Commission for the Conservation of
Southern Bluefin Tuna

みなみまぐろ保存委員会

CCSBT-EC/1610/15 (Rev.1)

Kobe Process

Purpose

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.

Kobe Steering Committee Meetings

There have been three short meetings of the Kobe Process Steering Committee since CCSBT 22. The meetings were chaired by Russell Smith[2], USA and were held at the following locations and dates:

- St Juliens, Malta (18 November 2015), in conjunction with ICCAT 24;
- Monterey, California, USA (19 January 2016), in conjunction with the Bluefin Futures Symposium; and
- Rome, Italy (11 July 2016), in conjunction with COFI 32.

Draft minutes of these meetings are provided at **Attachments A, B and C**. The Executive Secretary participated at the first two meetings by phone and the last in-person.

Kobe Process Steering Committee (KSC) meetings have received updates on progress with Kobe Process and related joint tuna RFMO working groups, as well as discussing areas of potential collaboration and the next steps in the Kobe Process.

At the most recent KSC, it was noted that KSC 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. The KSC Chair noted that he would be stepping down at the end of the year.

Joint Tuna RFMO Activities

The main joint tuna RFMO activities of relevance to the CCSBT that are underway are in relation to the following technical groups and projects:

- Management Strategy Evaluation Working Group (MSE WG)

  A meeting of the MSE WG is scheduled for 1-3 November 2016. The agenda consists of five main themes: Development of a dialogue between managers and scientists; Conditioning of operating models; Computational aspects; Albacore case study; and Dissemination of information. More information is available at: http://www.tuna-org.org/mse.htm

[1] A cooperative process involving joint meetings of members of the five tuna RFMOs, The first meeting was held in Kobe, Japan.
[2] Deputy Assistant Secretary for International Fisheries, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

- Joint Technical Bycatch Working Group (TBWG)

  The Chair has changed from Dr Simon Nicol to Mr Neville Smith. The new Chair is developing a work plan for 2017 and onwards, with the intent to distribute the plan in early October 2016 for discussion in December 2016 when it is hoped to hold a meeting in association with the EBFM meeting. Funding is a barrier to collaborative work with all tuna RFMOs and as a consequence, little such work has occurred. However, work has progressed in the following areas of the TBWG work plan by more than one tuna RFMO:
  - *Turtles workshop in Hawaii involving collaborative analysis of bycatch data[3];*
  - *The Bycatch Mitigation Information System (BMIS) is progressing[3,4];*
  - *The first assessment for southern hemisphere porbeagle shark involving a stock assessment model, which will address both stock status and exploitation rates, and a risk assessment model, which will address exploitation rates only, is underway[3]; and*
  - *Implementation of the WCPFC Bycatch Data Exchange Protocol (BDEP), which is based on the CCSBT ERS Data Exchange requirements, is underway and IOTC is trialing the BDEP with the Secretariat completing it.*

- Consolidated List of Authorised Vessels (CLAV)

  *The CLAV has continues to be updated on a daily basis[3]. A report on the CLAV is provided at **Attachment D**. The rate of IMO number reporting has almost tripled in the 12 months from March 2015 to February 2016. This improved reporting has allowed for more efficient detection of redundancies and has improving the reliability of the CLAV. Maintenance of the CLAV requires substantial work and this will continue through funding from the ABNJ Tuna Project during 2017. However, once the ABNJ Tuna Project finishes, continuation of the CLAV will require an ongoing source of funding such as contributions from the tuna RFMOs.*

- Joint Tuna RFMO Meeting on Implementation of Ecosystems Based Fisheries Management (EBFM)

  *Tentative dates for the first joint tuna RFMO EBFM meeting are 14-16 December 2016[3]. The purpose of the meeting is to exchange ideas on the implementation of ecosystems based fisheries management within each of the t-RFMOs. A draft agenda for the meeting is provided at **Attachment E**. For further details see CCSBT Circulars #2016/006 and 009 and CCSBT-EC/1610/16.*

Progress with Kobe Process Recommendations

The updated progress of each of the tuna RFMOs towards implementing the recommendations from the Kobe Process is provided at **Attachment F**. It should be noted that the progress listed for each RFMO is a self-assessment by that RFMO and the assessments are not always comparable between RFMOs. For easy reference, a list of Kobe recommendations for which the CCSBT has made limited progress is provided at **Attachment G**. 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.

Prepared by the Secretariat

[3] Funded by the ABNJ Tuna Project.
[4] Funding through ISSF.

KOBE STEERING COMMITTEE CONFERENCE CALL

Hilton Hotel
St Juliens, Malta
November 18, 2015

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:

- Russell Smith (USA), Chair of Steering Committee and WCPFC representative
- Mr. Driss Meski, Executive Secretary of ICCAT
- Mr. Bob Kennedy, Executive Secretary of CCSBT
- Mr. Stefaan Depypere (EU), ICCAT representative
- Mr. Bernal Chavarría (Honduras), IATTC representative
- Dr. Paul de Bruyn, ICCAT staff member
- Ms. Jenny Cheatle, ICCAT staff member
- Ms. Melanie King (USA), assistant to the Chair

II. Adoption of Agenda

The agenda was adopted without change. It is attached to this report.

III. Future of Kobe Process and Steering Committee

Participants agreed that the Kobe process has been helpful, in particular for advancing the harmonization of MCS measures such as CDS and observer schemes. It was noted that the Kobe process provides an opportunity to discuss minimum standards and best practices, but it is also important to note differences between t-RFMOs, geographical regions, and individual fisheries. It is important not to create the impression that the Kobe process is some kind of "Super-RFMO" that makes binding decisions, but rather just a body to discuss synergies. This is particularly important to ensure developing country buy-in. The Kobe process is a venue to discuss management and technical issues, but political issues must be dealt with in other fora.

The importance of communicating the accomplishments of the t-RFMOs and the Kobe process was also discussed. There are a number of fora such as the Economist's World Ocean Summit and the Out Ocean Conference that could provide good venues for conversations about those achievements. It was also noted that the t-RFMOs should work to harmonize messaging, where appropriate.

Regarding the role of the Steering Committee, it was noted that the group should be relatively passive, and mainly function as a conduit to share information, both to t-RFMO Membership, but also to the global community regarding the work that is being done. The utility of the tuna-org.org website was emphasized as a way to share information.

The Chair noted and participants agreed that there has not been a lot of enthusiasm for the Kobe Steering Committee process and it has been difficult to find meeting times and venues that allow the participation of all Committee members. While the COFI meetings have been convenient for the t-RFMO Executive

Secretaries/Directors, t-RFMO Chairs and Vice Chairs have not attended meetings. While conference calls are useful when a final decision needs to be made, planning can be difficult, particularly given the broad range of time zones for the potential participants. The Bluefin Futures Symposium being held in January 2016 was noted as another opportunity for the Steering Committee to get together and discuss progress and next-steps. While the COFI meetings are not the ideal venue, it was agreed that it is still worthwhile to try and host discussions there. The next formal meeting of the Steering Committee will be held on the sidelines of the COFI meeting in July.

Given the difficulty of convening a Steering Committee meeting, it was suggested that it may be time to begin discussions on convening a larger Kobe meeting to take stock of progress and plan for the future. It was also noted that there has not been a general expression of interest by t-RFMO Membership, so such a meeting would not take place immediately in the future. It may be appropriate to consider a meeting in 2018 or beyond to have time to ensure t-RFMO Membership support, identification of a host, agenda development, etc. Ideally a developing country would host.

IV. Updates

The Chair requested that the t-RFMOs leading each group provide more regular written updates to ensure transparency and information flow. The tuna-org.org website was noted as a useful platform to share this information. The ICCAT Secretariat continues to host and maintain that website.

a. Joint tRFMO Technical Group on MSE (ICCAT)

Dr. Laurie Kell from ICCAT has been working with representatives from other RFMOs on this initiative. The group has been advancing their work and collaborating online, but it is difficult to determine interim progress given the nature of the work. It was noted this technical work can support the political dialog in the RFMOs. CCSBT has already implemented MSE, with ICCAT, IATTC and WCPFC also making progress.

b. Joint Technical Bycatch Workgroup (WCPFC)

This group met most recently in January 2015 in Taiwan, where they focused on observer programs and the harmonization of data collection. ISSF has provided funding to the group in the past and has posted reports on its website. It was noted that the past Chair of the body has stepped down. Mr. Kennedy and Dr. de Bruyn offered to work with existing members of the group to send a communication on the need to identify a new chair. It was also suggested that meeting reports be posted on tuna-org.org.

c. CLAV (IOTC)

It was noted that the t-RFMOs have made excellent progress on the CLAV with frequent communication between coordinators in each t-RFMO Secretariat. It was noted that while the CLAV coordinator's contract may be ending in the next year, this work still requires someone working full-time. It was also noted that this work is being funded by the GEF ABNJ project, and the t-RFMOs will have to consider how/whether to fund it in the future.

d. Progress on Kobe recommendations in each RFMO

It was noted that the t-RFMOs generally have a standing Kobe agenda item on annual meeting agendas, and Secretariats report out on progress of the Steering Committee and relevant technical groups, as well as progress in implementing the Kobe process recommendations. Some examples of better coordination among the t-RFMOs was noted:

- ICCAT and CCSBT have coordinated regarding the development of an eBCD system in CCSBT;
- ICCAT and IOTC have a joint pool of observers for the transhipment ROPs, resulting in cost savings and a bigger pool of observers;
- IATTC and WCPFC coordinate their scientific observer programs.

It was also noted that ICCAT's eBCD system could be expanded to other RFMOs and other species once it becomes operational.

e. FAD Working Groups

Participants noted the increasing interest on coordination regarding FAD impact assessment and management, agreeing that this is a promising area for future work. ICCAT, IATTC, and IOTC all have mandates to work together with other t-RFMOs on FAD issues.

V. Other matters

Port inspection was noted as another potential area for collaboration. FAO is developing training materials on port State measures and will make the training manual public. It was suggested that ICCAT could adapt this training manual and set up trainings specific to the ICCAT port inspection measure. It was noted that IATTC came close to adoption of a port inspection proposal, but some concerns remain, including the availability of funding to assist developing States in its implementation.

It was also suggested that web-based reporting could be an area for future collaboration. IOTC and WCPFC have both made significant progress on this issue.

Steering Committee members also requested the Chair to attend the UNFSA Review Conference and report on the Kobe process.

VI. Adjournment

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

ATTACHMENT:

KOBE STEERING COMMITTEE CONFERENCE CALL

Hilton Hotel
St Juliens, Malta
8:00 to 15:00 November 18, 2015

Conference Call

8:00 to 10:00 am Nov 18 in Malta
23.00 Nov 17 to 1:00 Nov 18 in La Jolla
18.00 to 20:00 on Nov 18 in Canberra and Pohnpei
11.00 to 13:00 on Nov 18 in the Seychelles.

Agenda

8:00 Conference call begins

VII. Opening of Meeting

VIII. Adoption of Agenda

IX. Future of Kobe Process and Steering Committee

10:00 Conference call ends

X. Updates

a. Joint tRFMO Technical Group on MSE (ICCAT)
b. Joint Technical Bycatch Workgroup (WCPFC)
c. CLAV (IOTC)
d. Progress on Kobe recommendations in each RFMO
e. FAD Working Groups

XI. Other matters

XII. Adjournment

KOBE STEERING COMMITTEE CONFERENCE CALL

Monterey Plaza Hotel
Monterey, CA, USA
January 19, 2016

Meeting Notes

I. Opening of Meeting

The Chair of the Kobe Steering Committee welcomed the following participants:

- Mr. Russell Smith (USA), Chair of Steering Committee and WCPFC representative
- Mr. Driss Meski, Executive Secretary of ICCAT
- Mr. Robert Kennedy, Executive Secretary of CCSBT (by phone)
- Dr. Guillermo Compean, Director of IATTC
- Dr. Paul de Bruyn, ICCAT staff
- Dr. Laurie Kell, ICCAT staff
- Ms. Rachel O'Malley (USA), assistant to the Chair

II. Adoption of Agenda

The agenda was adopted without change (attached).

III. Review of Minutes from November 18, 2015

The Committee adopted the minutes of the November meeting without change.

IV. Joint Technical Bycatch Working Group (JTBWG)

Prior to the meeting, Mr. Kennedy had circulated an email to the tuna RFMOs, which are the formal members of the JTBWG, asking whether they wished to nominate any candidates for Chair of the JTBWG. In that communication, Mr. Kennedy proposed one candidate for consideration: Dr. Neville Smith, who has recently replaced Dr. Simon Nichol at SPC. Dr. Smith previously worked for New Zealand's Ministry for Primary Industries and was New Zealand's Head of Delegation on the CCSBT's Ecologically Related Species Working Group. On behalf of ICCAT, Dr. Meski seconded the nomination of Dr. Neville Smith as the next chair of the JTBWG, noting that Dr. Smith has the relevant experience and leadership qualities to ensure that the working group continues to provide sound scientific management advice to the tuna RFMOs bycatch issues. Dr. Compean fully supported Dr. Smith's nomination, on behalf of IATTC.

The Steering Committee Chair committed to follow up with IOTC and WCPFC in order to finalize a decision. It was also agreed that the Steering Committee should provide the new JTBWG Chair with clear guidance to facilitate the planning and execution of the group's work. It is crucial that this group continues to provide science-based advice on key bycatch issues of relevance to all the tuna RFMOs. It was agreed that the new JTBWG Chair will be endorsed electronically by the Steering Committee and that the formal changeover date should be after the WCPFC Turtle Workshop (February 15-19, 2016), which will be attended by Dr. Nichol. On behalf of the Steering Committee, the Chair will send an email expressing appreciation to Dr. Nichol following the designation of his successor.

V. Future of the Kobe Process

The Steering Committee considered whether new working groups should be created to enhance t-RFMO collaboration on current issues of critical interest. There was general agreement that a focus on technical issues would be most appropriate. The Steering Committee concluded that additional time is needed to identify the issues that might warrant the creation of additional working groups. The Chair will invite Committee members to share suggestions concerning key issues prior to the next meeting of the Steering Committee so that the matter can be more fully discussed. It was suggested that the composition of the Steering Committee should be reviewed, if the focus is to be on more technical issues. However, it was also acknowledged that there exists the possibility of calling in any expert who can contribute to the discussion, so modification of the Steering Committee's composition may not be necessary.

This item will remain on the agenda for the next Steering Committee meeting. The Chair expressed his intention to send out an email to Steering Committee members to seek initial input on this matter in the meantime.

a. FAD Working Group

Participants discussed the increasing interest on t-RFMO coordination regarding FAD impact assessment and management. ICCAT will hold its own FAD Working Group meeting in March 2016 and has invited the other t-RFMOs to participate. IATTC intends to send a scientist to this meeting, and IOTC will also participate; the FADs are not an issue of concern for the CCSBT as FADs are not used in the southern bluefin tuna fishery. There was some discussion of the best way to organize a joint meeting of the interested t-RFMOs on this issue. It was suggested that this joint meeting could take place in connection with either the IATTC's scientific committee meeting (May 2016) or annual meeting (June 2016). Dr. Compean will consult with the Chair of the IATTC's FAD Working Group to explore the possibility of holding a joint t-RFMO meeting on this topic.

b. Bluefin Working Group

The Chair noted that some participants at the Bluefin Futures Symposium in Monterey had proposed the revitalization of the Kobe process as a forum for addressing newly emerging cross-cutting issues of interest to the RFMOs. Following the conclusion of the symposium this week, it was agreed that the Steering Committee should consider the possibility of creating a group for technical issues relating to bluefin. Another approach might be to identify technical issues that affect multiple species (e.g., tagging, genetics, etc.) The ICCAT Executive Secretary noted that ICCAT is making a huge investment in tagging through GBYP and, for tropical tunas, through the AOTTP and could benefit from learning from other experiences. The Chair offered to circulate a question to the Steering Committee on this so that they could hold some consultations, in particular to receive input from their scientists, on the best approach. This item will remain on the agenda for the next Steering Committee meeting.

VI. Other matters

Management Strategy Evaluation (MSE) Working Group
The Chair of the MSE WG, Dr. Kell, proposed that an initial meeting of the Working Group should be convened in the 2nd or 3rd quarter of this year, as all work to-date has been conducted through virtual collaboration. There is interest among the RFMO scientists in holding an in-person meeting in order to facilitate work such as sharing code and methods, and the conditioning of operating models. Dr. Kell proposed involving a cross-section of people from the t-RFMOs (4-5 from each, with a range of expertise). It was agreed that a progress report would be available from this Working Group by July. The

in-person meeting will be a venue for reporting out by the individuals involved and developing a detailed workplan. There was support for this idea, although funding must be identified to support an in-person meeting. Mr. Meski suggested that ICCAT could host at the offices of the Secretariat, if the participants are willing to come to Madrid.

Performance Reviews
Dr. Compean reported that IATTC has resolved the remaining issues related to its performance review: funding, and whether to review IATTC and AIDCP together or separately. The results of this performance review will be ready in time for the IATTC annual meeting in June. A company in San Diego has been contracted to conduct the financial audit and MRAG/Glenn Hurry will conduct the review of conservation and management activities. Mr. Meski noted that ICCAT will have its second performance review later this year.

VII. Next Steering Committee meeting

The next meeting (tentative date July 12, 2016) will be held on the margins of the FAO Committee on Fisheries meeting in Rome, Italy.

VIII. Adjournment

The Chair thanked everyone for a fruitful discussion and adjourned the meeting.

ATTACHMENT:

KOBE STEERING COMMITTEE CONFERENCE CALL

Carmel Room, Monterey Bay Aquarium
Monterey, California, USA
17:30 January 19, 2016

Conference Call

17:30 Jan 19 in La Jolla
12:30 Jan 20 in Canberra and Pohnpei
5:30 Jan 20 in the Seychelles.
2:30 Jan 20 in Madrid

Draft Agenda

I. Opening of meeting

II. Adoption of agenda

III. Review of Minutes from November 18

IV. Joint Technical Bycatch Working Group

V. Future of Kobe process

   a. FAD Working Group

   b. Bluefin Working Group

VI. Other matters

VII. Next Steering Committee meeting

VIII. Adjournment

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

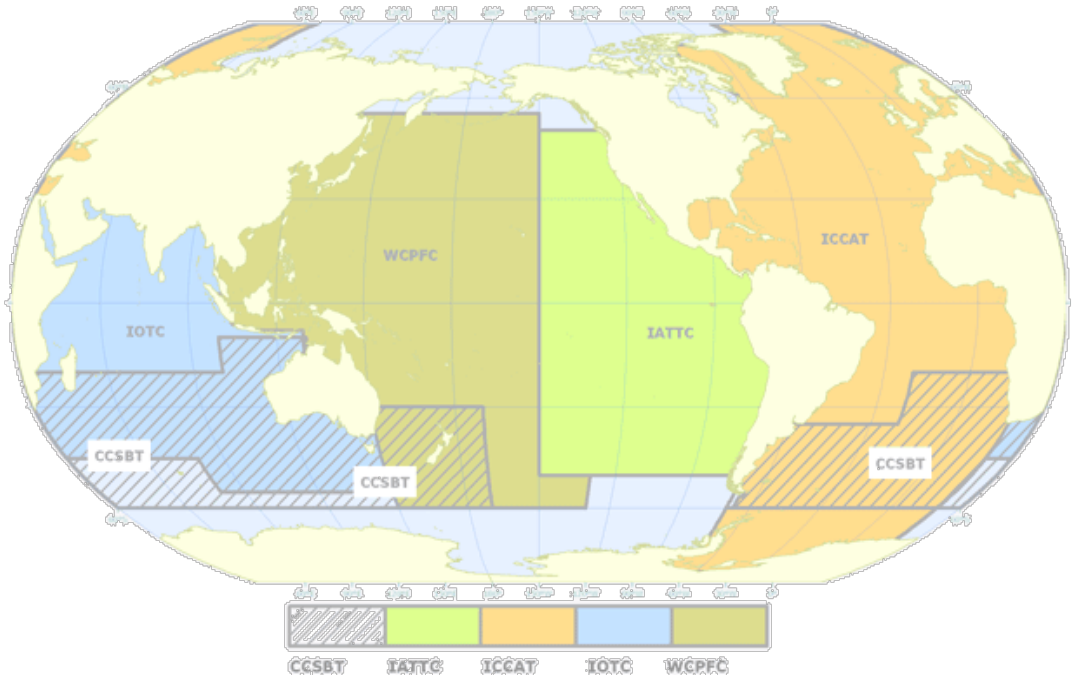
IV. Discussion of key challenges and areas for potential collaboration

- a. Potential Collaboration on Fish Aggregating Devices

V. Next steps in Kobe process

VI. Other matters

VII. Adjournment



CLAV. The Consolidated List of Authorized Vessel

A one year Report of the CLAV: March 2015 - February 2016

Fernando Jara and Fabio Fiorellato

3/25/2016

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 maintain 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 March 2015 to February 29th, 2016

Contents.

