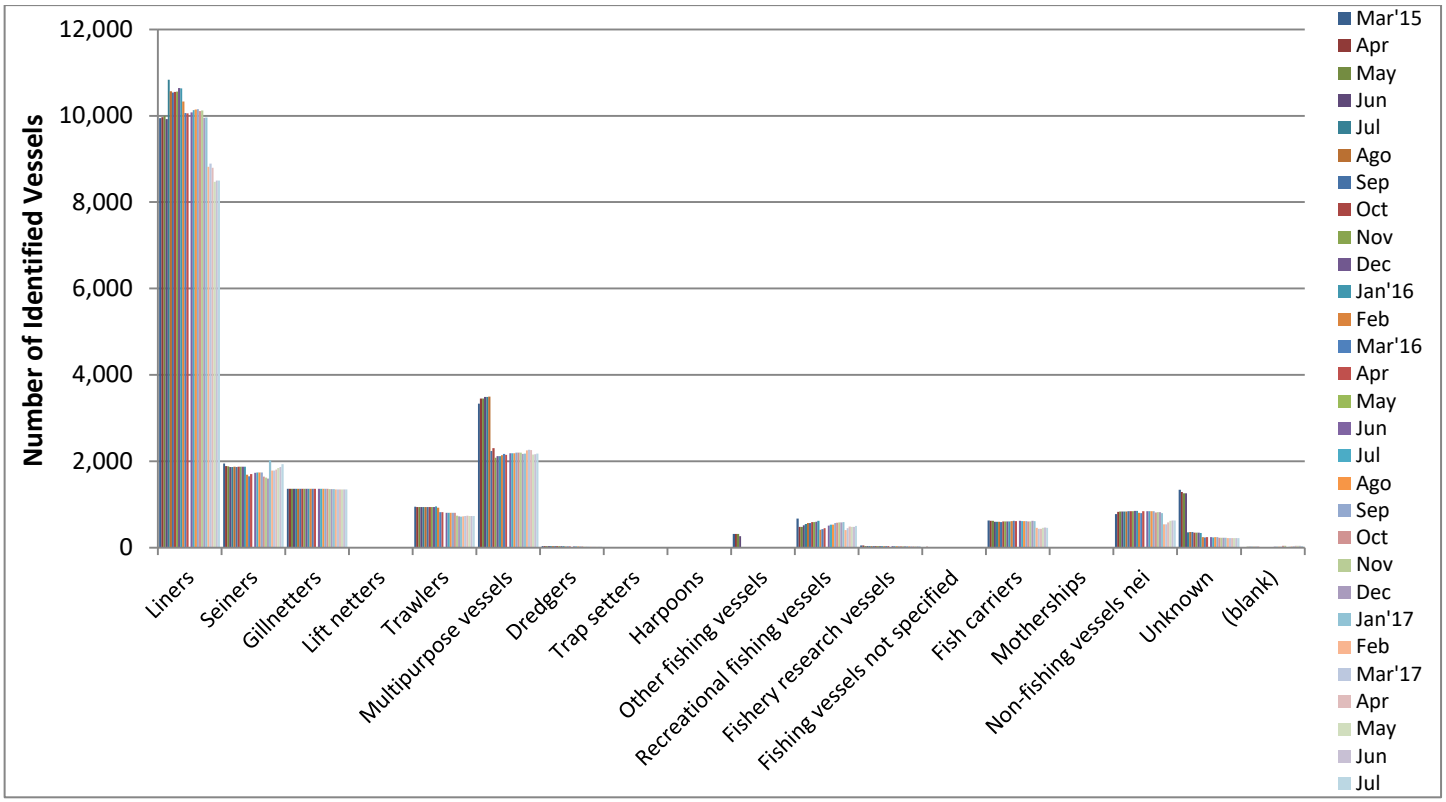
The total number of authorized vessels in the CLAV, classified by type is illustrated below. Liners comprise 51 to 52 percent of all vessels authorized, multipurpose vessels represent more than thirteen percent, seiners more than eleven percent, gillnetters eight percent, trawlers more than four percent, while fish carriers represent less than three percent of all vessel authorized.

Table 6 and **Figure 4.** Total number of authorized vessels by types at the end of each month from March 2015 to July 2017. (*nei* = not elsewhere included; *n. d.* = no data)

Vessel Types	Mar'15	Apr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dec	Jan'16	Feb
Liners	9,945	9,967	9,999	9,922	10,837	10,565	10,535	10,556	10,560	10,645	10,634	10,331
Seiners	1,950	1,889	1,880	1,869	1,868	1,870	1,867	1,870	1,870	1,871	1,871	1,689
Gillnetters	1,358	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,361	1,358
Lift netters	0	0	0	0	0	0	0	0	0	0	0	0
Trawlers	945	940	940	942	942	942	942	941	940	942	953	923
Multipurpose vessels	3,331	3,454	3,455	3,492	3,491	3,497	2,239	2,301	2,083	2,118	2,118	2,142
Dredgers	37	35	35	35	35	35	35	35	35	35	35	30
Trap setters	9	12	12	4	4	4	3	1	1	1	1	1
Harpoons	0	0	0	1	1	1	1	1	1	1	1	1
Other fishing vessels	313	314	314	261	7	7	7	7	7	8	8	8
Recreational fishing vessels	674	481	481	513	546	568	568	590	589	601	620	413
Fishery research vessels	50	50	32	32	32	32	33	33	34	34	34	34
Fishing vessels not specified	15	17	16	16	16	13	13	13	13	13	13	12
Fish carriers	629	621	620	600	600	597	589	602	603	606	608	611
Motherships	13	12	12	11	11	11	11	11	12	12	12	12
Non-fishing vessels *nei*	775	830	832	832	833	832	840	844	845	852	847	806
Unknown	1,337	1,287	1,258	1,256	357	360	359	347	346	346	342	241
(blank)	15	16	18	17	17	17	17	17	14	15	15	16
Grand Total	**21,396**	**21,285**	**21,264**	**21,163**	**20,957**	**20,711**	**19,419**	**19,529**	**19,313**	**19,460**	**19,473**	**18,628**

Vessel Types	Mar'16	Apr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dec	Jan'17	Feb
Liners	10,067	10,054	*n. d.*	10,080	10,128	10,149	10,152	10,111	10,120	9,954	9,964	8,822
Seiners	1,653	1,701	*n. d.*	1,734	1,738	1,739	1,738	1,642	1,622	1,595	2,021	1,781
Gillnetters	1,359	1,359	*n. d.*	1,360	1,359	1,360	1,360	1,359	1,351	1,351	1,351	1,348
Lift netters	0	0	*n. d.*	0	0	0	0	0	0	0	0	10
Trawlers	819	821	*n. d.*	805	802	804	805	806	740	721	719	726
Multipurpose vessels	2,169	2,144	*n. d.*	2,181	2,184	2,184	2,201	2,200	2,199	2,172	2,176	2,251
Dredgers	30	30	*n. d.*	30	30	30	30	25	20	19	19	19
Trap setters	9	9	*n. d.*	7	1	1	1	1	0	0	0	0
Harpoons	1	1	*n. d.*	1	1	1	1	1	1	1	1	1
Other fishing vessels	8	9	*n. d.*	9	9	9	9	9	9	9	9	9
Recreational fishing vessels	431	449	*n. d.*	509	533	533	567	573	580	586	593	405
Fishery research vessels	33	34	*n. d.*	34	34	34	34	33	33	33	33	33
Fishing vessels not specified	12	12	*n. d.*	10	14	15	15	15	15	15	15	6
Fish carriers	623	615	*n. d.*	620	616	616	616	605	606	617	611	458
Motherships	11	11	*n. d.*	11	11	11	11	11	11	11	11	5
Non-fishing vessels *nei*	799	839	*n. d.*	841	842	845	845	811	822	817	798	537
Unknown	238	240	*n. d.*	240	238	239	240	229	230	229	230	220
(blank)	16	16	*n. d.*	18	18	18	18	45	43	16	20	28
Grand Total	**18,278**	**18,344**	**no data**	**18,490**	**18,558**	**18,588**	**18,643**	**18,476**	**18,402**	**18,146**	**18,571**	**16,659**

Vessel Types	Mar'17	Apr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dec	Jan'18	Feb
Liners	8,890	8,800	8,469	8,503	8,502							
Seiners	1,782	1,807	1,844	1,866	1,933							
Gillnetters	1,348	1,348	1,347	1,347	1,347							
Lift netters	10	10	10	10	10							
Trawlers	730	741	735	735	732							
Multipurpose vessels	2,263	2,259	2,158	2,160	2,176							
Dredgers	19	19	19	19	19							
Trap setters	10	10	10	0	0							
Harpoons	1	1	1	1	1							
Other fishing vessels	9	9	5	5	5							
Recreational fishing vessels	451	484	476	476	499							
Fishery research vessels	34	34	34	34	34							
Fishing vessels not specified	6	6	6	3	3							
Fish carriers	436	438	460	462	458							
Motherships	4	4	4	4	4							
Non-fishing vessels *nei*	537	580	618	630	624							
Unknown	219	220	219	217	217							
(blank)	38	40	39	39	36							
Grand Total	**16,787**	**16,810**	**16,454**	**16,511**	**16,600**							



The numbers of vessels whose types were reported as either Other fishing vessels or Unknown early on (March to June 2015) were drastically reduced when most of them were later re-classified as Liners (July 2015 onwards). On the other hand, the number of vessels reported as Multipurpose was notoriously reduced in September 2015 when about 1,260 of them flagged to Sri Lanka had their authorization terminated. Throughout the period illustrated above, the number of trawlers shows a decreasing tendency from 945 in March 2015 to 732 in July 2017 (**Table 6** and **Figure 4**). The number of liners dropped notoriously in February and May 2017 as many vessels from IOTC (flagged to Indonesia), WCPFC (flagged to Indonesia, and Philippines), ICCAT and more recently IATTC (flagged to USA) had their authorization terminated.