9. **Flags with authorized vessels at each tRFMO**
   Table 6. Number of flags with authorized vessels registered at each tRFMO, March 2015 to February 2016.

10. **Flags represented in the CLAV**
    Table 7. Number of flags with registered vessels authorized in the CLAV at a single or multiple tRFMOs, March 2015 to February 2016.

11. **Flags reporting authorized vessels at a single and multiple tRFMOs as of February 29th, 2016**
    Table 8. Proportion of all vessels authorized by flag that were registered under a single or multiple tRFMOs, at the end of February 2016.

12. **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 February 2016.
    Figure 9. IMO number performance for the five tRFMOs, considering only those authorized vessels of length equal to 24 meters and over, March 2015 to February 2016.
    Figure 10. IRCS performance for all the vessels authorized by the five tRFMOs, March 2015 to February 2016.
    Table 9. Comparative scoring of the degree of completion by the end of each month of the ten different attributes reported to the CLAV by the five tRFMOs, for all vessels authorized, March 2015 to February 2016.
    Figure 11. Comparison of the overall performance of the five tRFMOs, March 2015 to February 2016.

13. **Performance of the most represented flags in the CLAV**
    Figure 12. Comparison of the overall performance for all the vessels authorized by the 38 most representative flags in the CLAV, March 2015 to February 2016.
    Figure 13. Comparison of the IMO number performance, for all the vessels authorized of length equal to 24 meters and over, by the 38 most representative flags in the CLAV, March 2015 to February 2016.
    Figure 14. Comparison of the IRCS performance for all the vessels authorized by the 38 most representative flags in the CLAV, March 2015 to February 2016.

14. **Conclusions**

1. Introduction.

It is now over a year since regular reports of the CLAV status have been produced and disseminated to interested parties. The progress achieved has been substantial. The evolution of the number of authorized vessels, uniquely identified in the CLAV, attests for such improvement. Starting at near 22,400 authorized vessels reported to the CLAV in February 2015 the number has dropped to near 18,600 at the end of February 2016; achieving a lowest ever number of 18,400 vessels at the time of preparation of this report (March 16th, 2016).

This has been a result of the joint efforts and close collaboration between the tRFMO´s compliance officials, the database managers, and the CLAV support at FAO, with the aid of *ad-hoc* tools developed for the purpose of: i) identifying and resolving duplications within each of the t-RFMOs (*merging* records to retain history); ii) resolving duplicates within the CLAV (*matching and linking* redundant records across the t-RFMOs); and iii) clearing legacy records (remaining from historical consolidations) no longer existing at the t-RFMOs data bases (*deletions*). The final product translates into a better quality and more reliable compilation of authorized vessels' data in the CLAV. The resolution of inconsistencies, eventual errors, and duplicates detected by the dedicated procedures applied regularly at the CLAV, continuously contribute to the betterment of the database. Contrasting the information stored in the CLAV with that currently valid at each tRFMO has significantly reduced redundancies and helped correct erroneous entries.

As both, the reporting rates of the IMO number and the IRCS have been increasing across the tRFMOs, the identification and matching processes at the CLAV have thus been facilitated and more thoroughly achieved. Recent extra efforts at gathering IMO numbers by all five tRFMOs produced notable results, increasing the overall IMO number reporting rate from 30 percent at the end of November 2015 to 44 percent at the end of February 2016.

The consolidated list of authorized vessels (CLAV) aims at integrating the records reported by each tRFMO 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 tRFMOs. Thus, the terms records and vessels, used distinctly throughout the report represent different figures indeed. The proportion of vessels authorized over the total number of authorized records reported by the five tRFMOs has remained stable through time, at about 86 percent. The remaining 14 percent of the records corresponds to authorized vessels that are registered at multiple tRFMOs. In other words, those are vessels authorized to operate in more than one Convention area.

The 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 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.

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.

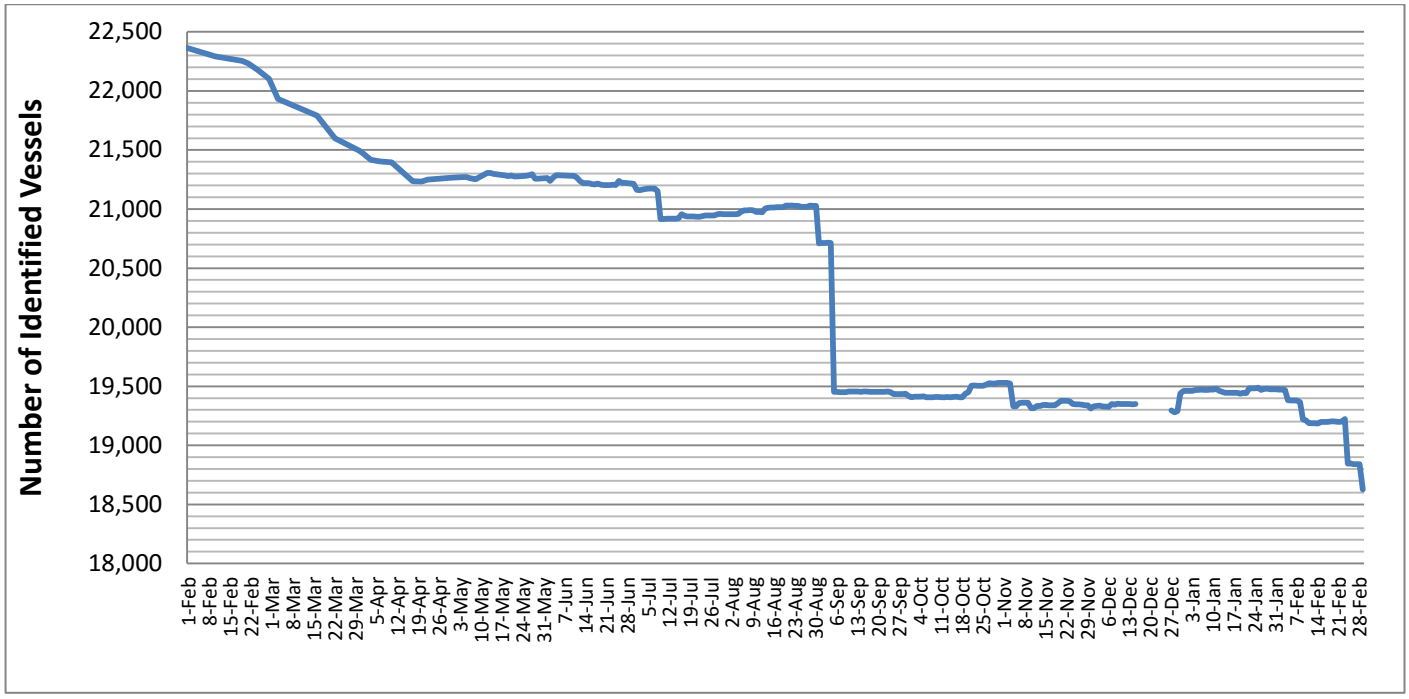
2. Authorized vessels identified by TUVIs.

The evolution of the number of vessels identified uniquely by TUVIs during the period February 1st, 2015 to February 29th, 2016 is illustrated below (**Figure 1**).

There were 18,628 vessels authorized at the end of February 2016. There have been sharp drops in the number of vessels during the one year of continuous operation of the CLAV. The drop shown at the end of August 2015 was due to the termination of the authorization of more than 300 vessels registered at IOTC under Maldivian flag; a further even sharper drop took place early in September 2015 when more than 1,260 vessels registered at IOTC and flagged to Sri Lanka had their authorization terminated. Another noticeable drop in the number of vessels occurred early in December 2015 when 193 vessel registered with IOTC and flagged to Sri Lanka became unauthorized. Then, in February 2016 there were several reductions in the number of authorized vessels at ICCAT. Starting with an early drop of about 250 vessels, which were flagged mostly to Brazil, Italy, Spain, and Turkey. Later, another sharp reduction of 378 vessels flagged mostly to Italy and the USA. Finally, at the very end of February 2016 an additional reduction of 213 vessels flagged mostly to Spain and the USA.

There was a ten days gap, between December 16th and 26th, 2015 caused by the IOTC CLAV server unavailability due to technical problems. Normal updates were resumed on December 27th 2015. Except for this unusual event, it is worth mentioning that during the period of over a year reported here, the CLAV service has been operating and available virtually continuously.

Figure 1. Number of vessels identified by TUVI in the CLAV, February 1st, 2015 to February 29th, 2016.

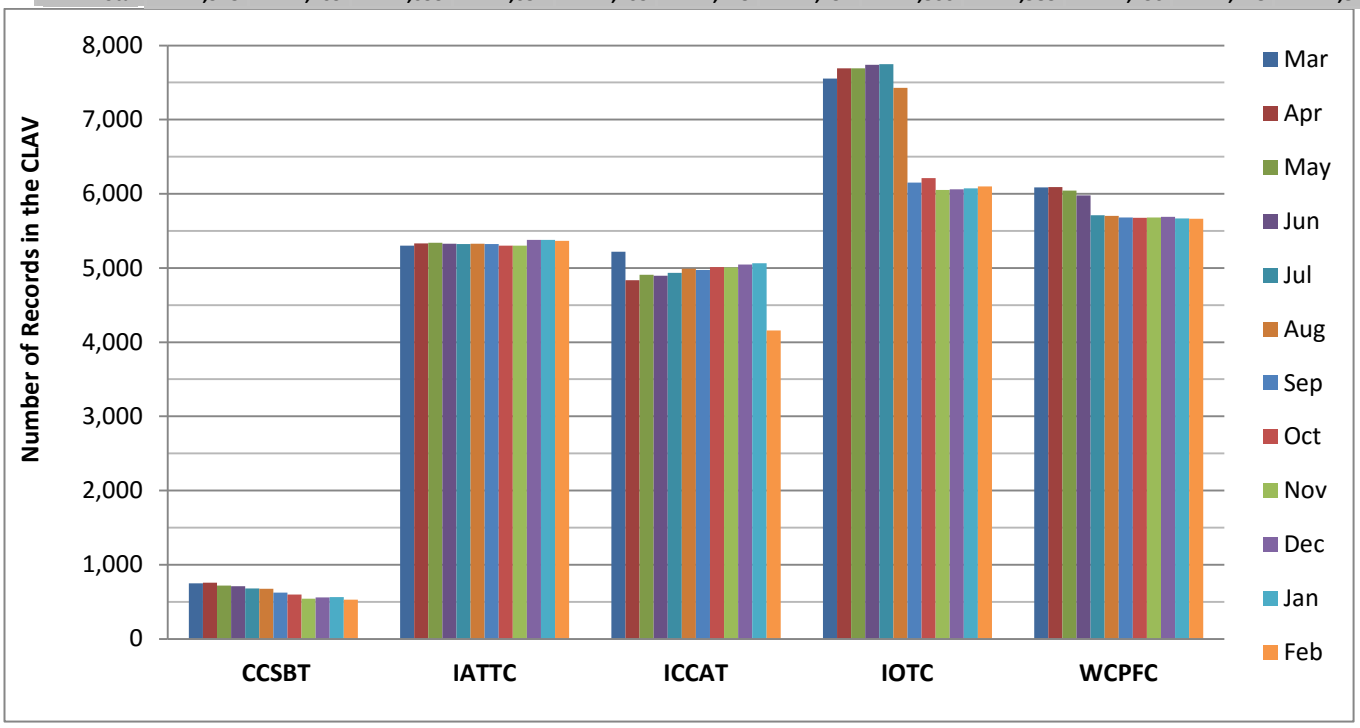


3. Authorized records in the CLAV.

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

Table 1 and **Figure 2.** Total number of authorized records in the CLAV, March 2015 to February 2016.

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**

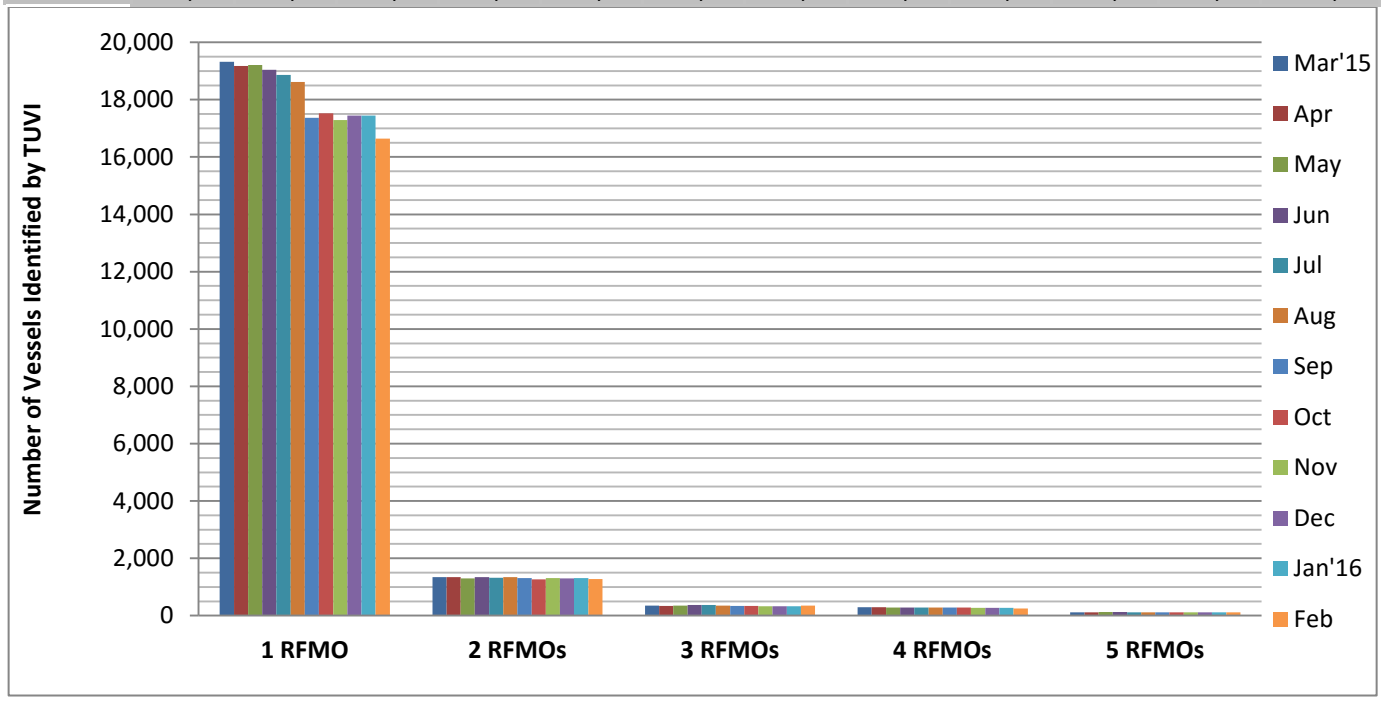


4. Authorized vessels registered under a single or multiple tRFMOs.

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

Table 2 and **Figure 3.** Number and proportion (*percent*) of authorized vessels registered under a single or multiple tRFMOs, March 2015 to February 2016.

	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**



5. Authorized records at each tRFMO, registered under a single or multiple tRFMOs.

The total number of authorized vessels registered, at the end of each month, under a single or multiple tRFMOs at each tRFMO, is illustrated below.

Table 3. Number of authorized records registered under a single or multiple tRFMOs, at each tRFMO, March 2015 to February 2016.

Source	Period	1 RFMO	2 RFMOs	3 RFMOs	4 RFMOs	5 RFMOs	Total Auth.
CCSBT	Mar'15	200	287	84	61	119	**751**
	Apr	214	286	81	60	117	**758**
	May	199	241	93	61	125	**719**
	Jun	192	236	96	60	128	**712**
	Jul	184	206	106	64	120	**680**
	Aug	189	197	107	65	119	**677**
	Sep	179	165	101	63	116	**624**
	Oct	174	145	95	65	117	**596**
	Nov	142	156	60	65	117	**540**
	Dec	168	144	66	62	119	**559**
	Jan'16	161	155	67	63	119	**565**
	Feb	159	149	66	39	114	**527**
IATTC	Mar'15	3,907	743	243	287	119	**5,299**
	Apr	3,943	740	245	284	117	**5,329**
	May	3,944	751	243	272	125	**5,335**
	Jun	3,876	798	259	265	128	**5,326**
	Jul	3,865	808	262	267	120	**5,322**
	Aug	3,870	835	236	267	119	**5,327**
	Sep	3,872	836	229	266	116	**5,319**
	Oct	3,880	807	232	264	117	**5,300**
	Nov	3,879	789	247	262	117	**5,294**
	Dec	3,956	790	241	265	119	**5,371**
	Jan'16	3,961	794	238	260	119	**5,372**
	Feb	3,965	791	262	231	114	**5,363**
ICCAT	Mar'15	4,330	247	218	284	119	**5,198**
	Apr	3,972	247	208	281	117	**4,825**
	May	4,019	261	208	274	125	**4,887**
	Jun	4,005	265	220	269	128	**4,887**
	Jul	4,046	269	220	269	120	**4,924**
	Aug	4,102	267	221	270	119	**4,979**
	Sep	4,107	257	217	269	116	**4,966**
	Oct	4,167	235	219	269	117	**5,007**
	Nov	4,161	231	229	267	117	**5,005**
	Dec	4,183	238	231	267	119	**5,038**
	Jan'16	4,209	242	226	263	119	**5,059**
	Feb	3,337	223	246	235	114	**4,155**
IOTC	Mar'15	6,334	519	242	297	119	**7,511**
	Apr	6,478	518	242	293	117	**7,648**
	May	6,523	461	251	287	125	**7,647**
	Jun	6,577	444	266	280	128	**7,695**
	Jul	6,633	415	274	280	120	**7,722**
	Aug	6,345	405	248	281	119	**7,398**
	Sep	5,114	386	241	279	116	**6,136**
	Oct	5,209	369	237	279	117	**6,211**
	Nov	5,015	426	215	277	117	**6,050**
	Dec	5,041	403	221	277	119	**6,061**
	Jan'16	5,037	414	230	273	119	**6,073**
	Feb	5,082	403	254	244	114	**6,097**
WCPFC	Mar'15	4,546	892	254	263	119	**6,074**
	Apr	4,567	889	244	262	117	**6,079**
	May	4,524	874	252	254	125	**6,029**
	Jun	4,395	943	260	246	128	**5,972**
	Jul	4,130	948	266	240	120	**5,704**
	Aug	4,113	976	244	241	119	**5,693**
	Sep	4,095	986	238	239	116	**5,674**
	Oct	4,095	984	234	239	117	**5,669**
	Nov	4,092	1,014	215	237	117	**5,675**
	Dec	4,096	1,013	219	237	119	**5,684**
	Jan'16	4,078	1,011	220	233	119	**5,661**
	Feb	4,094	998	225	227	114	**5,658**

The authorized vessels shared by all five tRFMOs, 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 tRFMOs, while gillnetters, trawlers, and multipurpose vessels are hardly shared among the tRFMOs. The largest proportion of fish carriers (87 percent) are registered at a single tRFMO, but less than 50 carriers are registered at two, about 20 at three, and only 12 at four tRFMOs.