8. Flags with authorized vessels at each t-RFMO.

The number of different flags with authorized vessels registered at each t-RFMO, at the end of each month, is illustrated below.

Table 7. Number of flags with authorized vessels registered at each t-RFMO, March 2015 to July 2017. (*n. d.* = no data).

Source	Mar'15	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'16	Feb
CCSBT	12	12	12	12	12	12	13	13	12	14	14	14
IATTC	26	28	27	26	25	25	25	24	24	24	25	25
ICCAT	56	55	54	54	55	55	55	55	55	56	56	52
IOTC	30	31	31	31	31	31	31	31	31	31	31	31
WCPFC	33	33	33	33	33	33	33	33	33	33	33	33

Source	Mar'16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'17	Feb
CCSBT	14	15	*n.d.*	15	14	15	15	15	15	15	15	15
IATTC	26	26	*n.d.*	26	26	26	26	26	26	26	26	26
ICCAT	52	53	*n.d.*	55	54	55	55	54	54	54	55	52
IOTC	31	31	*n.d.*	32	32	32	32	32	32	32	32	31
WCPFC	33	33	*n.d.*	33	33	33	33	33	33	33	33	33

Source	Mar'17	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'18	Feb
CCSBT	15	15	15	15	15							
IATTC	26	26	26	26	26							
ICCAT	53	54	55	55	56							
IOTC	31	31	31	31	31							
WCPFC	33	33	33	33	33							

9. Flags represented in the CLAV.

There were in total 91 different flags represented in the CLAV at the end of July 2017, with vessels authorized at a single or multiple t-RFMOs. The greatest proportion (71 percent) of the flags had all their vessels registered under a single t-RFMO. Ten flags (11 percent) had vessels registered under only two t-RFMOs, another nine flags (10 percent) registered vessels under only three t-RFMOs, three flags (3.3 percent) registered vessels under only four t-RFMOs, and four flags (4.4 percent) have vessels registered under all five t-RFMOs.

Table 8. Number of flags with registered vessels authorized in the CLAV at a single or multiple t-RFMOs, March 2015 to July 2017. (*n. d.* = no data).

Number of RFMOs	Mar'15	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'16	Feb
1 RFMO	67	67	64	63	63	63	63	63	63	63	65	62
2 RFMOs	8	7	7	9	9	8	8	8	10	10	8	9
3 RFMOs	9	8	10	9	9	10	10	9	7	8	9	8
4 RFMOs	2	3	3	3	3	3	3	4	4	4	4	4
5 RFMOs	4	4	4	4	4	4	4	4	4	4	4	4
Total	**90**	**89**	**88**	**88**	**88**	**88**	**88**	**88**	**88**	**89**	**90**	**87**

Number of RFMOs	Mar'16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'17	Feb
1 RFMO	61	62	*n.d.*	63	64	65	65	64	64	63	63	61
2 RFMOs	10	9	*n.d.*	10	10	10	10	10	9	9	11	10
3 RFMOs	8	10	*n.d.*	10	10	9	9	9	10	10	8	9
4 RFMOs	4	3	*n.d.*	3	3	3	3	3	3	3	4	3
5 RFMOs	4	4	*n.d.*	4	4	4	4	4	4	4	4	4
Total	**87**	**88**	***n.d.***	**90**	**91**	**91**	**91**	**90**	**90**	**89**	**90**	**87**

Number of RFMOs	Mar'17	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan'18	Feb
1 RFMO	61	62	63	63	65							
2 RFMOs	11	11	11	11	10							
3 RFMOs	9	9	9	9	9							
4 RFMOs	3	3	3	3	3							
5 RFMOs	4	4	4	4	4							
Total	**88**	**89**	**90**	**90**	**91**							

10. Flags reporting authorized vessels at a single and multiple t-RFMOs as of June 30, 2017.

Table 9. Proportion of all vessels authorized by flag that were registered under a single or multiple t-RFMOs, at the end of July 2017.