Table 4a. Total number, and number by main types, of vessels authorized that were registered under a single or multiple tRFMOs for all the possible combinations of tRFMOs, at the end of January 2016.

Source	IATTC	ICCAT	IOTC	WCPFC	Number of RFMOs	All Vessels Authorized	Liners	Seiners	Gill-netters	Trawlers	Multi-purpose	Fish Carriers	Mother-ships
CCSBT					1	161	85	2	0	13	59	0	0
	IATTC				1	3,961	2,820	249	18	2	638	0	0
		ICCAT			1	4,209	1,447	694	33	927	52	18	4
			IOTC		1	5,037	2,229	91	1,307	3	1,348	19	0
				WCPFC	1	4,078	2,325	659	1	0	8	490	8
				Total	1 RFMO	**17,446**	**8,906**	**1,695**	**1,359**	**945**	**2,105**	**527**	**12**
CCSBT	IATTC				2	1	1	0	0	0	0	0	0
CCSBT		ICCAT			2	31	30	0	0	0	0	1	0
CCSBT			IOTC		2	110	109	1	0	0	0	0	0
CCSBT				WCPFC	2	13	9	0	0	0	0	4	0
	IATTC	ICCAT			2	64	45	17	0	2	0	0	0
	IATTC		IOTC		2	8	8	0	0	0	0	0	0
	IATTC			WCPFC	2	721	679	28	0	0	10	3	0
		ICCAT	IOTC		2	83	35	30	2	6	0	0	0
		ICCAT		WCPFC	2	64	31	4	0	0	0	29	0
			IOTC	WCPFC	2	213	138	58	0	0	1	12	0
				Total	2 RFMOs	**1,308**	**1,085**	**138**	**2**	**8**	**11**	**49**	**0**
CCSBT	IATTC	ICCAT			3	0	0	0	0	0	0	0	0
CCSBT	IATTC		IOTC		3	3	3	0	0	0	0	0	0
CCSBT	IATTC			WCPFC	3	17	17	0	0	0	0	0	0
CCSBT		ICCAT	IOTC		3	32	29	0	0	0	0	3	0
CCSBT		ICCAT		WCPFC	3	0	0	0	0	0	0	0	0
CCSBT			IOTC	WCPFC	3	15	6	4	0	0	1	4	0
	IATTC	ICCAT	IOTC		3	72	69	0	0	0	0	0	0
	IATTC	ICCAT		WCPFC	3	80	77	2	0	0	0	1	0
	IATTC		IOTC	WCPFC	3	66	63	3	0	0	0	0	0
		ICCAT	IOTC	WCPFC	3	42	2	28	0	0	0	12	0
				Total	3 RFMOs	**327**	**266**	**37**	**0**	**0**	**1**	**20**	**0**
CCSBT	IATTC	ICCAT	IOTC		4	40	40	0	0	0	0	0	0
CCSBT	IATTC	ICCAT		WCPFC	4	0	0	0	0	0	0	0	0
CCSBT	IATTC		IOTC	WCPFC	4	10	10	0	0	0	0	0	0
CCSBT		ICCAT	IOTC	WCPFC	4	13	0	0	0	0	1	12	0
	IATTC	ICCAT	IOTC	WCPFC	4	210	208	1	0	0	0	0	0
				Total	4 RFMOs	**273**	**258**	**1**	**0**	**0**	**1**	**12**	**0**
CCSBT	IATTC	ICCAT	IOTC	WCPFC	5	119	119	0	0	0	0	0	0
				Total	5 RFMOs	**119**	**119**	**0**	**0**	**0**	**0**	**0**	**0**
				Grand Total		**19,473**	**10,634**	**1,871**	**1,361**	**953**	**2,118**	**608**	**12**

Table 4b. Total number, and number by main types, of vessels authorized that were registered under a single or multiple tRFMOs for all the possible combinations of tRFMOs, at the end of February 2016.

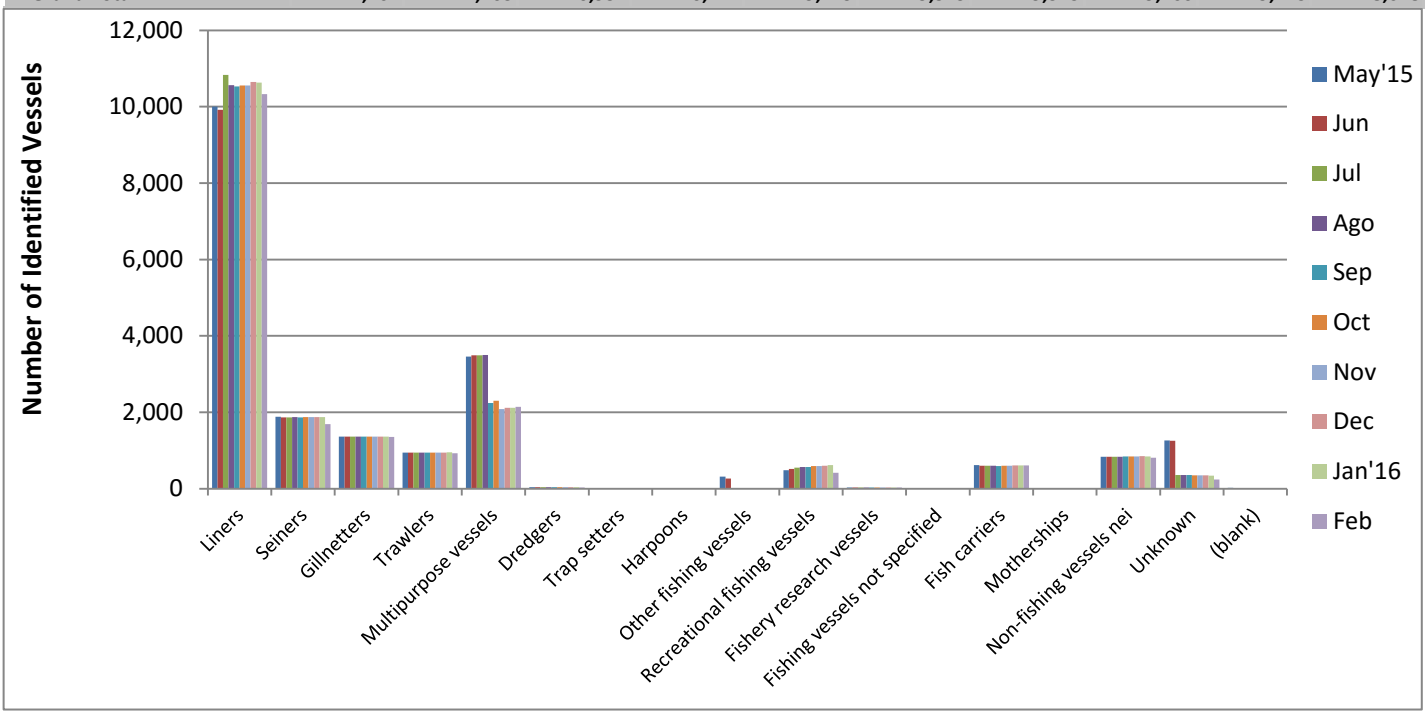
Source	IATTC	ICCAT	IOTC	WCPFC	Number of RFMOs	All Vessels Authorized	Liners	Seiners	Gill-netters	Trawlers	Multi-purpose	Fish Carriers	Mother-ships
CCSBT					1	159	79	2	0	14	60	1	0
	IATTC				1	3,965	2,824	257	18	2	632	0	0
		ICCAT			1	3,337	1,136	517	30	896	50	17	4
			IOTC		1	5,082	2,251	89	1,307	3	1,379	19	0
				WCPFC	1	4,094	2,333	660	1	0	8	497	8
				Total	1 RFMO	**16,637**	**8,623**	**1,525**	**1,356**	**915**	**2,129**	**534**	**12**
CCSBT	IATTC				2	2	2	0	0	0	0	0	0
CCSBT		ICCAT			2	27	27	0	0	0	0	0	0
CCSBT			IOTC		2	107	106	1	0	0	0	0	0
CCSBT				WCPFC	2	13	9	0	0	0	0	4	0
	IATTC	ICCAT			2	58	47	9	0	2	0	0	0
	IATTC		IOTC		2	8	8	0	0	0	0	0	0
	IATTC			WCPFC	2	723	682	28	0	0	10	2	0
		ICCAT	IOTC		2	82	35	27	2	6	0	0	0
		ICCAT		WCPFC	2	56	25	5	0	0	0	26	0
			IOTC	WCPFC	2	206	133	56	0	0	1	12	0
				Total	2 RFMOs	**1,282**	**1,074**	**126**	**2**	**8**	**11**	**44**	**0**
CCSBT	IATTC	ICCAT			3	0	0	0	0	0	0	0	0
CCSBT	IATTC		IOTC		3	2	2	0	0	0	0	0	0
CCSBT	IATTC			WCPFC	3	17	17	0	0	0	0	0	0
CCSBT		ICCAT	IOTC		3	32	29	0	0	0	0	3	0
CCSBT		ICCAT		WCPFC	3	0	0	0	0	0	0	0	0
CCSBT			IOTC	WCPFC	3	15	5	5	0	0	1	4	0
	IATTC	ICCAT	IOTC		3	92	91	0	0	0	0	0	0
	IATTC	ICCAT		WCPFC	3	80	77	2	0	0	0	1	0
	IATTC		IOTC	WCPFC	3	71	68	3	0	0	0	0	0
		ICCAT	IOTC	WCPFC	3	42	2	27	0	0	0	13	0
				Total	3 RFMOs	**351**	**291**	**37**	**0**	**0**	**1**	**21**	**0**
CCSBT	IATTC	ICCAT	IOTC		4	17	17	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	13	0	0	0	0	1	12	0
	IATTC	ICCAT	IOTC	WCPFC	4	205	203	1	0	0	0	0	0
				Total	4 RFMOs	**244**	**229**	**1**	**0**	**0**	**1**	**12**	**0**
CCSBT	IATTC	ICCAT	IOTC	WCPFC	5	114	114	0	0	0	0	0	0
				Total	5 RFMOs	**114**	**114**	**0**	**0**	**0**	**0**	**0**	**0**
				Grand Total		**18,628**	**10,331**	**1,689**	**1,358**	**923**	**2,142**	**611**	**12**

6. Vessel Types

The total number of authorized vessels in the CLAV, classified by type is illustrated below. Liners comprise more than 55 percent of all vessels authorized, multipurpose vessels represent around eleven percent, seiners less than ten percent, gillnetters seven percent, trawlers about five percent, while fish carriers represent three percent of all vessel authorized.

Table 5 and **Figures 4.** Total number of authorized vessels by types at the end of each month from May 2015 to February 2016. (*nei* = not elsewhere included)

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

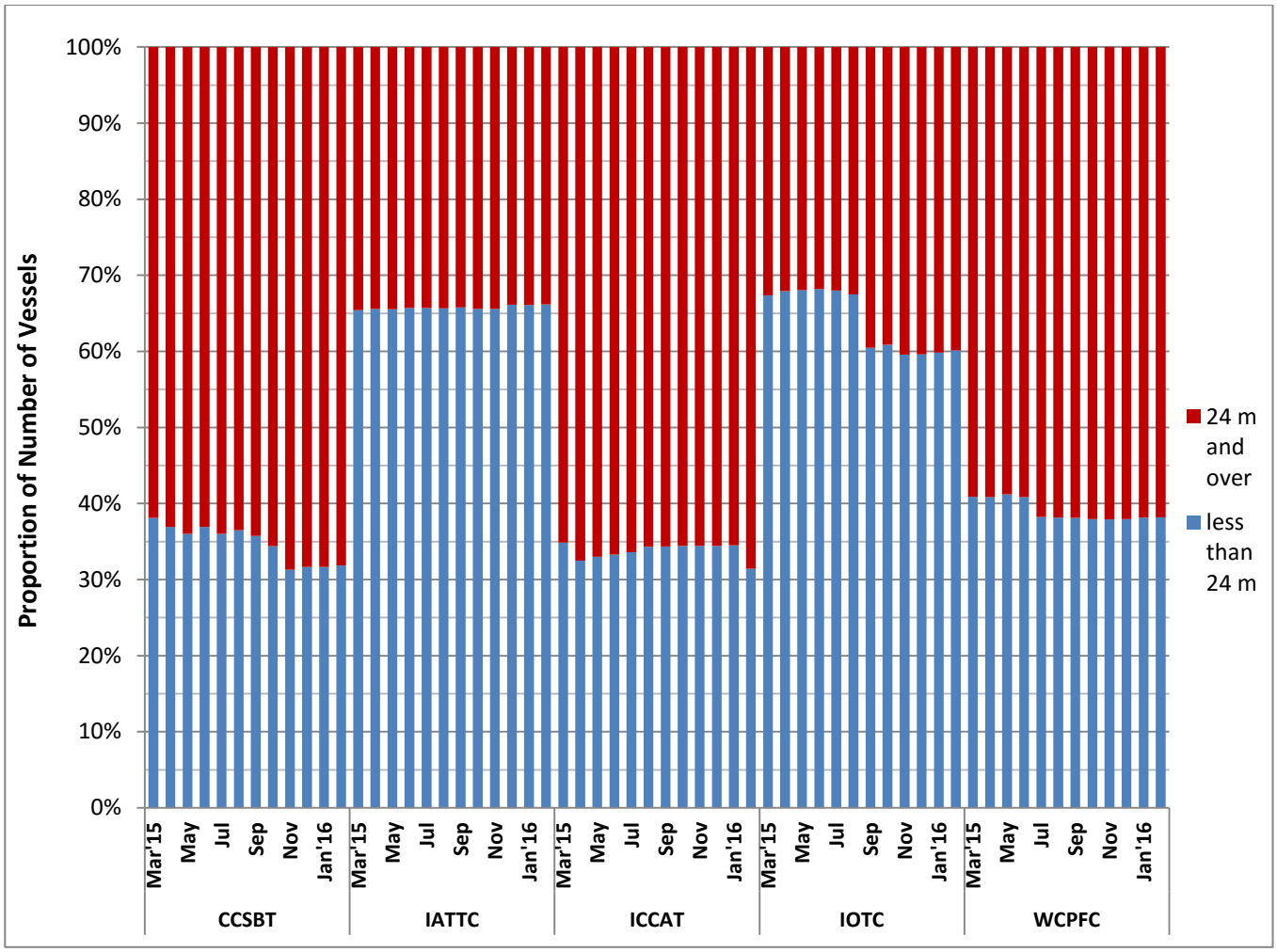


7. Size composition of the authorized vessels registered at each tRFMO, and at the CLAV.

There are differences in the size distributions of the vessels registered under the five tuna organizations, with IATTC and IOTC having the greatest proportion (60 percent or more) of vessels of less than 24 meters in length (**Figure 5**).

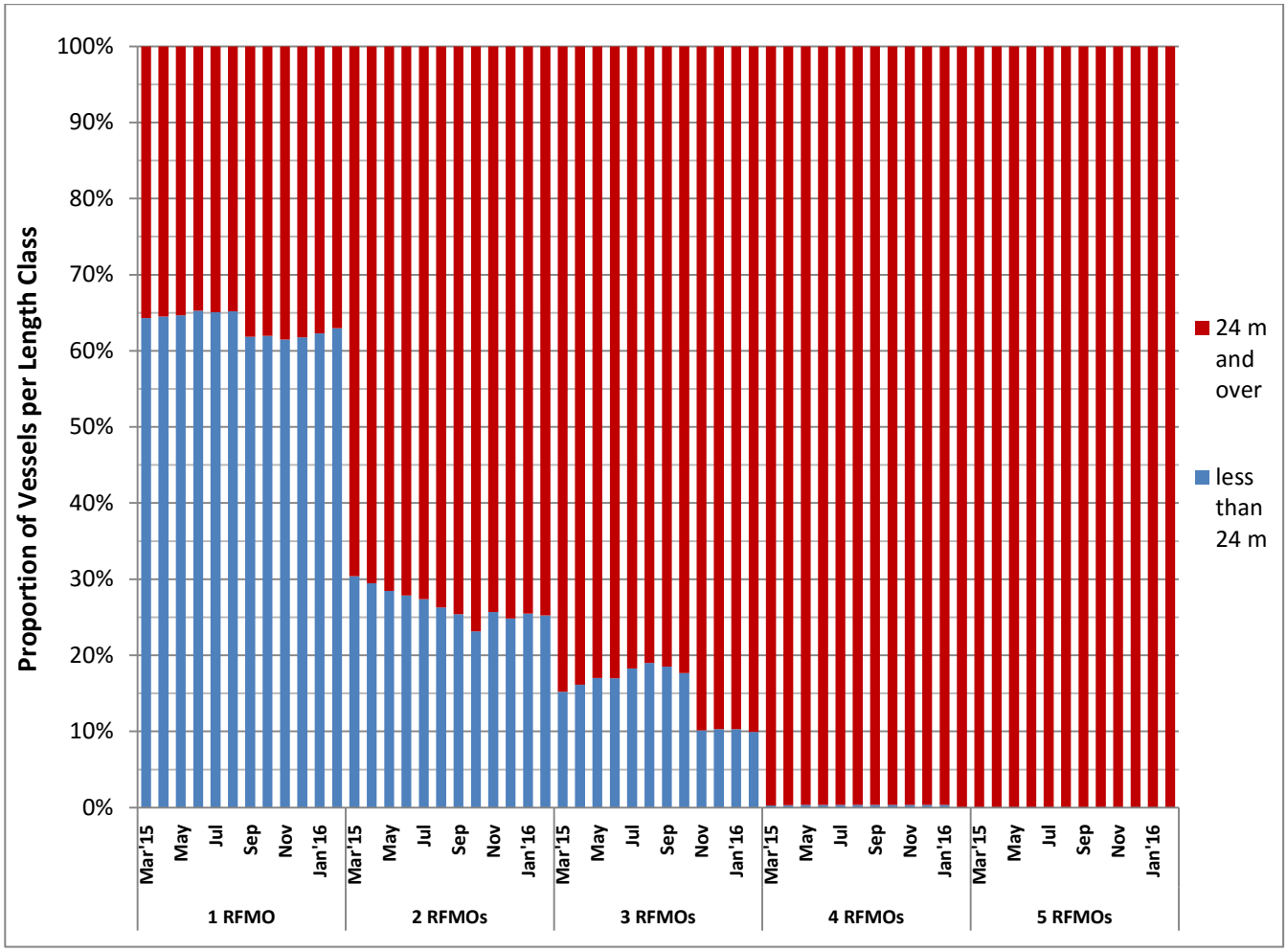
The categorization, using 24 meters as the delimiting criterion, permits individualizing the fraction of the vessels for which the IMO number should be mandatory.