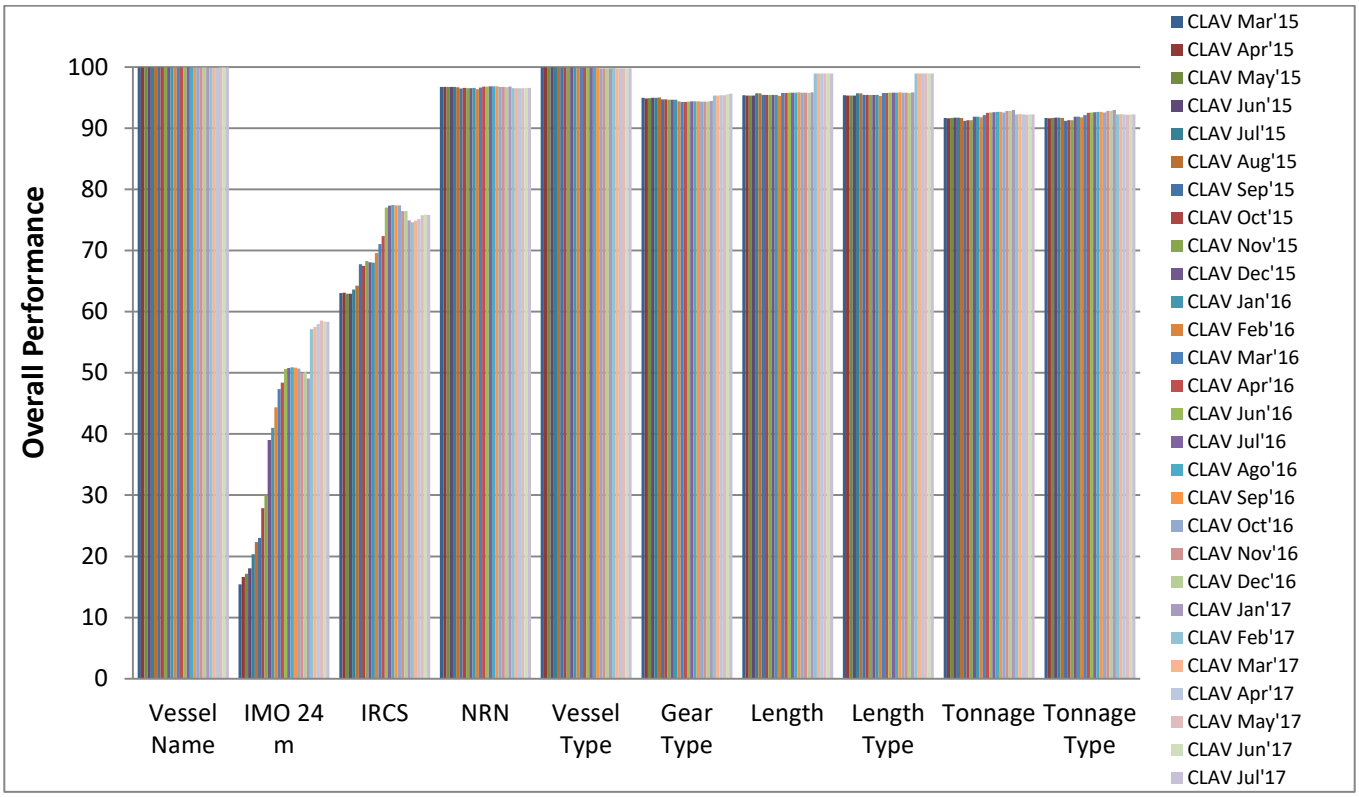
Flag	1 RFMO	2 RFMOs	3 RFMOs	4 RFMOs	5 RFMOs
AGO	100.00%				
ALB	100.00%				
AUS	32.22%	38.89%	28.89%		
BHS	100.00%				
BLZ	100.00%				
BRA	100.00%				
CAN	95.02%	4.98%			
CHN	48.95%	40.59%	9.62%	0.84%	
CIV	100.00%				
COK	100.00%				
COL	100.00%				
CPV	100.00%				
CRI	100.00%				
CUW	100.00%				
CYP	100.00%				
DEU	100.00%				
DZA	100.00%				
ECU	96.11%	3.89%			
EGY	100.00%				
ESP	73.47%	5.54%	15.16%	4.66%	1.17%
FJI	100.00%				
FRA	87.29%	8.05%	4.66%		
FSM	100.00%				
GBR	98.70%	1.30%			
GHA	100.00%				
GIN	100.00%				
GRC	100.00%				
GTM	100.00%				
HND	100.00%				
HRV	100.00%				
IDN	62.24%	37.76%			
IND	100.00%				
IRL	100.00%				
IRN	100.00%				
ISL	100.00%				
ITA	100.00%				
JPN	66.78%	9.01%	1.17%	12.87%	10.18%
KEN	100.00%				
KIR	97.37%	2.63%			
KOR	48.50%	17.94%	13.29%	16.94%	3.32%
LBR	10.71%	7.14%	53.57%	28.57%	
LBY	100.00%				
LKA	100.00%				
LTU	37.50%	62.50%			
MAR	100.00%				
MDG	100.00%				
MDV	100.00%				
MEX	100.00%				
MHL	100.00%				
MLT	100.00%				
MOZ	100.00%				

MUS	100.00%				
MYS	100.00%				
NAM	100.00%				
NCL	100.00%				
NIC	100.00%				
NLD	58.33%	16.67%	25.00%		
NOR	100.00%				
NZL	98.92%	1.08%			
OMN	100.00%				
PAK	100.00%				
PAN	89.89%	9.04%	0.35%	0.71%	
PER	100.00%				
PHL	97.02%	2.98%			
PNG	100.00%				
POL	100.00%				
PRT	74.44%	8.89%	5.56%	2.22%	8.89%
PYF	100.00%				
RUS	100.00%				
SEN	100.00%				
SGP			100.00%		
SHN	100.00%				
SLB	100.00%				
SLE	100.00%				
SLV	73.33%	13.33%	13.33%		
SPM	100.00%				
SYC	100.00%				
SYR	100.00%				
THA	50.00%	50.00%			
TON	100.00%				
TTO	100.00%				
TUN	100.00%				
TUR	100.00%				
TUV	100.00%				
TWN	90.51%	8.56%	0.93%		
URY	100.00%				
USA	92.66%	7.14%	0.21%		
VCT	100.00%				
VEN	71.19%	28.81%			
VUT	34.12%	64.71%	1.18%		
ZAF	65.52%	9.20%	25.29%		

11. Degree of Completion of minimum data requirements and benchmark analyses.

Performance, for the ten different data fields compiled in the CLAV, was based on their degree of completion and expressed on a 100-points scale. For the performance evaluation of the IMO number, only the vessels authorized of length 24 meters and over were included.

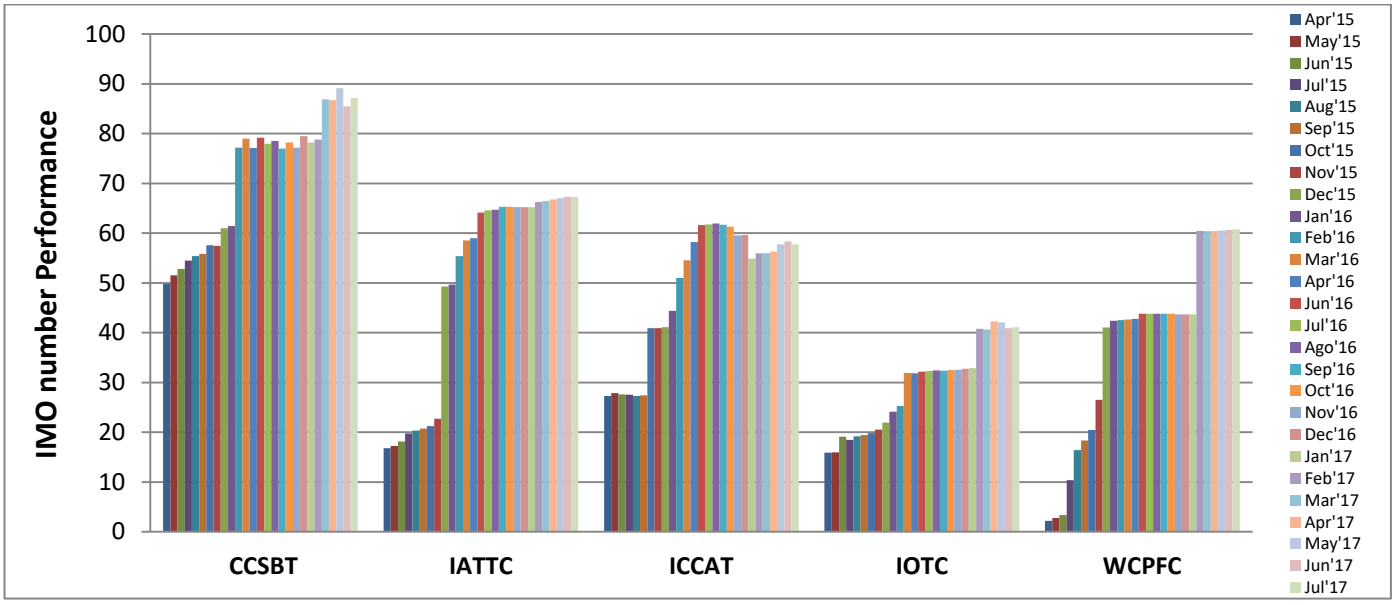
Figure 8. Overall performance for the ten different data fields compiled in the CLAV, March 2015 to July 2017.



The performance reductions observed from October 2016 to January 2017 for IMO 24 m, and IRCS were the direct result of resolving and cleaning erroneous or spurious entries to the CLAV database. Figures or expressions that were incorrect or that did not correspond to IMO numbers or IRCS, which have accumulated through time in the CLAV, and which were taken as valid entries in past analyses were deleted as part of the cleaning-up of the CLAV database. In the case of IRCS, the cleaning of those expressions affected greatly ICCAT´s performance as there were hundreds of entries with values entered as (n/a).