Figure 5. Proportion of the number of authorized vessels by length category at each tRFMO, March 2015 to February 2016.



The drops in the number of authorized vessels already mentioned in relation to **Figure 1**, affected the proportion of small vessels (less than 24 meters) in IOTC from September onwards (**Figure 5**), and corresponded mainly to multipurpose vessels, as seen in **Table 5**.

Figure 6. Proportion of the number of authorized vessels in the CLAV, registered under a single or multiple tRFMOs, by length category, March 2015 to February 2016.



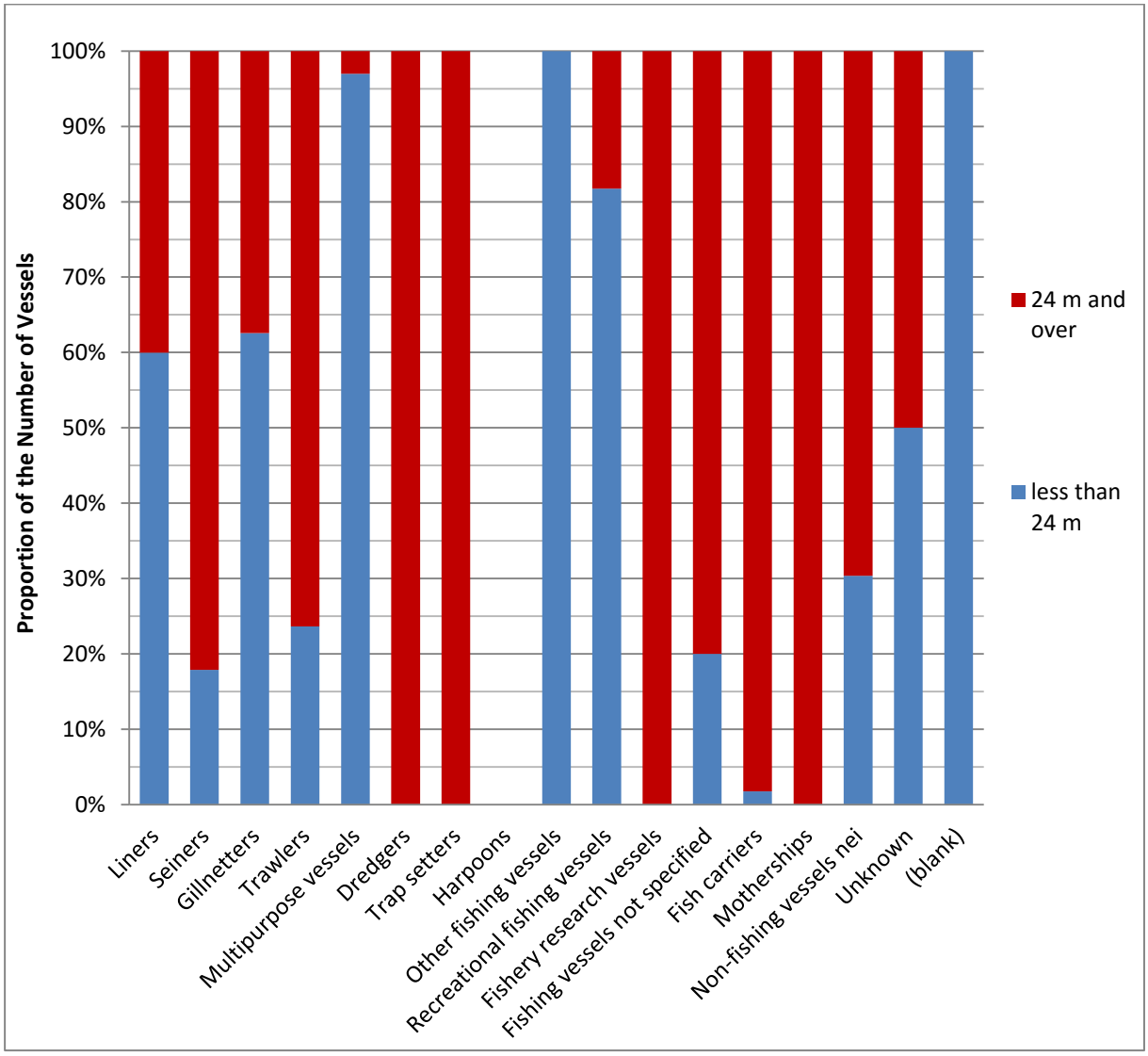
Small-size vessels are predominant among those registered at a single tRFMO (more than 60 percent), while they represent less than 30 percent and less than 10 percent of those registered at two and three tRFMOs, respectively.

The registration at multiple tRFMOs is predominant for vessels of larger size (99.9 percent at four and hundred percent at five tRFMOs, respectively). The vessels registered at four tRFMOs being mostly large liners (about 95 percent) and some fish carriers, while those registered at five tRFMOs are all large liners (see also **Table 4**).

8. Size composition of the authorized vessels in the CLAV by vessel types.

There are differences in the size distributions of the different vessels authorized in the CLAV. The following illustration is based on the fraction (88 percent) of the vessels for which a length measure has been reported. There were still 2,241 authorized vessels in the CLAV without a reported length measure by the end of February 2016.

Figure 7. Proportion of the number of authorized vessels in the CLAV by vessel type and length category at the end of February 2016.



9. Flags with authorized vessels at each tRFMO.

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

Table 6. Number of flags with authorized vessels registered at each tRFMO, March 2015 to February 2016.

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

10. Flags represented in the CLAV

There were in total 90 different flags represented in the CLAV at the end of February 2016, with vessels authorized at a single or multiple tRFMOs. The greatest proportion (69 percent) of the flags had their vessels registered under a single tRFMO. Ten flags (11 percent) have vessels registered under only two tRFMOs, another nine flags (10 percent) registered vessels under only three tRFMOs, five flags (6 percent) registered vessels under only four tRFMOs, and four flags (4 percent) have vessels registered under all five tRFMOs.

Table 7. Number of flags with registered vessels authorized in the CLAV at a single or multiple tRFMOs, March 2015 to February 2016.

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	10
3 RFMOs	9	8	10	9	9	10	10	9	7	8	9	9
4 RFMOs	2	3	3	3	3	3	3	4	4	4	4	5
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**	**90**

11. Flags reporting authorized vessels at a single and multiple tRFMOs as of February 29th, 2016.

Table 8. Proportion of all vessels authorized by flag that were registered under a single or multiple tRFMOs, at the end of February 2016.

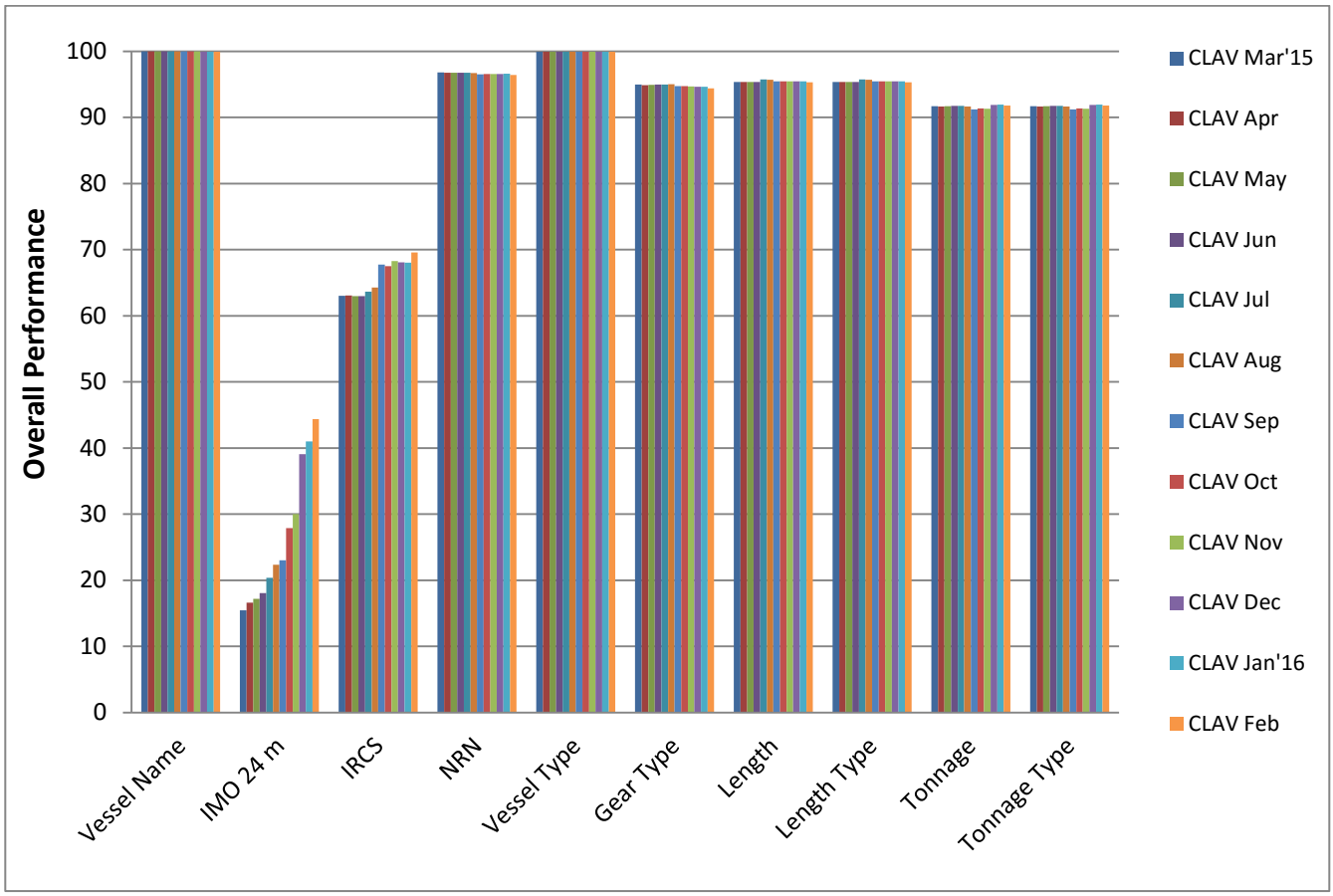
Flag	1 RFMO	2 RFMOs	3 RFMOs	4 RFMOs	5 RFMOs
AGO	100.00%				
ALB	100.00%				
AUS	37.62%	54.46%	7.92%		
BLZ	100.00%				
BRA	100.00%				
CAN	94.52%	5.48%			
CHN	50.94%	38.37%	9.22%	1.47%	
CIV	100.00%				
COK	100.00%				
COL	100.00%				
CPV	100.00%				
CRI	100.00%				
CUW	100.00%				
CYP	100.00%				
DEU	100.00%				
DZA	100.00%				
ECU	96.55%	3.45%			
ESP	72.45%	6.46%	15.35%	4.59%	1.15%
FJI	100.00%				
FRA	83.39%	12.20%	4.41%		
FSM	100.00%				
GBR	100.00%				
GHA	100.00%				
GIN	100.00%				
GRC	100.00%				
GTM	100.00%				
HND	100.00%				
HRV	100.00%				
IDN	89.71%	10.29%			
IND	100.00%				
IRL	100.00%				
IRN	100.00%				
ITA	100.00%				
JPN	67.20%	7.89%	0.69%	14.17%	10.06%
KIR	100.00%				
KOR	36.71%	26.90%	13.29%	20.25%	2.85%
LBR		34.78%	43.48%	21.74%	
LBY	100.00%				
LKA	100.00%				
LTU	69.23%	30.77%			
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%	8.33%	33.33%		
NZL	96.25%	3.75%			

OMN	100.00%				
PAK	100.00%				
PAN	91.13%	7.95%	0.18%	0.74%	
PER	100.00%				
PHL	95.78%	4.22%			
PNG	100.00%				
POL	100.00%				
PRT	70.83%	11.46%	8.33%		9.38%
PYF	100.00%				
RUS	100.00%				
SEN	94.12%	5.88%			
SGP			100.00%		
SHN	100.00%				
SLB	100.00%				
SLE	100.00%				
SLV	69.23%	15.38%	15.38%		
SPM	100.00%				
SYC	98.53%	1.47%			
SYR	100.00%				
THA	100.00%				
TON	100.00%				
TTO	100.00%				
TUN	100.00%				
TUR	100.00%				
TUV	100.00%				
TWN	90.00%	8.78%	1.22%		
TZA	100.00%				
URY	100.00%				
USA	93.80%	5.95%	0.25%		
VCT	100.00%				
VEN	81.82%	18.18%			
VUT	51.09%	44.57%	3.26%	1.09%	
ZAF	53.70%	12.96%	33.33%		
VEN	75.38%	24.62%			
VUT	51.52%	42.42%	3.03%	3.03%	
ZAF	53.70%	12.96%	33.33%		

12. 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.

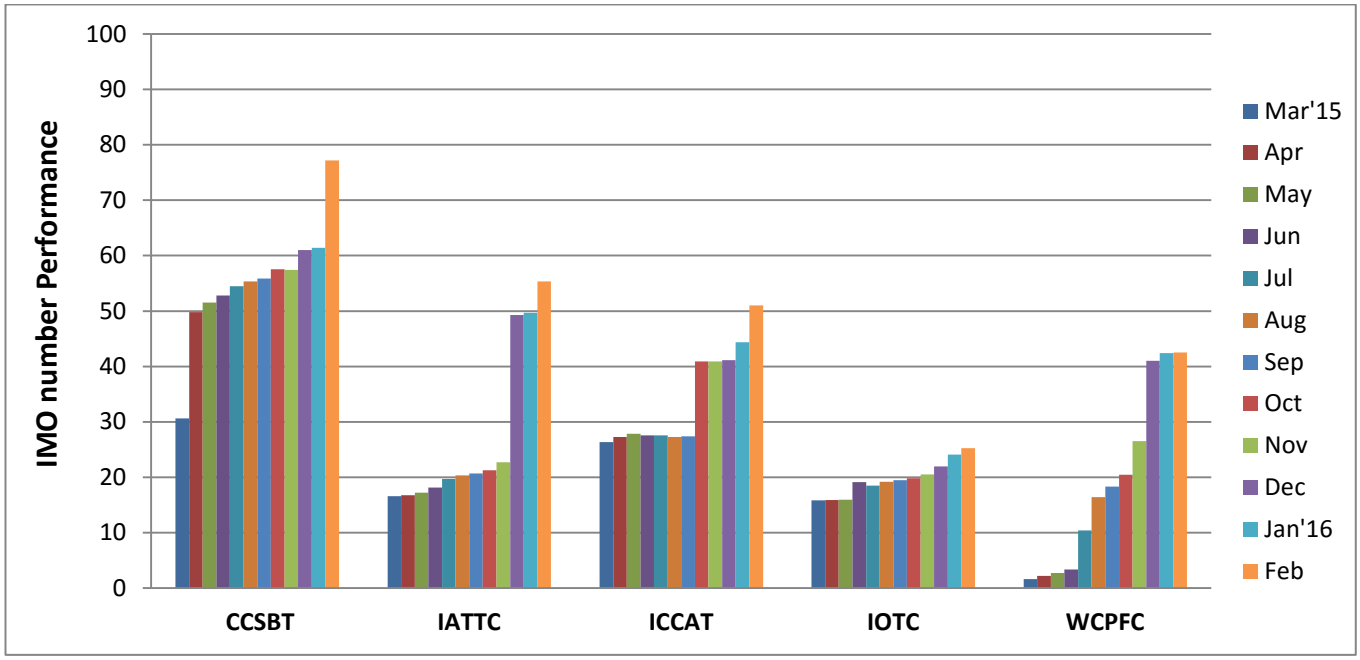
Figure 8. Overall performance for the ten different data fields compiled in the CLAV, March 2015 to February 2016.



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 February 2016 (44 percent), a near threefold improvement. There are differences in the reporting of the IMO number by the different tRFMOs, as shown below.

Recent extra efforts at gathering IMO numbers by all five tRFMOs are responsible for the notable overall improvement already mentioned; whose details are shown below in **Figure 9**.

Figure 9. IMO number performance for the five tRFMOs, considering only those authorized vessels of length equal to 24 meters and over, March 2015 to February 2016.



The **IRCS** (International Radio Call Sign) has been the second least reported attribute. Overall, only about 69 percent of all the vessels authorized were reported with an IRCS at the end of February 2016. However, there are differences in the reporting of the IRCS by the various tRFMOs, 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 tRFMOs (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 tRFMOs, March 2015 to February 2016.

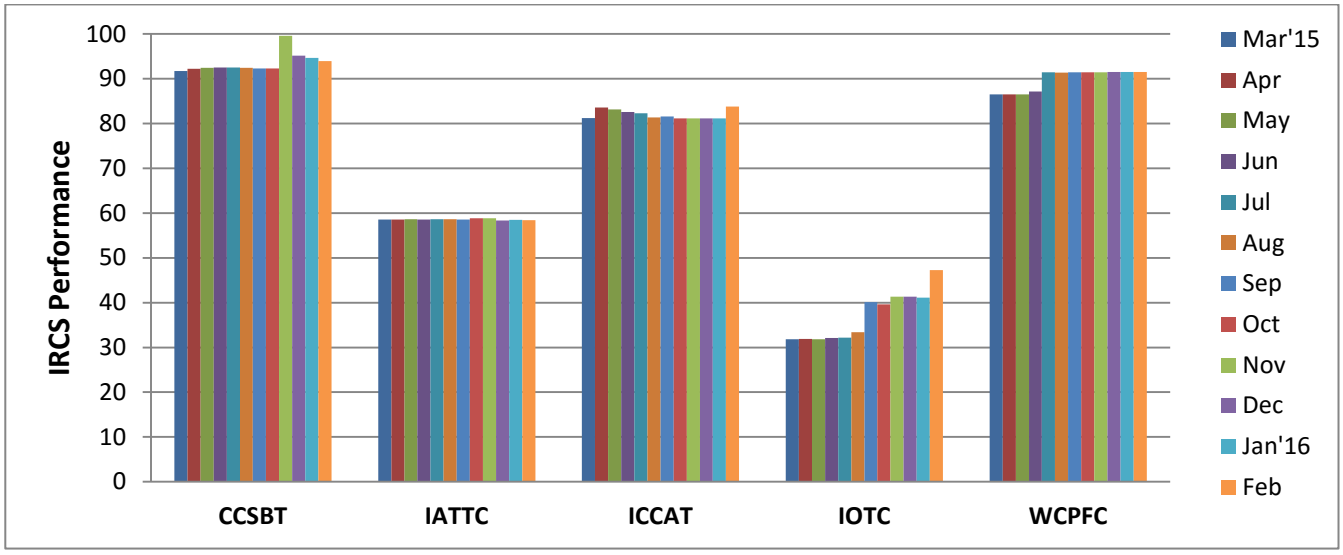


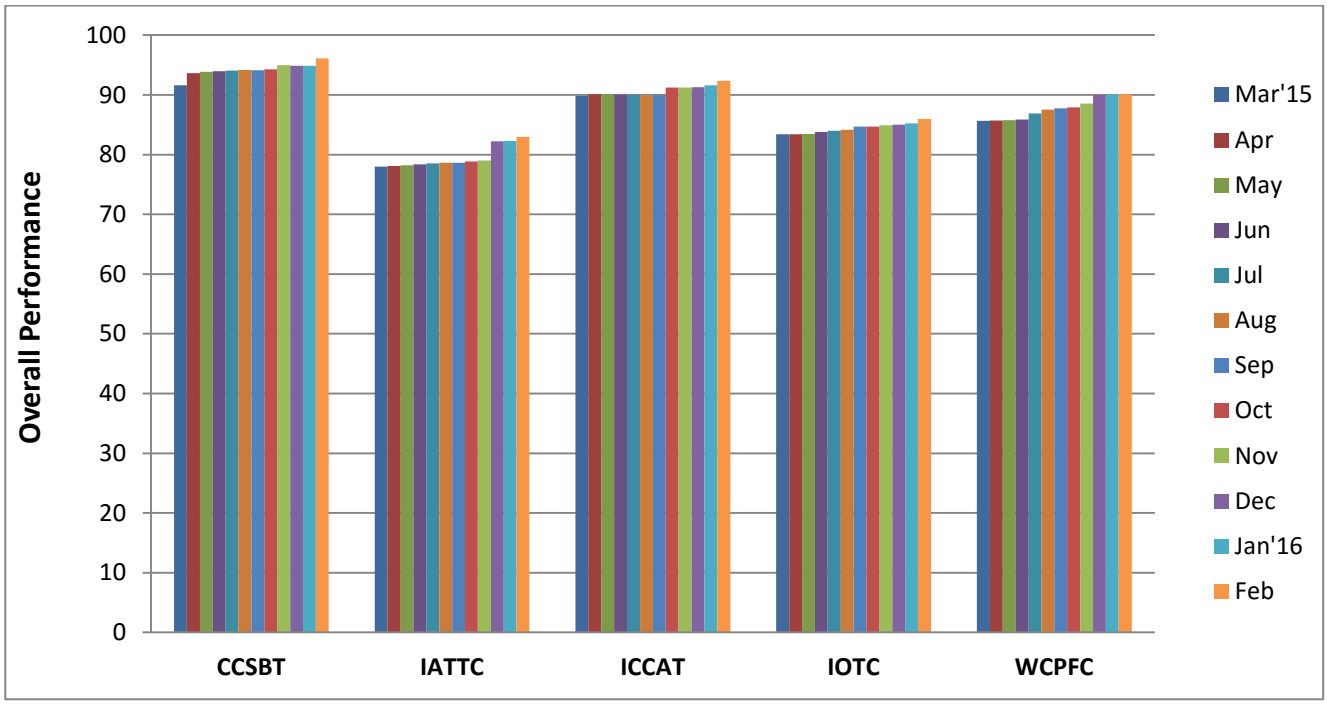
Table 9. Comparative scoring of the degree of completion by the end of each month of the ten different attributes reported to the CLAV by the five tRFMOs, for all vessels authorized, from March 2015 to February 2016.

Source	Period	Vessel Name	IMO 24 m	IRCS	NRN	Vessel Type	Gear Type	Length	Length Type	Tonnage	Tonnage Type
CCSBT	Mar'15	100.00	30.60	91.74	100.00	99.60	94.94	99.87	99.87	99.73	99.73
CCSBT	Apr	100.00	49.79	92.22	100.00	99.47	94.99	100.00	100.00	99.87	99.87
CCSBT	May	100.00	51.52	92.49	100.00	99.30	95.27	100.00	100.00	99.86	99.86
CCSBT	Jun	100.00	52.78	92.56	100.00	99.30	95.08	100.00	100.00	99.86	99.86
CCSBT	Jul	100.00	54.48	92.50	100.00	99.26	94.85	100.00	100.00	99.85	99.85
CCSBT	Aug	100.00	55.35	92.47	100.00	99.26	94.83	100.00	100.00	99.85	99.85
CCSBT	Sep	100.00	55.86	92.31	100.00	99.20	94.23	100.00	100.00	99.84	99.84
CCSBT	Oct	100.00	57.54	92.28	100.00	99.16	93.96	100.00	100.00	99.83	99.83
CCSBT	Nov	100.00	57.41	99.63	100.00	99.44	93.52	100.00	100.00	100.00	100.00
CCSBT	Dec	100.00	60.99	95.17	100.00	99.28	93.56	100.00	100.00	99.82	99.82
CCSBT	Jan'16	100.00	61.40	94.69	100.00	99.29	93.45	100.00	100.00	99.82	99.82
CCSBT	Feb	100.00	77.16	93.93	98.67	99.05	92.79	100.00	100.00	99.81	99.81
IATTC	Mar'15	99.91	16.56	58.56	85.63	100.00	100.00	93.87	93.87	65.84	65.84
IATTC	Apr	99.89	16.77	58.57	85.71	100.00	100.00	93.90	93.90	66.09	66.09
IATTC	May	99.89	17.25	58.65	85.77	100.00	100.00	93.91	93.91	66.29	66.29
IATTC	Jun	99.89	18.11	58.58	85.74	100.00	100.00	93.92	93.92	66.63	66.63
IATTC	Jul	99.89	19.72	58.60	85.73	100.00	100.00	93.91	93.91	66.74	66.74
IATTC	Aug	99.89	20.36	58.62	85.74	100.00	100.00	93.92	93.92	66.82	66.82
IATTC	Sep	99.89	20.70	58.56	85.72	100.00	100.00	93.91	93.91	66.87	66.87
IATTC	Oct	99.89	21.24	58.85	85.89	100.00	100.00	93.89	93.89	67.30	67.30
IATTC	Nov	99.89	22.70	58.85	85.89	100.00	100.00	93.89	93.89	67.45	67.45
IATTC	Dec	99.83	49.27	58.36	86.13	100.00	100.00	93.98	93.98	70.22	70.22
IATTC	Jan'16	99.83	49.68	58.49	86.22	100.00	100.00	93.97	93.97	70.28	70.28
IATTC	Feb	99.83	55.36	58.44	86.20	100.00	100.00	93.96	93.96	71.01	71.01
ICCAT	Mar'15	99.96	26.33	81.20	99.81	100.00	100.00	99.98	99.98	95.48	95.48
ICCAT	Apr	99.98	27.25	83.55	99.83	100.00	100.00	99.98	99.98	95.14	95.14
ICCAT	May	99.98	27.87	83.13	99.84	100.00	100.00	99.98	99.98	95.21	95.21
ICCAT	Jun	99.94	27.57	82.57	99.84	100.00	100.00	99.98	99.98	95.20	95.20
ICCAT	Jul	99.94	27.56	82.29	99.84	100.00	100.00	99.98	99.98	95.28	95.28
ICCAT	Aug	99.94	27.28	81.36	99.84	100.00	100.00	99.98	99.98	95.33	95.33
ICCAT	Sep	99.94	27.40	81.58	99.84	100.00	100.00	99.98	99.98	95.31	95.31
ICCAT	Oct	99.94	40.88	81.14	99.84	100.00	100.00	99.98	99.98	95.35	95.35
ICCAT	Nov	99.94	40.88	81.18	99.84	100.00	100.00	99.98	99.98	95.35	95.35
ICCAT	Dec	99.94	41.11	81.17	99.84	100.00	100.00	99.98	99.98	95.38	95.38
ICCAT	Jan'16	99.94	44.36	81.16	99.84	100.00	100.00	99.98	99.98	95.42	95.42
ICCAT	Feb	99.98	51.00	83.78	99.81	100.00	100.00	100.00	100.00	94.49	94.49
IOTC	Mar'15	99.99	15.82	31.85	99.59	100.00	100.00	93.54	93.54	99.76	99.76
IOTC	Apr	99.99	15.92	31.89	99.56	100.00	100.00	93.67	93.67	99.78	99.78
IOTC	May	99.99	15.97	31.86	99.57	100.00	100.00	93.68	93.68	99.80	99.80
IOTC	Jun	99.99	19.11	32.12	99.57	100.00	100.00	93.73	93.73	99.79	99.79
IOTC	Jul	99.99	18.49	32.21	99.61	100.00	100.00	95.08	95.08	99.85	99.85
IOTC	Aug	99.99	19.20	33.41	99.64	100.00	100.00	94.87	94.87	99.91	99.91
IOTC	Sep	99.98	19.45	40.09	99.56	100.00	100.00	93.87	93.87	99.90	99.90
IOTC	Oct	99.98	19.82	39.59	99.58	100.00	100.00	93.98	93.98	99.90	99.90
IOTC	Nov	99.98	20.52	41.31	99.57	100.00	100.00	93.82	93.82	99.90	99.90
IOTC	Dec	99.98	21.94	41.32	99.57	100.00	100.00	93.83	93.83	99.87	99.87
IOTC	Jan'16	99.98	24.12	41.09	99.56	100.00	100.00	93.86	93.86	99.87	99.87
IOTC	Feb	99.98	25.27	47.24	99.54	100.00	100.00	93.88	93.88	99.89	99.89
WCPFC	Mar'15	100.00	1.62	86.53	100.00	99.75	79.96	94.45	94.45	99.89	99.89
WCPFC	Apr	100.00	2.17	86.54	100.00	99.77	79.75	94.47	94.47	99.89	99.89
WCPFC	May	100.00	2.74	86.49	100.00	99.77	79.73	94.42	94.42	99.88	99.88
WCPFC	Jun	100.00	3.33	87.16	100.00	99.77	79.86	94.38	94.38	99.88	99.88

WCPFC	Jul	100.00	10.39	91.46	100.00	99.75	79.10	94.12	94.12	99.93	99.93
WCPFC	Aug	100.00	16.39	91.37	100.00	99.75	79.50	94.14	94.14	99.96	99.96
WCPFC	Sep	100.00	18.33	91.45	100.00	99.75	79.50	94.12	94.12	99.96	99.96
WCPFC	Oct	100.00	20.46	91.47	100.00	99.75	79.44	94.12	94.12	99.96	99.96
WCPFC	Nov	100.00	26.51	91.48	100.00	99.75	79.41	94.12	94.12	99.96	99.96
WCPFC	Dec	100.00	41.02	91.49	100.00	99.75	79.26	94.13	94.13	99.96	99.96
WCPFC	Jan'16	100.00	42.42	91.53	100.00	99.75	79.18	94.11	94.11	99.96	99.96
WCPFC	Feb	100.00	42.52	91.53	100.00	99.75	79.10	94.14	94.14	99.96	99.96

Summarizing the scoring for the ten attributes from **Table 9** above it is possible to have a comparative idea of the overall performance of the different tRFMOs in a type of benchmark analysis, as shown below.

Figure 11. Comparison of the overall performance of the five tRFMOs, March 2015 to February 2016.



The figure above illustrates that, though in different degrees, all five tRFMOs have improved through time their performance in terms of completion of the ten basic attributes reported to the CLAV.

13. Performance of the most represented flags in the CLAV.

The results of the overall performance evaluation (based on similar benchmark analyses) for the most representative 38 flags in the CLAV are shown below. Only those most represented flags with 50 or more authorized vessels are shown; together they encompassed about 88 percent of the total number of vessels authorized in the CLAV at the end of February 2016.

The following Figures illustrate the overall performance by flag for the degree of completion of the ten basic attributes included in the CLAV for all vessels authorized (**Figure 12**), and the comparative performance by flag for those least reported attributes, namely the IMO number for all vessels authorized of 24 meters and over (**Figure 13**), and the IRCS (**Figure 14**).

Cases where notable changes are observed (e.g., from 0 to 100) may result from only one or very few vessels being reported with such attribute. This was the case for LKA where the IMO number of just one vessel larger than 24 meters was reported. Some other notable changes of performance were from flags with only a small proportion of vessels equal or above 24 meters, where the reporting of some few IMO numbers made a big difference (**Figure 13**).

Figure 12. Comparison of the overall performance for all the vessels authorized by the 38 most representative flags in the CLAV, March 2015 to February 2016.

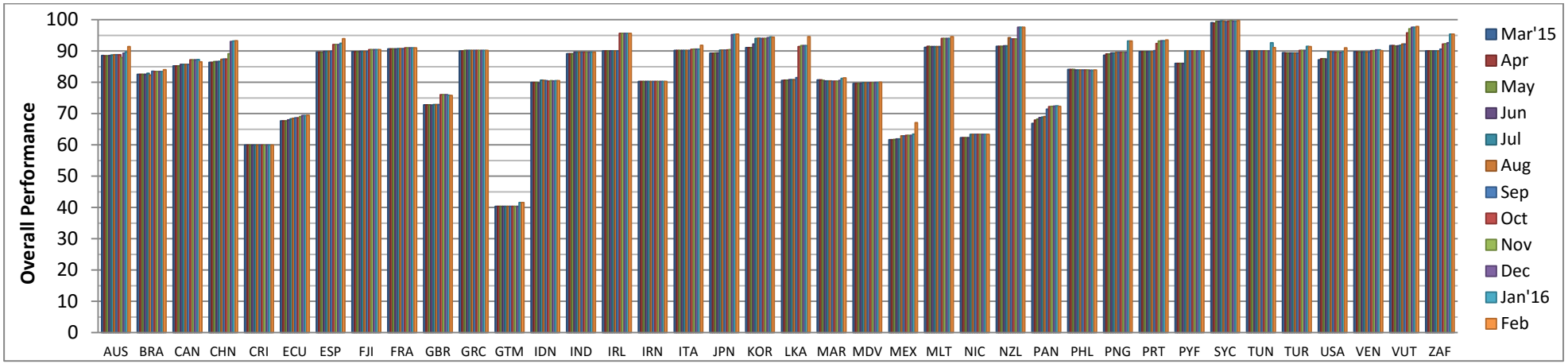


Figure 13. Comparison of the IMO number performance, for all the vessels authorized of length equal to 24 meters and over, by the 38 most representative flags in the CLAV, March 2015 to February 2016.

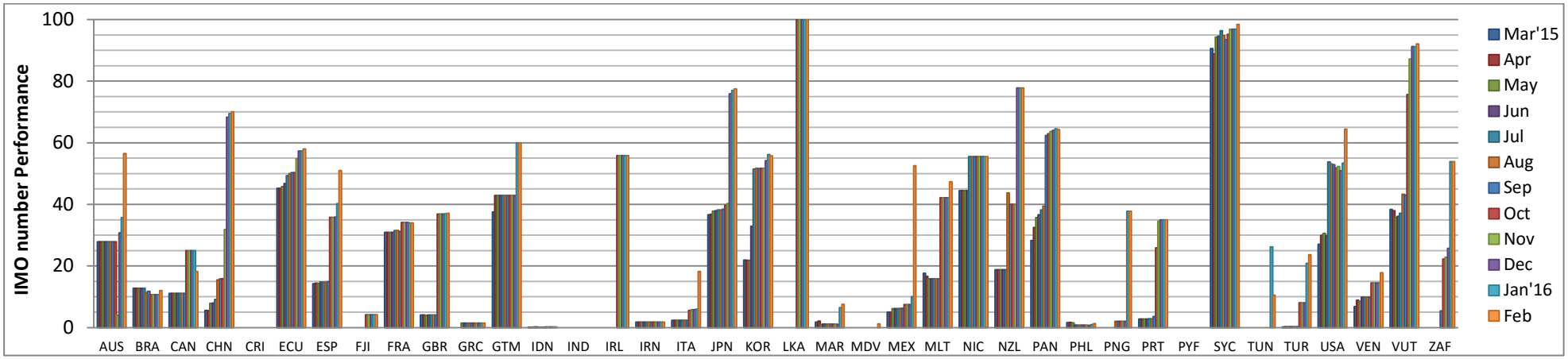
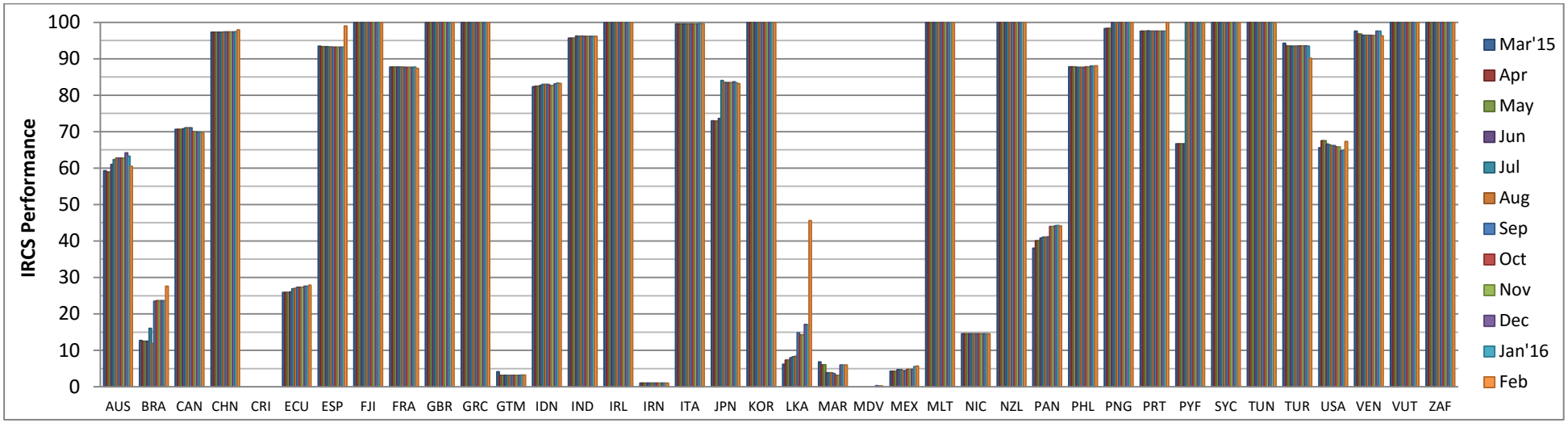


Figure 14. Comparison of the IRCS performance for all the vessels authorized by the 38 most representative flags in the CLAV, March 2015 to February 2016.



14. Conclusions.

- After being relatively stable above 19,400 through January 2016, the number of authorized vessels in the CLAV declined again through February to a mere 18,628 at the end of that month. At the time of preparation of this report (March 16th, 2016) the number of authorized vessels reached a lowest ever number of 18,400 vessels.