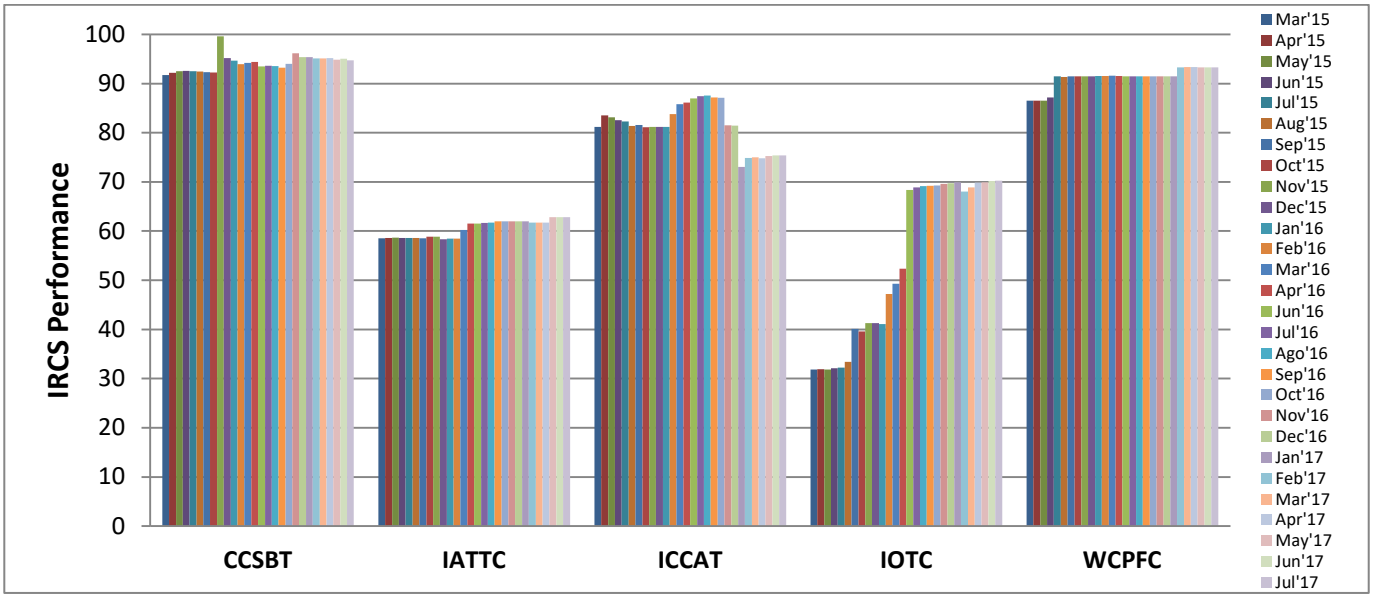
The **IMO number** has been the attribute with the lowest level of completion, though a clear tendency at improving its reporting continues, as shown by the overall trend from March 2015 (15 percent) to July 2017 (58 percent), a near fourfold improvement (see **Figure 8**). Extra efforts at gathering IMO numbers by all five t-RFMOs are responsible for this notable overall improvement, whose details are shown below in **Figure 9**. However, there are differences in the reporting of the IMO number by the different t-RFMOs.

Figure 9. IMO number performance for the five t-RFMOs, considering only those authorized vessels of length equal to 24 meters and over, March 2015 to July 2017.



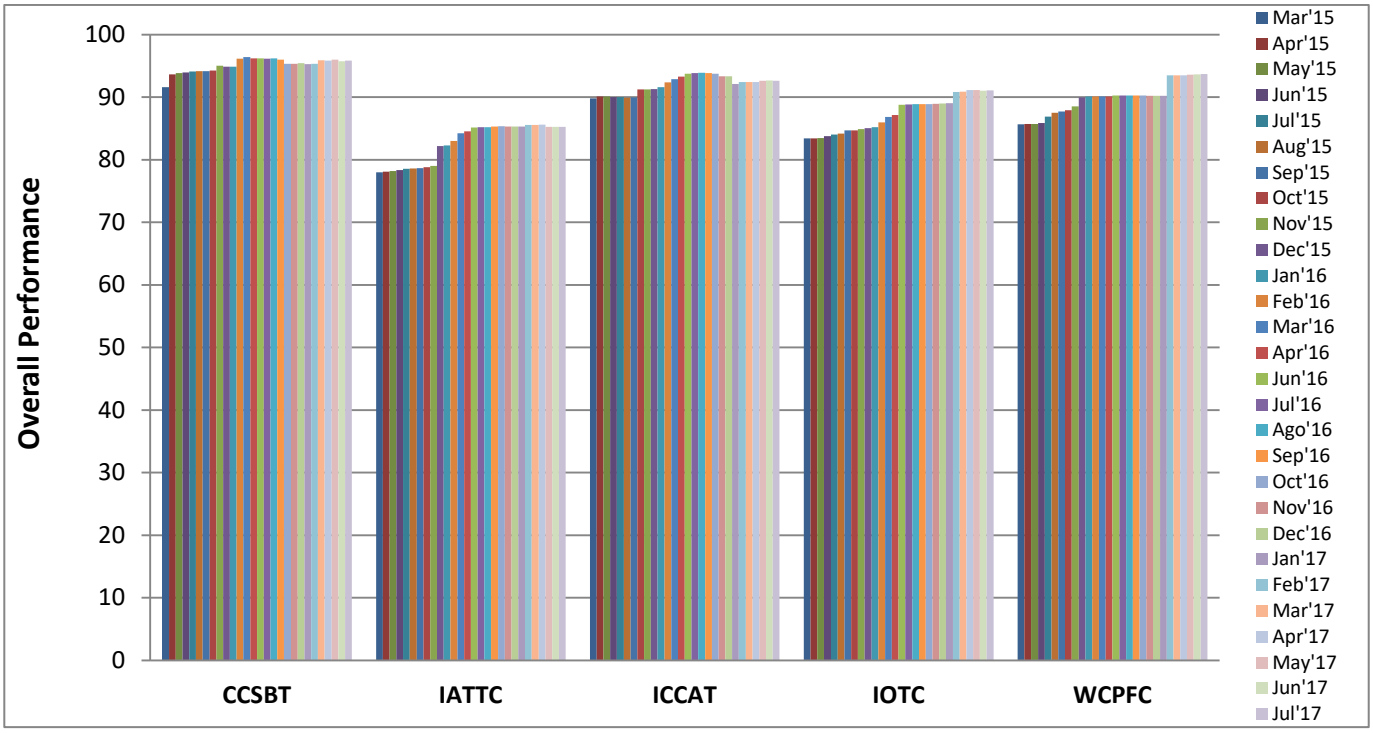
The **IRCS** (International Radio Call Sign), the second least reported attribute, has also improved its reporting through time and overall almost 76 percent of all the vessels authorized included an IRCS at the end of July 2017 (see **Figure 8**). The cleaning of hundreds of entries with values entered as (n/a) affected greatly ICCAT´s performance from October 2016 onwards as seen in **Figure 10**, below. There are differences in the reporting of the IRCS by the various t-RFMOs, as shown below. Part of such lower IRCS reporting is likely associated with the higher proportion of vessels of smaller size in a couple of the t-RFMOs (i.e., IATTC and IOTC). Smaller vessels that operate near shore may not be required an IRCS.

Figure 10. IRCS performance for all the vessels authorized by the five t-RFMOs, March 2015 to July 2017.



Summarizing the scoring for the ten attributes it is possible to have a comparative idea of the overall performance of the different t-RFMOs in a type of benchmark analysis, as shown below. The figure below illustrates that, though in different degrees, all five t-RFMOs have improved through time their performance in terms of completion of the ten basic attributes reported to the CLAV.

Figure 11. Comparison of the overall performance of the five t-RFMOs, March 2015 to July 2017.



The slight drop (noticeable for ICCAT) in the period October 2016 to January 2017 is partially the result of the resumed maintenance of the CLAV, when duplicates were again being consolidated and erroneous and spurious accumulated entries were either edited or deleted. These actions affected the number of authorized records reporting the ten basic attributes and hence modified their performance, in particular that of the IMO number and the IRCS reporting.

12. Conclusions.

- In its early stages (February – August 2015) an important proportion of the decrease in the number of authorized vessels was the result of the consolidation process achieved by the CLAV maintenance.
  The decrease amplified significantly in late August – early-September 2015 with the massive termination of more than 1,500 vessels. In a following stage (mid-September 2015 – January 2016) with continuous CLAV maintenance the number of vessels remained rather stable around 19,300 – 19,500. Further reductions through February – March 2016 were mainly due to terminations of hundreds of vessels.
  There comes a period, May – September 2016, of slight increase of the number of authorized vessel when there was no CLAV maintenance. Such increase being mostly due to accumulated unresolved redundant records. Once the CLAV maintenance was resumed in October 2016, the decreasing tendency initially resulted from resolving those redundant records.
  From December 2016 onwards, the drop in the number of authorized vessels responded mostly to massive terminations, and secondarily to the CLAV maintenance tasks (*linking* and *merging*).
  Recently, the slight increase of the number of authorized vessels corresponds mainly to re-authorizations of previously unauthorized vessels.

- There are still duplicates, mixed-up records, and some erroneous entries (that although detected and informed to the corresponding t-RFMOs) have not been corrected or resolved by the sources yet. Therefore, those errors will remain in the CLAV database until further notice from the responsible source.

- The greatest majority of authorized vessels (89 percent) are reported from only one t-RFMO. The remaining authorized vessels are reported from multiple t-RFMOs.

- Of the 91 flags represented in the CLAV at the end of July 2017, the great majority (71 percent) have vessel authorized to operate at only one Convention area. Ten flags operate vessels at two Convention areas, while nine flags operate vessels at three, three flags operate vessels at four, and four flags operate vessels at five Convention areas.

- The rate of the overall IMO number reporting (for vessels 24 meters and above) has increased significantly from March 2015 (15 percent) to July 2017 (58 percent), a near fourfold improvement. Performance reductions observed from October 2016 onwards originated from resolving and cleaning erroneous and spurious entries to the CLAV database. Figures or expressions that were incorrect or that did not correspond to IMO numbers accumulated through time and were deleted as part of the cleaning-up of the CLAV database.

- The overall IRCS reporting rate has improved slightly, from 63 percent in March 2015 to 76 percent at the end of July 2017. Performance reductions observed from October 2016

onwards originated from resolving and cleaning erroneous or spurious entries to the CLAV database. This affected primarily ICCAT´s performance as hundreds of spurious entries (such as n/a) counted previously as IRCS were deleted from the CLAV database.

- Developing and maintaining the CLAV up to this point has involved multiple efforts and investments. The progress achieved at keeping the CLAV updated at close-to-real time, during the period of over two years has been completed with the support of the Common Oceans Tuna Project at FAO. This has been possible by the joint efforts and close collaboration between the t-RFMO´s compliance officials, the database managers, and the CLAV maintenance work. Some mechanism and institutionalization, agreed upon by the t-RFMOs owners of the CLAV, would seem necessary and should be devised to insure the continuation and further maintenance of the CLAV beyond September 2017, the end of the support provided by the Common Oceans Tuna Project.