- The rate of the overall IMO number reporting (for vessels 24 meters and above) continues its improvement trend, and has almost tripled for the period considered (from 15 percent in March 2015 to 44 percent in February 2016). A greater reporting of the IMO number has allowed for a more efficient detection of redundancies, facilitating the matching processes carried out at the CLAV. Hence, improving the reliability of the consolidated list.

- However, the overall IRCS reporting rate has only improved slightly in the period considered (from 63 percent in March 2015 to almost 70 percent in February 2016). Though most IRCSs reported adhere to the coding style of the ITU (International Telecommunication Union), for more than 100 Chinese vessels a nine-digit MMSI number (Maritime Mobile Service Identity) has been reported instead.

- Lower IRCS reporting rates are associated with those tRFMOs (e.g., IATTC and IOTC) with the greatest proportion of small-size vessels which may not required an IRCS identifier.

- The adopted benchmark approach allows for expected goals to be established and eventually achieved, and hence the possibility to evaluate progress through time. Such has been the case for the improvement regarding the IMO number reporting. Likewise, the performance of the various tRFMOs can then be monitored as the completion of the basic information compiled in the CLAV is improved. Setting such goals require committing the responsible flags to comply with full data submissions.

- 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 a year of work, completed with the support of the Common Oceans Tuna Project and the expertise and technical assistance provided by FAO, has been substantial. This has been possible by the joint efforts and close collaboration between the tRFMO´s compliance officials, the database managers, and the CLAV support at FAO. Thus, some mechanism and institutionalization would seem necessary to insure furthering the maintenance of the CLAV beyond the end of the support provided by the Common Oceans Tuna Project.

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

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2016 ANNOTATED AGENDA OF THE JOINT MEETING OF t-RFMOs ON THE IMPLEMENTATION OF EBFM

(Rome, xx-xx Month, 2016)

1. Opening, adoption of Agenda and meeting arrangements.

2. Review of RFMO EBFM experiences.
   Each group will be asked to provide a presentation that describes the actions that have been taken and future plan for implementing an ecosystem based fisheries management framework. The presentation should attempt to address the following questions. What is the understanding of the EAFM in your organization? Who is responsible for developing the EBFM approach? Has a subcommittee been tasked with the responsibility? In what way does your strategic plan support the implementation of EBFM? Describe the role that scientists, managers, the Commission and other stakeholders play in developing the EBFM approach? What are the dimensions of the framework, their components and required steps for implementation? Have management objectives been defined with respect to the components of your framework? What steps have you taken to operationalize your conceptual management objectives? How will the EBFM framework be used within your organization? What are the impediments to developing and implementing the framework?

3. Discuss the merits of each organizations approach and the problems they have encountered.
   In a roundtable discussion the group will summarize the problems that were identified and discuss? offer plausible solutions. The problem areas can be broadly categorized into a) Communication b) Institutional/Organizational c) Data d) Capacity/Knowledge and e) Leadership.

4. Identify opportunities to collaborate.
   Determine how the 5 organizations might work together to advance the implementation of an EBFM framework.

5. Discuss next steps.
   Develop a work plan which would facilitate the implementation of the EBFM approach among the 5 tuna RFMOs. Set a future meeting time and location.

6. Other matters.

KOBE STEERING COMMITTEE MEETING
Updated July 2016
Rome, Italy

KOBE RECOMMENDATIONS QUESTIONNAIRE

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SCIENCE					
Data Sharing and the Provision of Scientific Advice					
1. Improve the request for scientific advice to clearly articulate risk and uncertainty to decision makers. [i.e. Kobe II Strategy Matrix] (Kobe II Course of Actions)	O[i]	O	O[1I]	O[1]	O (and F)
2. Efforts should be undertaken so that basic data used in stock assessment (catch, effort and sizes by flag and time/area strata) provided by members should be made available via the websites of tuna RFMOs or by other means. (Kobe II Science Workshop)	O	O	O	O[2]	O
3. 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. (Kobe II Science Workshop)	X[ii]	O[1]	O	O[3]	O
4. Standardized executive summaries should be developed for consideration by all tuna RFMOs to summarize stock status and management recommendations. These summaries should be discussed and proposed by the chairs of the Scientific Committees at Kobe 3. (Kobe II Science Workshop)	NR[iii]	F	O	O[4]	O
5. The application of the Kobe 2 strategy matrix should be expanded and applied primarily to stocks for which sufficient information is available. (Kobe II Science Workshop)	O[iv]	O[2]	O[2I]	O[5]	O
6. Tuna RFMOs should develop mechanisms to deliver timely and adequate information on their scientific outcomes to the public. (Kobe II Science Workshop)	O	O	O	O[6]	O
7. Chairs of Scientific Committees should establish an annotated list of common issues that could be addressed jointly by tuna RFMOs and prioritize them for discussion at the Kobe 3 meeting. (Kobe II Science Workshop)	X	F	O	O[7]	O
8. When useful to support scientific and MCS purposes, cooperate with	O[v]	O	O[3I]	O[8]	O

[1] The Stock Synthesis assessment files are available on request. The stock assessment reports are published online in draft form for the meetings of the Scientific Advisory Committee (SAC) and in final form in the Stock Assessment Report series

[2] The Kobe Strategy Matrix has been evaluated for bigeye and yellowfin tuna

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other tuna RFMOs to develop protocols for exchanging data, including provisions for data confidentiality. (Kobe II MCS Workshop)					
9. Recognizing that the five tuna Regional Fisheries Management Organizations (tRFMOs) have different data confidentiality rules, and noting this might curb the exchange of data across tRFMOs, Kobe III participants recommended that tRFMO Secretariats cooperate to develop common data confidentiality rules and a draft protocol for data sharing. The protocol will specify the types of data to be shared, how it can be used, and who can have access to it.	O[vi]	O[3]	X	X	O[4]
Data Reporting					
1. Provide accurate, timely and complete data, and adopt measures to address the current low rate of compliance by RFMO participants with the obligations for data provision under the rules of each RFMO and any other relevant international instrument. (Kobe II Course of Actions)	O	O	O	O[9]	O[5]
2. All members of t-RFMOs are called upon to give a top priority to the provision of data of good quality in a timely manner, according to the existing mandatory data requirements of tuna RFMOs, in order to facilitate the work of tuna RFMOs scientific bodies in the provision of scientific advice based on the most recent information. (Kobe II Science Workshop)	O	O	O	O[67]	O
3. Lags in the submission of fishery data should be reduced making a full use of communication technologies (e.g. web based) and efforts should be undertaken that basic data formats are harmonized. (Kobe II Science Workshop)	O	O	O	O[10]	O
4. Fine scale operational data should be made available in a timely manner to support stock assessment work, and confidentiality concerns should be addressed through RFMOs rules and procedures for access protection and security of data. (Kobe II Science Workshop)	O/[vii]	O	O[4]	O[11]	O
5. All RFMOs establish strong requirements for the provision of accurate data and information to secretariats so that the status of tuna stocks can be accurately assessed. All RFMO members and cooperating non-members should make a firm commitment to provide these data on a timely basis, and it should be cross-checked with market, landings and processing establishment data under the competency of tuna RFMOs. (Kobe II Management Workshop)	O	O	O	O[12]	O[6]

[3] A Memorandum of Cooperation on the exchange and release of data between the IATTC and the WCPFC has been in force since December 2009.
[4] WCPFC presently has MOUs with a number of RFMOs, which includes provisions for data exchanges
[5] Compliance with scientific data provision rules, including with reporting deadlines, are reviewed and assessed through the WCPFC Compliance Monitoring Scheme.
[6] Additional work is underway in 2016/17 to cross-check data with market, landings and processing

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Data Gathering and Analysis					
1. Tuna RFMOs should ensure adequate sampling for catch, effort and size composition across all fleets and especially distant water longliners for which this information is becoming limited. (Kobe II Science Workshop)	O[viii]	O	O[5I]	O/F**[13]**	O
2. Tuna RFMOs should cooperate to improve the quality of data, in particular for methods to estimate: (1) species and size composition of tunas caught by purse seiners and by artisanal fisheries and (2) catch and size of farmed tunas. (Kobe II Science Workshop)	O	O	O[6I]	O**[14]**	O
3. Tuna RFMOs should use alternative sources of data, notably observer and cannery data, to both validate the information routinely reported by Parties and estimate catches from non-reporting fleets. (Kobe II Science Workshop)	O	O	O	O**[15]**	O (and F)
4. Regular large scale tagging programs should be developed, along with appropriate reporting systems, to estimate natural mortality growth and movement patterns by sex, and other fundamental parameters for stock assessments. (Kobe II Science Workshop)	O[ix]	O	O	O**[16]**	O
5. Archival tagging should be an ongoing activity of tagging programs as it provides additional insights into tuna behavior and vulnerability. (Kobe II Science Workshop)	O	O	O	O**[17]**	O
6. Spatial aspects of assessment should be encouraged within all tuna RFMOs in order to substantiate spatial management measures. (Kobe II Science Workshop)	O	O	O	O**[18]**	O (and F)
7. The use of high-resolution spatial ecosystem modeling frameworks should be encouraged in all tuna RFMOs since they offer the opportunity to better integrate biological features of tuna stocks and their environment. (Kobe II Science Workshop)	O / NR[x]	X	F	O**[19]**	F
8. Tuna RFMOs should promote peer reviews of their stock assessment works. (Kobe II Science Workshop)	O	O	O[7I]	X**[20]**	O
9. Tuna RFMOs should use more than one stock assessment model and avoid the use of assumption-rich models in data-poor situations. (Kobe II Science Workshop)	O	O	O	O**[21]**	O
10. Chairs of Scientific Committees should jointly develop checklists and minimum standards for stock assessments. (Kobe II Science Workshop)	NR[iii]	O	O	O**[22]**	F
11. Tuna RFMOs should actively cooperate with programs integrating ecosystem and socio-economic approaches such as CLIOTOP to support the conservation of multi-species resources. (Kobe II Science Workshop)	NR[xi]	O	F	X	F
12. RFMOs should assess the impact of fisheries for tuna, tuna like and	O[xii]	O	O[8I]	O**[24]**	O (and

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other species covered by the conventions on bycatch by taxon using the best available data. (Kobe II Bycatch Workshop)					F)
13. RFMOs should consider adopting standards for bycatch data collection which, at a minimum, allows the data to contribute to the assessment of bycatch species population status and evaluation of the effectiveness of bycatch measures. The data should allow the RFMOs to assess the level of interaction of the fisheries with bycatch species. (Kobe II Bycatch Workshop)	O	O	O[9l]	O[25]	O (and F)
14. Encourage the participation of appropriate scientists in relevant T-RFMO working groups to conduct and evaluate bycatch assessments and proposed mitigation strategies. (Kobe II Bycatch Workshop)	O	O	O	O[26]	O
15. Evaluate the effectiveness of current bycatch mitigation measures, and their impact on target species catch and management, and identify priorities for action and gaps in implementation, including enforcement of current measures and capacity building needs in developing states. (Kobe II Bycatch Workshop)	O[xiii] […]	O	O[10l]	[…] O[27]	O (and F)
16. Identify research priorities, including potential pilot projects to further develop and evaluate the effectiveness of current or proposed bycatch mitigation measures, working with fishers, fishing industry, IGOs and NGOs, universities and others as appropriate, and facilitate a full compendium of information regarding mitigation techniques or tools currently in use, e.g. building on the WCPFC Bycatch Mitigation Information System. (Kobe II Bycatch Workshop)	O[xiv]	O	F	O[28]	O
17. As a matter of priority, establish a joint T-RFMO technical working group to promote greater cooperation and coordination among RFMOs with the attached Terms of Reference. The RFMOs are encouraged to expedite the formation of the joint working group. (Kobe II Bycatch Workshop)	O	F	O	O	O
18. Actively develop collaborations between relevant fishing industry, IGOs and NGOs, universities and others as appropriate, and RFMOs to assess the impact of bycatch on the five taxa, study the effectiveness of bycatch mitigation measures, and further the understanding of population dynamics of species of conservation concern. (Kobe II Bycatch Workshop)	O[xv]	F	O[11l]	O[29]	O (and F)
19. Emphasizing the potential of the Kobe II Strategy Matrix (K2SM) to communicate efficiently among all stakeholders and to assist in the decision-making process according to different levels of risk, but also recognizing that substantial uncertainties still remain in the assessments, Kobe III participants recommended that the Scientific Committees and Bodies of the tRFMOs develop research activities to	O[xvi]	O[7]	O	O	O (and F)

[7] A report (Document SAC-04-09a) on the application of K2SM and the related decision analysis was presented at the 4th meeting of the Scientific Advisory Committee in May 2013

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better quantify the uncertainty and understand how this uncertainty is reflected in the risk assessment inherent in the K2SM.					
20. Recognizing that a Management Strategy Evaluation (MSE) process needs to be widely implemented in the tRFMOs in the line of implementing a precautionary approach for tuna fisheries management, it is recommended that a Joint MSE Technical Working Group be created and that this Joint Working Group work electronically, in the first instance, in order to minimize the cost of its work.	O[xvii]	O[8]	O	O	O
MANAGEMENT					
Management Measures, Decision-making, and RFMO functioning					
1. Consistent with the FAO IPOA-Sharks, establish precautionary, science-based conservation and management measures for sharks taken in fisheries within the convention areas of each tuna RFMO, including as appropriate: o Measures to improve the enforcement of existing finning bans; o Prohibitions on retention of particularly vulnerable or depleted shark species, based on advice from scientists and experts; o Concrete management measures in line with best available scientific advice with priority given to overfished populations; o Precautionary fishing controls on a provisional basis for shark species for which there is no scientific advice; and o Measures to improve the provision of data on sharks in all fisheries and by all gears. (Kobe II Course of Actions)	NR[xviii]	O	O	[…] O[30]	O
2. RFMO measures should reflect adopted international agreements, tools and guidelines to reduce bycatch, including the relevant provisions of the FAO Code of Conduct, the IPOAs for Seabirds and Sharks, the FAO guidelines on sea turtles, the best practice guidelines for IPOAS for seabirds, and the precautionary approach and ecosystem approaches. (Kobe II Bycatch Workshop)	O	O	O	O	O
3. For populations of concern including those evaluated as depleted, RFMOs should develop and adopt immediate, effective management measures, for example, prohibition as appropriate on retention of such species where alternative effective sustainability measures are not in place. (Kobe II Bycatch Workshop)	O[xix] […]	O	O	O[31]	O (and F)
4. 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	X[xix] / O[xx]	O	O	O[32]	O

[8] IATTC staff members participate in the joint MSE working group. Also, the staff prepared a report (Document SAC-05-10b) for the 5th meeting of the Scientific Advisory Committee in May 2014; a preliminary MSE has been applied to north Pacific bluefin tuna, and is planned for other species

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where bycatch is a concern. (Kobe II Bycatch Workshop)					
5. Due to the conservation status of certain populations and in accordance with priorities in the RFMO areas, expedite action on reducing bycatch of threatened and endangered species. (Kobe II Bycatch Workshop)	O[xix] […]	O	O	O[73]	O
6. 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, holisitic, collaboratively developed with industry and stakeholders, and fully implemented. (Kobe II Bycatch Workshop)	O / X[xxi]	O	O	O	O
7. Develop the long-term capacity of T-RFMOs to coordinate and cooperate for data collection, assessment of bycatch, outreach, education, and observer training, including establishing a process to share information on current bycatch initiatives and potential capacity building activities. (Kobe II Bycatch Workshop)	X[xix]	F	F	O[33]	O (and F)
8. Ensure that the effectiveness of all conservation and management measures is not undermined by exemption or exclusion clauses. (Kobe II Management Workshop)	O	O	O	O[34]	O
9. Ensure that all conservation and management measures are implemented in a consistent and transparent manner and are achieving their management goals. (Kobe II Management Workshop)	O	O	O	O[35]	O
10. Ensure that all stocks maintained at sustainable and optimal levels through science-based measures. (Kobe II Management Workshop)	O[xxii]	O	O	O[36]	O
11. Kobe III participants recommended that the decision-making framework guidelines outlined in Annex 3 [of the Kobe III report] be referred to the respective tRFMOs for consideration.	O	O[9]	O	O	O
12. Tuna RFMO members should provide input to the Steering Committee through the Chair(s) of their respective RFMO(s) and during the annual review at the RFMO meeting(s).	O[xxiii]	X	F	O	F
Capacity and Allocation					
1. The participants agreed that global fishing capacity for tunas is too high, and that this problem needs to be urgently addressed. The participants recognized that in order to address this problem it is imperative that members of RFMOs collaborate at a global level, and that each flag State or fishing entity ensure that its fishing capacity is commensurate with its fishing opportunities as determined by each	O	O	O	O[37]	F

[9] At the 5th meeting of the Scientific Advisory Committee in May 2014, staff made recommendations regarding harvest control rules (Document SAC-05-16)

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tuna RFMO, including through a fair, transparent, and equitable process for the allocation of fishing opportunities among its members. The participants agreed that this problem should be addressed in a way that does not constrain the access to, development of, and benefit from sustainable tuna fisheries, including on the high seas, by developing coastal States, in particular small island developing States, territories, and States with small and vulnerable economies. (Kobe II Course of Actions)					
2. Tuna fishing capacity should not be transferred between RFMO areas and, as appropriate within RFMO areas, unless in accordance with the measures of the RFMOs concerned. (Kobe II Course of Actions)	NR[xxiv]	O	O (intra) X (inter)	O[38]	O
3. As appropriate, RFMOs include only vessels on their active vessel register in any scheme for reducing capacity by eliminating vessels. (Kobe II Management Workshop)	NR[xxvi]	O	O BFT X rest	O[39]	X
4. Review existing capacity against the best available scientific advice on sustainable levels of catch and implement measures to address any overcapacity identified. (Kobe II Management Workshop)	O[xxv] / NR[xxvi]	O	O	O[68]	O (and F)
5. 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. (Kobe II Management Workshop)	X / NR[xxvi]	O	O	O[40]	O
6. 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." (Kobe II Management Workshop)	X[xxvi]	O	X (meth. Definition)	O[41]	O
7. Review and develop management regimes, based inter alia on the concept of fishing rights for fisheries under the RFMOs' competence. (Kobe II Management Workshop)	O[xxvii]	O	O	O[42]	O
8. Consider using right-based management approaches and other approaches as part of a 'tool box' to address the aspirations of developing states, overfishing, overcapacity and allocation. (Kobe II Management Workshop)	O[xxvii]	O	O	O[43]	O
9. The tuna RFMOs should ensure a constant exchange of information with regard to the capacity of fleets operating within their zones as well as the mechanisms to manage this capacity. Kobe III will provide an opportunity for the tuna RFMOs to provide an update on progress with these issues. (Kobe II Management Workshop)	O[xxviii]	O	O	O[44]	O (and F)

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10. Kobe III participants recommended that each tRFMO Secretariat annually measure existing capacity in tuna fisheries under its jurisdiction and monitor where that capacity is used and by whom. The results of this work should be referred to the respective Commission for its consideration.	O[xxv] / NR[xxix]	O[10]	F	O[69]	F
11. In order to assist in the analysis and appropriate management decision-making to reduce overfishing and overcapacity, Kobe III participants recommended that by 2013 each tRFMO establish a record of vessels, by gear type, actively fishing for stocks under its jurisdiction, and that all tRFMO Secretariats coordinate the establishment of a common vessel database linked, to the extent possible, to the existing consolidated list of active vessels, taking into account the requirements of each tRFMO for vessel registration.	O[xxx]	O[11]	O	O[70]	X[12]
12. Kobe III participants recommend that developed fishing members freeze large-scale purse-seine capacity under their flag. Based on the status of the stocks, each tRFMO should consider a scheme for: • Reduction of overcapacity in a way that does not constrain the access to, development of, and benefit from sustainable tuna fisheries, including on the high seas, by developing coastal States, in particular small island developing States, territories, and States with small and vulnerable economies; and • Transfer of capacity from developed fishing members to developing coastal fishing members within its area of competence where appropriate.	NR[xxxi]	O[13]	O (for some species only)	O[73]	O (and F)[14]

[10] Within IATTC, issues related to capacity are addressed first by the Permanent Working Group on Capacity that was established for this purpose and has already met on fourteen occasions. Reports are commonly presented on the capacity of the tuna fleet, including calculations and recommendations on optimal target capacity. Special workshops are also organized, the latest one in April 2014.

[11] See previous footnote, also more information on vessel database at https://www.iattc.org/VesselListsENG.htm. The IATTC Regional Vessel Register, which is precise, detailed, comprehensive and constantly updated, was established in 2000. Vessels are classified by flag and gear.

[12] WCPFC currently has a record of authorized fishing vessels (CMM 2013-10), which includes both active and inactive fishing vessels. This is an area of work that is expected to commence once the Commission has taken decisions on how to manage fishing capacity.

[13] Resolution C-02-03 establishes vessel capacity limit rules in the IATTC area of competence. The modifications that have been made to the resolution are described this presentation, which also shows that most of the capacity in the EPO belongs to developing flag States, and more particularly to developing coastal States of the region, and not to developed fishing States. The purpose of the workshops referred to in the previous footnote is to provide inputs to the IATTC for a scheme for reducing overcapacity which would update and strengthen the *Plan for Regional Management of Fishing Capacity* that it adopted in June 2005.

[14] CMM 2015-01 included provisions to limit the number of purse seine vessels larger than 24m with freezing capacity operating between 20N and 20S at current levels (CMM 2015-01 para 49). Paragraph 54 of CMM 2015-01 says that "CCMs other than SIDS, shall jointly develop a scheme to jointly reduce the capacity of LSPSVs to the level of 31 December 2012 and submit to WCPFC11. " and paragraph 55 says "Nothing in this measure shall restrict the ability of SIDS to construct or purchase vessels from other CCMs for their domestic fleets."

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Capacity Building					
1. Enhance the ability of developing coastal States, in particular small island developing States, territories, and States with small and vulnerable economies, to conserve and manage highly migratory fish stocks and to develop their own fisheries for such stocks; enable them to participate in high seas fisheries for such stocks, including facilitating access to such fisheries; and to facilitate their participation in the work of tuna RFMOs and relevant technical Workshops. The Workshops agreed will consider how to address this principle. (Kobe II Course of Actions)		O[15]	O	O[45]	O
2. Where determined by a Tuna RFMO, a review of the effectiveness of capacity-building assistance already provided should be undertaken. Reviews of tuna scientific management capacity in developing countries, within the framework of the respective RFMO may also be conducted at their request. (Kobe II Science Workshop)	NR	F	O	O[46]	O (and F)
3. Developed countries should strengthen in a sustained manner their financial and technical support for capacity-building in developing countries, notably small island developing States, on the basis of adequate institutional arrangements in those countries and making full use of local, sub-regional and regional synergies. (Kobe II Science Workshop)	O[xxxii]	F	O	O[47]	O (and F)
4. Tuna RFMOs should have assistance funds that cover various forms of capacity-building (e.g. training of technicians and scientists, scholarships and fellowships, attendance to meetings, institutional building, development of fisheries). (Kobe II Science Workshop)	O[xxxii]	O[16]	O	O[48]	O
5. Tuna RFMOs, if necessary, should ensure regular training of technicians for collecting and processing of data for developing states, notably those where tuna is landed. (Kobe II Science Workshop)	O[xxxii]	O	O	O[49]	O
6. The structural weaknesses in the receiving mechanism for capacity building within a country should be improved by working closely with Tuna RFMOs. (Kobe II Science Workshop)	X	F	O	O	O (and F)
7. Provide technical assistance and capacity building support to assist developing countries in implementing existing CDSs and any expanded CDS, including ensuring that capacity building funds that currently exist in RFMOs can be used for this purpose. (Kobe II MCS Worksop)	O[xxxii]	O[17]	X	NR[50]	X
8. Acknowledging the additional or new requirements of bycatch	X	O[18]	X	X	O

[15] Capacity building is an active area of effort by staff, see the capacity building section in Document SAC-05-15
[16] IATTC has created a fund to assist developing countries. This fund was recently used to support the participation of scientists in the meeting of the Scientific Advisory Committee in May 2014.
[17] See previous footnote

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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 II Bycatch Workshop)					
9. Kobe III participants, reaffirming the recommendations regarding port state measures and catch document schemes (CDS), recommended that tRFMOs, developed States, and NGOs accelerate efforts to provide capacity building assistance through various means, including workshops, to implement CDS, port state measures, and data collection and to participate in the scientific work.	O[xxxii]	O[19]	O (psm = F)	O[75]	F (and X)[20]
COMPLIANCE AND ENFORCEMENT					
Compliance					
1. The implementation of a robust compliance review mechanism within each RFMO recording the actions by the Parties and non Contracting Parties	O	O	O[12l]	O[51]	O
2. The tuna RFMO Secretariats continue their collaboration to advance implementation of a combined vessel register that incorporates a unique vessel identifier (UVI). The Secretariats will advance this through meetings of their members and on-going collaboration with the competent organizations concerned	O	O	O	O[52]	O
3. To start work between RFMOs on harmonising and making compatible the procedures and criteria for the listing and delisting from the respective RFMO IUU list	O[xxxiii]	F	O[13l]	O[76]	X
4. Develop a consistent enforceable regime for sanctions and penalties	O[xxxiv]	X	F	X	XF
5. Kobe III participants noted their appreciation for the work already conducted by the tRFMO Secretariats on the development of a	O[xxxv]	F	O	O[71]	O (and F)[21]

[18] See previous footnote
[19] See previous footnote
[20] Partial – WCPFC has held regular workshops on data collection and has well-established mechanisms to facilitate the participation of developing country scientists in Scientific Committee meetings. WCPFC has not yet agreed on mechanisms of assistance to implement CDS and Port State Measures, which in part is because conservation and management measures have not yet been agreed.
[21] In December 2013, the WCPFC Commission agreed to include the IMO Number in the Record of Fishing Vessels (CMM 2013-04) – the footnote to paragraph 6(s) of CMM 2013-10 says "Effective 1 January 2016, flag CCMs shall ensure that all their fishing vessels that are authorized to be used for fishing in the Convention Area beyond the flag CCM's area of national jurisdiction and that are at least 100 GT or 100 GRT in size have IMO or LR numbers issued to them.". In addition WCPFC agreed to continue to explore how to ensure that all vessels of the RFV have

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consolidated list of authorized vessels, including the implementation of unique vessels identifier (UVIs), and recommended that they continue these efforts. Furthermore, the participants recommended that these efforts be coordinated with the Food and Agriculture Organization of United Nation's (FAO) effort to develop and implement a global record of fishing vessels, refrigerated transport vessels, and supply vessels.					
6. Kobe III participants recommended that the tRFMOs establish a common format for assessing compliance with data reporting requirements. Furthermore, to facilitate compliance, participants recommended that all tRFMOs streamline and harmonize their reporting formats, procedures, and timing.	X[xxxvi]	F	O	X	X
Eliminate IUU fishing					
1. 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. (Kobe II Course of Actions)	X[xxxvii]	F	O	O[53]	F
2. Develop publicly available authorised and active vessel (to be determined by individual RFMOs) lists for all gears. These lists will include small-scale fishing vessels that are capable of catching significant amounts of fish under the competency of tuna RFMOs. (Kobe II Management Workshop)	O […]	O	O (SWO-BFT)[14I]	O[54]	O
3. Encourage secretariats to continue their work on the global list of tuna vessels, including the assignment of a unique vessel identifier. (Kobe II Management Workshop)	O	O	O[15I]	O[55]	O
4. Kobe III participants recommended that tRFMOs cooperate to harmonize illegal, unregulated and unreported (IUU) vessel listing criteria, processes, and procedures, to the maximum extent possible, and move towards adopting principles, criteria, and procedures for cross-listing IUU vessels that are listed on the IUU list of other tRFMOs, taking into account the principles in Annex 5.	O[xxxiii]	F[22]	O	X	F[23]
Advance Performance in MCS, Vessel Monitoring Systems, Transhipment					

UVIs. Further, the WCPFC RFV has been successfully incorporated into the CLAV since 2015 and the WCPFC RFV is replicated to the CLAV daily.

[22] Presently IATTC prepares and adopts its own IUU vessel list in accordance with the provisions of its Resolution C-05-07 (June 2005). Collaboration among the tuna RFMOs in this matter is still limited to an exchange of such lists.

[23] In 2012, the WCPFC Secretariat provided the paper WCPFC-TCC8-2012-10 *Compilation and Analysis of IUU listing procedures from other RFMOs*. The WCPFC has not yet decided to adopt any changes to its WCPFC IUU listing procedures, nor agreed to a process to further progress this matter.

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1. Review and strengthen their MCS framework to improve the integrity of their management regime and measures. (Kobe II Management Workshop)	O	O	O[17l]	O[57]	O
2. Where they do not already exist, establish standards for the format, content, structure and frequency of VMS messages. (Kobe II MCS Workshop)	NR [xxxviii]	NR	O[18l]	O[58]	O
3. Ensure there are no gaps in geographic coverage in regional VMS programs, and all relevant vessel types and sizes participate in VMS programs while on the high seas. (Kobe II MCS Workshop)	O	F	O[19l]	O[59]	O
4. Cooperate with other tuna RFMOs to standardize transhipment declaration forms so that they use, to the maximum extent possible, the same format and include the same required data fields, as well as develop minimum standards for the timeframes by which such Declarations are submitted to RFMO Secretariats, flag States, coastal States, and port States. (Kobe II MCS Workshop)	O	O	O	O[60]	O[24]
5. Establish that advance notifications must be provided to the relevant tuna RFMO Secretariat for those high seas transshipment activities that are permitted by that RFMO's measures (for example, 36 hours in advance of the transhipment operation taking place). (Kobe II MCS Workshop)	O	O	O	X[61]	O
Observers					
1. 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. (Kobe II MCS Workshop)	X[xxxix]	O	O[20l]	O[62]	O
2. There are specific aspects of observer programs that could benefit from the development of minimum standards or procedures that if utilized by tuna RFMOS could promote comparable observer-generated data.	O	O	O	O[63]	O
3. Where appropriate and practical, subject all gear types in high seas fishing operations to observer coverage while adopting a minimum of 5% coverage as an initial level. Observer coverage rates should be evaluated and may be adjusted depending on the scope and objectives of each observer program or particular conservation and management	O	O	O	O[64]	O

[24] CMM 2009-06 specifies the minimum fields to be included in transshipment declarations that are submitted to WCPFC, for high seas transshipment activities. In accordance with CMM 2009-06 transshipments that occur in port and within areas under national jurisdiction are to occur in accordance with national laws of the coastal State.

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measures. (Kobe II MCS Workshop)					
4. Exchange information and examples of the standards developed in each program. These should include: a) Training material and procedures; b) On-board reference materials; c) Health and safety issues; d) Rights, and responsibilities of vessel operators, masters, crew and observers; e) Data collection, storage and dissemination including where appropriate between RFMOs; f) Debriefing protocols and procedures; g) Reporting formats – especially for target and by-catch species; h) Basic qualifications and experience of observers. (Kobe II MCS Workshop)	NR[xl]	O	O	O	O (and F)
5. Implement/enhance observer and port sampling programs with sufficient coverage to quantify/estimate bycatch and require timely reporting to inform mitigation needs and support conservation and management objectives, addressing practical and financial constraints. (Kobe II Bycatch Workshop)	O[xli]	O	F	O[72]	O
Port State Measures					
1. Encourage RFMO Members to consider signing and ratifying the FAO Port State Measures Agreement at their earliest opportunity. (Kobe II MCS Workshop)	X[xlii]	X	X	O[77]	O
2. Where they do not already exist, where appropriate, adopt port State control measures that are consistent with the FAO Port State Measures Agreement, and that take into account the specific characteristics and circumstances of each RFMO. (Kobe II MCS Workshop)	O	F	F	O[65]	O (and F)
Catch Documentation Schemes (CDS)					
1. Establish or expand the use of CDS to fisheries for tuna and tuna-like species and sharks not currently covered by an existing CDS and to which current conservation and management measures apply, taking into account the specific characteristics and circumstances of each RFMO. (Kobe II MCS Workshop)	O[xliii]	O	O[21l]	X[66]	O[25]
2. Ensure compatibility between new or expanded CDS and existing certification schemes already implemented by coastal, port and importing States. (Kobe II MCS Workshop)	NR[xliv]	F	F	NR	O
3. Develop a common/harmonized form for use across RFMOs and the use of electronic systems and tags to enhance the efficiency,	O /	X	F	NR	F

[25] A WCPFC Catch Documentation Scheme intersessional working group was established in December 2012 and has met a number of times in the past years and will meet again in September 2016, to work on the development of a WCPFC Catch Documentation Scheme that is expected to take these recommendations into account in its work.

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effectiveness and utility of a CDS. (Kobe II MCS Workshop)	NR[xlv]				
4. Take into account fish caught by purse seine fisheries and delivered to processing plants when implementing an expanded CDS. (Kobe II MCS Workshop)	NR	O	O	NR	O
5. Consider a tagging system for fresh and chilled products to improve the implementation of new or expanded CDS. (Kobe II MCS Workshop)	O	O	O CPCs level X institutional	NR	F (and O)
6. Develop a simplified CDS form to cover catches by artisanal fisheries that are exported (see Appendix 3, EU form that could serve as an example). (Kobe II MCS Workshop)	NR[xlvi]	X	X	NR	F (and O)
7. Provide technical assistance and capacity building support to assist developing countries in implementing existing CDSs and any expanded CDS, including ensuring that capacity building funds that currently exist in RFMOs can be used for this purpose. (Kobe II MCS Workshop)	O	F	X	NR	F (and O)

KOBE RECOMMENDATIONS QUESTIONNAIRE FOOTNOTES

Footnotes for CCSBT

[i] The CCSBT has not yet used the Kobe II Strategy Matrix, but its requests for advice and the scientific advice provided have included the main elements of the Strategy Matrix, including alternative time frames and the probability of meeting targets under different management regimes.
[ii] 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.
[iii] This is of more relevance to other TRFMOs which are dealing with numerous species and stock assessments. The CCSBT conducts assessment for a single stock only. These are detailed assessments and a checklist or "standardized" executive summaries are not likely to be of significant value to the CCSBT.
[iv] Most of the relevant information for this is available through the CCSBT Management Procedure work, but not in the specific Kobe matrix format. The precise format is not a major issue for the CCSBT due to the single species nature of the CCSBT.
[v] Exchange of data and information is already happening in relevant areas, including: Exchange of authorized vessel details for the CLAV; The transhipment monitoring program, in which information is shared between ICCAT and CCSBT, and IOTC and CCSBT; Provision of high level SBT catch data and assessments by CCSBT to the other tuna RFMOs and FAO; and the MOU between CCSBT and WCPFC that includes exchange of data. Furthermore, the Draft Rules and Procedures for the Protection, Access to, and Dissemination of Data Compiled by the CCSBT contain provisions for the confidentiality of data shared with other RFMOs.
[vi] CCSBT's confidentiality rules were agreed in 2010 and used both ICCAT's and WCPFC's rules as the baseline for CCSBT's rules. Consequently there is already significant compatibility of rules between these RFMOs. Sharing of data with ICCAT and IOTC occurs for the transshipment monitoring program and between all the tRFMOs for the consolidated list of authorized vessels. There is currently no sharing of confidential data, although WCPFC and CCSBT are considering the possibility of sharing certain catch and effort data that is not publicly available.
[vii] Data for stock assessments is provided in a timely manner. CCSBT has rules and procedures in place for access to, protection and security of data, but has not yet reached agreement on the necessity for provision of fine scale operational data. In the interim, cooperative practises operate between Member scientists to enable necessary analyses to be conducted. This includes Members with access to necessary fine scale data conducting analyses on those data requested by other Members.
[viii] CCSBT Members are working to improve existing data collection, particularly the coverage and representativeness of observer programs. Significant improvement in observer coverage levels have occurred since Kobe 3, with most Members reaching the 10% target level.
[ix] The CCSBT conventional tagging program continues to collect tags, but large scale conventional tagging activities finished in 2007. In 2016, the CCSBT commenced a pilot gene tagging program which is designed to become a recruitment monitoring series. Gene tagging overcomes problems of tag loss and reporting rates associated with a conventional tagging program.
[x] Aspects of integrating environmental and spatial modelling are important. Work on interpreting CPUE in relation to these aspects are being pursued within the CCSBT, particularly in relation to spatial fleet dynamics. Spatial ecosystem modelling may be examined in the future by individual Members.
[xi] However, if the Extended Scientific Committee or Secretariat was approached by programs such as CLIOTOP, consideration would be given within the constraints of its available resources.
[xii] Work is progressing. Aggregated observer data is exchanged between Members on Ecologically Related Species (ERS) and risk assessments for SBT fishing on seabirds have been conducted. Further work on sharks, in particular Porbeagles, is underway.
[xiii] CCSBT Members have conducted significant work evaluating the effectiveness of current bycatch mitigation measures.