- Responses, from the t-RFMO´s compliance officials and/or database managers, regarding the usefulness of the CLAV unanimously indicated that *maintaining the CLAV is a worthwhile effort, and that the additional time and efforts dedicated to resolve issues detected by the CLAV ultimately resulted in data quality improvements to the benefit of both the t-RFMOs and flag members.*

- http://clav.iotc.org/browser/search

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Kobe recommendations for which the CCSBT has made limited progress

KOBE SCIENCE RECOMMENDATIONS

Data Sharing and the Provision of Scientific Advice

- All documents, data and assumptions related to past assessments undertaken by tuna RFMOs should be made available in order to allow evaluation by any interested stakeholder[1].

KOBE MANAGEMENT RECOMMENDATIONS

Management Measures, Decision-making, and RFMO functioning

- Seek binding measures or strengthen existing mitigation measures, including the development of mandatory reporting requirements for bycatch of all five taxa across all gear types and fishing methods where bycatch is a concern[2].
- Adopt the following principles as the basis for developing best practice on bycatch avoidance and mitigation measures and on bycatch conservation and management measure: binding, clear and direct, measureable, science-based, ecosystem-based, ecologically efficient (reduces the mortality of bycatch), practical and safe, economically efficient, holistic, collaboratively developed with industry and stakeholders, and fully implemented[3].

Capacity and Allocation

- Each tuna RFMO consider implementing where appropriate a freeze on fishing capacity on a fishery by fishery basis. Such a freeze should not constrain the access to, development of, and benefit from sustainable tuna fisheries by developing coastal States[4].
- Develop measures of capacity and, in the absence of an agreed capacity definition, adopt the FAO definition "The amount of fish (or fishing effort) that can be produced over a period of time (e.g. a year or a fishing season) by a vessel or a fleet if fully utilised and for a given resource condition."

Capacity Building

- The structural weaknesses in the receiving mechanism for capacity building within a country should be improved by working closely with Tuna RFMOs.
- Acknowledging the additional or new requirements of bycatch mitigation and the need to build further capacity for implementation, in carrying out the [Kobe II Bycatch Working Group recommendations], consider capacity building programs for developing countries to assist in their implementation. Establish a list of existing capacity building programs related to bycatch issues to avoid duplication where possible and facilitate coordination of new capacity building programs.

KOBE COMPLIANCE AND ENFORCEMENT RECOMMENDATIONS

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[1] The majority of documents and much of the data are publicly available. However, fine scale data used in generation of indices and some other data and documents are not publicly available for confidentiality reasons. The Scientific Committee has recommended that it would be valuable to seek ways of addressing this issue to make the data used in the assessment more transparent.

[2] Instead of different specific measures of its own, the CCSBT has adopted a "harmonized" approach requiring its Members to comply with all binding and recommended bycatch measures of ICCAT, IOTC and WCPFC when fishing in those Convention Areas. Most CCSBT mitigation measures are highly recommended (as opposed to mandatory).

[3] Many of these principles are used, but they have not been formally adopted and are mainly non-binding (although strongly recommended).

[4] The SBT fishery is managed by a global TAC and national allocations of the TAC. Most Members also have IQ or ITQ systems for SBT. Capacity or effort control is therefore not the primary management measure for CCSBT as it is in some other RFMOs, and is currently of lower priority.

Compliance

- The tRFMOs establish a common format for assessing compliance with data reporting requirements. Furthermore, to facilitate compliance, all tRFMOs streamline and harmonize their reporting formats, procedures, and timing[5].

Eliminate IUU fishing

- The establishment of a global Register of active vessels, with contributions by the five RFMOs. This list will not be understood as providing individual or collective fishing rights. It will be without prejudice to any system of rights provided for in the existing RFMOs. The preparation of this list will be coordinated by the Secretariats of the tuna RFMOs[6].

Observers

- RFMOs are encouraged to support the establishment of regional observer programs which could be built on existing national programs. It is the responsibility of each RFMO to clearly establish the purpose and scope of the information collected by its regional observer program, such as whether it will be used to support scientific or monitoring functions, or both, and then define the specific observer tasks and duties appropriate for that particular purpose and scope[7].

[5] Harmonised reporting formats (including data submission) could have considerable benefits, but it would also involve major work from all involved to implement new formats – e.g. significant changes to data submission/loading code, possible changes to the meaning of certain data items and possible re-submission of historic data etc. CCSBT considered that this is a low priority on the basis of the significant effort and disruption involved rather than the usefulness of the concept. However, if all tRFMOs showed a strong commitment to this recommendation, then this priority would be reconsidered.

[6] CCSBT has an active vessel register, but it is not aware of any work underway to develop a global register of active vessels.

[7] The CCSBT has Scientific Observer Program standards with a target coverage of 10%. Most Members are now achieving this target.