[xiv] Identification of research priorities is part of the ongoing work of the CCSBT Ecologically Related Species Working group. It should also be noted that the priorities for certain research differs between Members depending on their particular circumstances.
[xv] Within the CCSBT, the research is conducted by the Members (not the RFMO), and the Members develop such collaborations as appropriate to their work.
[xvi] CCSBT does not use the K2SM but it actively addresses uncertainty in its assessments.
[xvii] The joint MSE group has been formed. CCSBT has conducted its own management strategy evaluation and has implemented a Management Procedure for recommending TACs. Joint work with other tRFMOs is a low priority for the CCSBT itself, but CCSBT scientists have agreed to be involved in the joint work on a cooperative basis. Work in this area is also being conducted as part of the GEF funded ABNJ project.
[xviii] CCSBT does not have a Convention Area, nor a mandate for management of sharks unless caught as a bycatch to SBT fishing. Nevertheless, CCSBT has adopted the shark related measures of ICCAT, IOTC and WCPFC for when fishing in those Convention Areas.
[xix] 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) due to a lack of lack of consensus as to whether CCSBT has a mandate to make binding resolutions on bycatch matters.
[xx] CCSBT has implemented a mandatory exchange of aggregated ERS data collected by scientific observers.
[xxi] Many of these principles are used, but they have not been formally adopted and are mainly non-binding (although strongly recommended).
[xxii] The SBT stock is at low levels, but the CCSBT has undergone a management strategy evaluation process and has subsequently implemented a management procedure designed to have a 70% probability of rebuilding the SBT stock to its interim rebuilding target of 20% SSB_0 by 2035.
[xxiii] The Chair and Vice Chair of the CCSBT rotate on an annual basis and sometimes the Chair may not have been appointed when Kobe related issues arise and sometimes the nominated Chair might not have previous experience of the CCSBT. Consequently, CCSBT has agreed that the Chairing and Vice Chairing Members may nominate alternatives with CCSBT experience to represent the Chair and Vice Chair at Kobe Steering Committee (KSC) meetings and for the Chair's representative to report the KSC meetings outcomes back to the CCSBT.
[xxiv] CCSBT does not have a Convention Area and the SBT fishery distribution overlaps with the Convention Areas of ICCAT, IOTC and WCPFC. Therefore, there will be movement of SBT vessels between RFMO Areas.
[xxv] The majority of CCSBT Members have completed a self-assessment of capacity in relation to their allocation.
[xxvi] 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.
[xxvii] The CCSBT management approach contains elements of a rights-based management regime, with national allocations of a global quota and 6 of the 8 Members managing their allocation with an IQ or ITQ system. Further elements are required for full rights-based management, but these are considered as and when required.
[xxviii] Capacity related information is now regularly exchanged for the Consolidated List of Authorised Vessels. CCSBT manages capacity indirectly through national allocations of a global TAC.
[xxix] The CCSBT does not have a closed authorized vessel register, so an annual assessment of capacity by the Secretariat would be difficult. In addition, because of the TAC management regime and the use of IQs or ITQs by most Members, capacity has not been considered a priority for CCSBT and there are no plans for an annual measurement.
[xxx] The CCSBT has an active vessel listhttps://www.ccsbt.org/en/content/active-vessels) in place. However, a joint active vessel list has yet to be established amongst the tRFMOs.
[xxxi] Purse seining for SBT is currently only conducted by a few vessels for farming purposes and is under ITQ controls.
[xxxii] Certain CCSBT Members have been and continue to provide support and training for one of CCSBT's developing country Members. CCSBT has also provided both scientific and compliance workshops in that country. Until recently, the CCSBT included a provision for ad-hoc support to developing States in its annual budget. This was discontinued on advice from its then only developing country Member that the fund was not necessary. Finally, as part of its Strategic Plan, the CCSBT is to develop programs to assist developing countries with Commission requirements..

[xxxiii] At the time of Kobe 3, the CCSBT did not maintain an IUU vessel list. The CCSBT adopted an IUU vessel list Resolution during October 2013 and this Resolution contains a provision that will enable cross-listing with other tRFMOs on a case by case basis. The CCSBT's IUU vessel list Resolution is based on those of the other tRFMOs, so it is harmonised to the extent possible.
[xxxiv] The CCSBT has developed and adopted a Corrective Actions Policy.
[xxxv] IOTC is the lead tRFMO for this work. Further work is being supported by the GEF funded ABNJ project and all tRFMOs are being included in this work.
[xxxvi] 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.
[xxxvii] CCSBT has an active vessel register, but it is not aware of any work underway to develop a global register of active vessels.
[xxxviii] CCSBT's VMS resolution adopts the VMS systems of IOTC, WCPFC, ICCAT and CCAMLR and modifications to those systems that are adopted by these RFMOs from time to time. Any standards set in those systems will thus become standards for CCSBT's VMS.
[xxxix] The CCSBT has Scientific Observer Program standards with a target coverage of 10%. Most Members are now achieving this target.
[xl] During and after the development of the CCSBT observer program standards, this type of information was exchanged between Member programs and with some other RFMOs. It may be an appropriate time to repeat this exchange process, both between Members/CNMs and RFMOs. However, without a specific goal for the exchange it is unlikely that the exchange will achieve a concrete result and much of the information will be ignored. It was therefore suggested that exchange of information be encouraged and supported, but only in response to a request for such information from a Member/CNM or another RFMO.
[xli] CCSBT's has a 10% target observer coverage and most Members are now achieving this target. However, this coverage may not be sufficient for rare bycatch events. CCSBT Members have recently commenced reporting aggregated ERS data from scientific observers as part of a mandatory data exchange process.
[xlii] However, 6 of the 8 Members have already ratified, approved or acceded to the agreement.
[xliii] The CCSBT has implemented a CDS for SBT. It would not be able to implement an effective CDS for tuna-like species or sharks because its mandate does not extend to tuna like species or sharks except as an Ecologically Related Species when fishing for SBT.
[xliv] The CCSBT is unlikely to implement new or expanded CDS schemes (to other species), therefore this is not currently relevant.
[xlv] The CCSBT CDS already utilises tags and allows Members/CNMs to submit information electronically. CCSBT's current focus is to improve its own system. Development of a harmonised form is more of a longer term objective.
[xlvi] This was raised in the context of an expanded CDS, which is unlikely in the case of CCSBT because CCSBT's system is already comprehensive.

Footnotes for IATTC

See footnotes in main text.

Footnotes for ICCAT

[1I] In 2009 the Commission requested the SCRS to conduct a pilot application of the Kobe strategy matrix (Res. 09-12).
[2I] Since 2009 strategy matrix are included as part of the assessment outputs.
[3I] Exchange of data and information is already happening in relevant areas: a) The transhipment monitoring program, in which information is shared between CCSBT, and IOTC; b) eBCD, ICCAT is working to establish an electronic system for the bluefin catch document, this system is expected to be extend to other species as well as to the IOTC, c) Rules and procedures for the protection, access to, and dissemination of data compiled by ICCAT contain

provisions for the confidentiality of data shared with other RFMOs. d) ICCAT participate in the CLAV (consolidated list of authorized fishing vessels) project since 2005.

[4I] ICCAT adopted in 2010 the Rules and procedures for the protection, access to, and dissemination of data compiled by ICCAT "Data Confidentiality Policy" that will provide access to the SCRS of more detailed fishery and biology related information.

[5I] A 5% of observer coverage for longliners over 24 m has been adopted by ICCAT (Rec. 04-01).

[6I] ICCAT participated in the International working group on tuna purse seine and baitboat catch species composition derived from observer and port sampler data, joint WG held in 2009 as well as in the joint 2011 ISSF meeting.

[7I] Some of the ICCAT stock assessments (SKJ, ALB, BET) have been peer reviewed.

[8I] ICCAT has conducted a full assessment on the impact of tuna fisheries on sea birds and is preparing similar work for sea turtles. ICCAT has also conducted Risk Assessment evaluations for less common catch of sharks species.

[9I] ICCAT has adopted several recommendations regarding the data collection of by catch species (including turtles, sea birds…) and minimum scientific observer coverage.

[10I] ICCAT Contracting Parties, non-Contracting Parties, Entities and Fishing Entities have been encouraged to conduct research programs on technological improvements in the various fishing gears, which promote the maximum reduction in mortality of by catch species. Mitigation measures such as the mandatory use of tori-line for longliners in specific areas (Rec. 07-07) have been already adopted by ICCAT. Also, measures for the release of live non-target species such billfish from main longline fleets.

[11I] NGOs regularly attend the ICCAT meetings as observers. In addition the assessment of the impact of the tuna fisheries on the sea birds populations was conducted jointly with ACAP. NGOs do actively participate in the scientific meetings of the SCRS ICCAT.

[12I] The Conservation and Management Measures Compliance Committee (COC) and the Permanent Working Group for the Improvement of ICCAT Statistics and Conservation measures (PWG) examine annually compliance with ICCAT conservation and management measures by Contracting Parties (COC) and non Contracting Parties (PWG). Since 2009, further to the review by the Commission of full and effective compliance of ICCAT obligations by the respective Contracting Parties, the Commission Chair and the COC Chair send a letter of concern or a letter of identification to CPCs pointing out lack of data reporting and non-compliance issues. Contracting Parties have then to review data deficiencies and rectify lapses in compliance before the next annual meeting of the Commission in which improvement shall be assessed.

[13I] In 2010, the PWG considered the development of guidance on the implementation of provisions of ICCAT Recommendation 09-10 that allow ICCAT to incorporate other tuna RFMOs IUU vessel lists into the ICCAT IUU list.

[14I] Established by ICCAT Recommendations 09-04 (SWO) and 10-04 (BFT).

[15I] The ICCAT Secretariat has participated in November 2010 in the "FAO Technical Consultation to Identify a Structure and Strategy for the Development and Implementation of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels".

[16I] ICCAT has adopted capacity measures for E-BFT by which Contracting Parties have established management plan for 2010-2013 (refer to Recommendation 10-04).

[17I] The ICCAT Working Group on integrated monitoring measures met in February 2010 to consider, among other issues, Port State measures and inspection scheme.

[18I]. ICCAT Recommendation 07-08 stipulates the format for the communication of VMS messages by fishing vessels.

[19I] Fishing vessels involved in E-BFT fisheries have to transmit VMS messages (refer to ICCAT Recommendation 10-04).

[20I] In 2006 ICCAT adopted a Programme for Transhipment (by ICCAT Recommendation 06-11) that requires that all transhipments of ICCAT species take place in port, unless they are properly monitored under the ICCAT Regional Observer Programme (ROP). The ROP is currently limited to large-scale longline vessels of Parties/Entities that participate in it.

In addition, since April 2010, ICCAT has implemented the ICCAT Regional Observer Programme (BFT-ROP) for bluefin tuna in the Eastern Atlantic and Mediterranean to ensure 100% coverage of purse seine vessels over 24 meters during all the annual fishing season, of all purse seiners involved in joint fishing operations, irrespective of the length of the vessels, during all transfer of bluefin tuna to the cages and all harvest of fish from the cage. The BFT-ROP establishes obligations for the observer (among others: monitor purse seine vessels' compliance with ICCAT conservation and management measures and collect Task II data based on the directives from the SCRS – refer to ICCAT Recommendation 10-04).

[21I] Since 2009, through ICCAT Recommendation 08-12 (amended by ICCAT Recommendation 09-11), ICCAT has implemented a Bluefin tuna catch documentation scheme to identify the origin of any bluefin tuna in order to support the implementation of ICCAT conservation and management measures. ICCAT Recommendation 10-11 stipulates that an electronic Blue Fin Tuna Catch Documentation System (eBCD) shall be developed to cover all bluefin tuna caught, farmed, harvested and traded. Since January 2011 a Working Group on e-BCD is examining the technical specifications of an eBCD system.

Footnotes for IOTC

1. The SC continues to look for improved ways of conveying advice for decision making.
2. All data are routinely available through the IOTC website with datasets published at regular intervals and prior to the assessments.
3. The Secretariat keeps a repository of the programs as well as the input and output data files utilized in the assessments by the Working Parties. The Secretariat also publishes data summaries which include an assessment of the quality of the data in the IOTC databases.
4. The Executive Summaries used by the IOTC continue to undergo annual revision and improvement. .
5. A K2SM has accompanied the advice for all stock assessments where possible, since 2010.
6. There are three basic ways to distribute information, depending on the intended audience: for the scientific community, through the Report of the Scientific Committee; for decision makers, through the Executive Summaries; for the general Public; through the Summary Table published in the Scientific Committee Report and on the IOTC Website stock status dashboard.
7. In progress
8. Information is routinely exchanged with other RFMOs and the FAO concerning fisheries statistics, the List of IUU vessels, the information on authorized vessels (through the CLAV), and in coordination of the transhipment monitoring programme activities between oceans, with confidentiality provisions where applicable. The IOTC has recently extended is data confidentiality policy and procedures to incorporate provisions for all types of data in the IOTC databases and some of this provisions are in line with those existing in other t-RFMOs.
9. The Compliance Committee was strengthened in 2011 and country-based assessments of compliance are conducted. The Scientific Committee and the Working Parties also identify the major fleets not complying with the data reporting requirements. The IOTC Secretariat has implemented several capacity building activities to assist IOTC CPCs with their data requirements.
10. All data submissions by IOTC members are done electronically. Basic data formats requirements have been similar to those of other RFMOs. Data forms and reporting guidelines are published in the IOTC website.
11. This has been only partially done. While operational level data is available for national scientists of the flag states, there is limited collaboration with scientists from other member states that would involve access to operational (logbook) data.
12. IOTC Members have adopted binding resolutions concerning the types of data, and submission timelines to be respected by the Members. The quality, completeness and timeliness of the submissions are reviewed by the Scientific and the Compliance Committees, and non-compliant fleets are identified. Data reports are regularly cross-checked against data from alternative data sources (e.g. processing plants, third-party reports, etc.).
13. A Regional Observers Scheme was adopted in 2010 aimed at placing observers vessels, targeting 5% coverage. In the Indian Ocean, the importance of the artisanal fisheries (~50% of catches), means that port sampling schemes are also required for small-scale fisheries that cannot carry on-board observers. However, sampling levels, in particular for catch-and-effort and length, remain low for most IOTC fisheries/fleets.
14. For the past ten years, IOTC has been cooperating with the Overseas Fishery Cooperation Foundation of Japan to improve statistical systems in developing CPCs in the Indian Ocean. Sampling programmes are being implemented for artisanal fisheries (see above). An established sampling design has been implemented in industrial tuna purse seine vessels since several years ago, covering the majority of the industrial purse seine catch.
15. Processors associated with the International Seafood Sustainability Foundation (ISSF) have reported commercial data that has allowed comparisons with official statistics from IOTC Members. Since many years ago, information from port sampling projects conducted by the Secretariat have been routinely used in estimating catches of non-reporting fleets.
16. The IOTC, in collaboration with the Commission de l'Ocean Indien and several IOTC Members completed in 2008 the Indian Ocean Tuna Tagging Programme that tagged almost 200,000 fish of the main three species. This data are an essential contribution to the assessments of the main species.
17. There are several projects in the Indian Ocean, especially in the western IO, involving the release of archival tags in the main species. The total number to date is in excess of 250 archival tags.
18. Stock assessment methods (MULTIFAN-CL; SS3) applied in the main tuna species (yellowfin tuna and bigeye tuna) incorporate spatial structure. One spatial management measure (time-area closure) has been adopted although there is little evidence to suggest it is effective.
19. Scientists are working in the application of ecosystem-based models (e.g. APECOS; SEAPODYM)
20. The SC has discussed this several times, though no commitment has yet been made to undertake formal review. Invited Experts are brought to each Working Party meeting where an assessment is undertaken, to act as an informal peer reviewer.

21. Regularly, several models, with different data requirements and assumptions are applied in the IOTC assessments, as well as analyses of other status indicators in the formulation of the scientific advice.
22. Minimum standards have been adopted and reviewed by the Scientific Committee. These are communicated to all those undertaking assessments each year as guidelines and minimum standards
23. For the past ten years, the Secretariat has collaborated with OFCF in improvement human capacity in coastal states and improving data collection in almost 20 countries of the region.
24. Data from observer programmes has been analysed to obtain estimates of bycatch for some purse seine and longline fleets. However, the amount of data available is still very low for most fleets and therefore of limited use.
25. IOTC has adopted minimum data standards for the collection of data under its Regional Observer Scheme. Observer schemes are mandated to collect information on bycatch species.
26. IOTC Secretariat normally invites or encourages recognized scientists to attend its meetings to increase available expertise at the Working Parties.
27. IOTC Working Party on Ecosystems and Bycatch routinely reviews information on the effectiveness on existing measures from research. Several initiatives are being conducted in the region to explore mitigation measures.
28. Member scientists, NGO's, Industry and the IOTC Secretariat have collaborated on several projects to test and identify suitable mitigation measures for seabirds, marine turtles and sharks. The Commission has adopted some of these in binding Resolutions and others will continue to be tested. An Indian Ocean Shark research program is also being developed which will include the testing of possible catch mitigation measures.
29. There are several initiatives currently in place to address these issues, such as the bycatch work by ISSF, WWF. See the above point for additional information. Progress on these initiatives is followed by the WPEB.
30. Ban of retention of thresher sharks and oceanic whitetip sharks adopted in 2010 and 2013, respectively. The Commission annually considered additional measures. Secretariat's work in support of data collection includes collection of data about sharks at the species level.
31. Non-IOTC species of concern have received protection in various forms by the Commission. See point above. Measures for mitigation of incidental mortality of seabirds have been adopted and revised.
32. Mitigation measures have been adopted to protect seabirds, cetaceans marine turtles. IOTC Members collect information on bycatch species, especially pelagic sharks. This data is required to be collected and reported using the same standards as those of IOTC species.
33. Although requests for a bycatch officer post to be created at the Secretariat was not agreed upon, several of the regular activities concerning data collection and observer schemes are consistent with this requirement.
34. The effectiveness of limits on fishing capacity adopted in 2006 and 2007 will be affected by the extent that the implementation of Fleet Development Plans increase current capacity.
35. The effectiveness of the time-area closure adopted by the Commission in 2010, was evaluated as being 'ineffective' by the Scientific Committee at its 2011, 2012 and 2013 Sessions. Unless the closure area is modified, it is highly unlikely to be of use for stock sustainability purposes.
36. All major stocks are assessed and their status is available on the IOTC websites, Stock Status Dashboard.
37. Limits on fishing capacity were established in 2006 and 2007, with clauses that contemplate, in principle, the rights of developing coastal States. The IOTC Members commenced in 2011 work on a mechanism for the allocation of fishing opportunities, though this process has encountered many difficulties and delays.
38. Only vessels that have been in the Record of Vessels of other RFMOs (and not in any IUU list) can be transferred to the IOTC area.
39. The measures adopted in control of fishing capacity are based and monitored on the basis of active vessels only.
40. These principles were implemented in the resolutions on control of fishing capacity.
41. The implicit definition utilized is the overall tonnage (measured in GRT or GT) of the vessel or fleet involved.
42. A management regime based on allocation of fishing rights among IOTC Members is under consideration by Members.
43. See reference 42
44. The consolidation of the lists of authorized vessels by all T-RFMOs is a step in developing information exchange mechanisms. The list of active vessels of IOTC is available from its website.
45. The Secretariat provides training and support in cooperation with various initiatives in the region. A Meeting Participation Fund was adopted in 2010 that is being used to support participation of developing states in the activities of the Commission. The IOTC has also devoted additional funds to assist developing CPCs with the implementation of their observer schemes in 2014 an 2015 (pending budget approval in June 2014).

46. The final reports of the cooperation projects undertaken by the Secretariat with the support of Japan (IOTC-OFCF Project), includes an evaluation of the effectiveness of the assistance provided. Similar evaluations are conducted in other cooperative projects (IOC-SmartFish, BOBLME, etc.).
47. There are multiple initiatives to support capacity building, directly through the IOTC Secretariat in cooperation with regional initiatives funded by developed Member countries, and through bilateral arrangements (e.g. access agreements) between countries of the region and distant-water fishing nations.
48. See above for the various cooperative projects currently in place
49. See above for the various cooperative projects currently in place
50. IOTC has not adopted a Catch Documentation Scheme
51. The Compliance Committee has been reinforced in 2011, expanding its work to include country-by-country review of the compliance situation, including identification of the areas for improvement.
52. The IOTC Secretariat has coordinated joint-t-RFMO work on the Global Consolidated List.of Authorized Vessels (CLAV), and allocation of Unique Vessel Identifiers to all vessels authorized by t-RFMOs. At present the IOTC Secretariat is coordinating this work with the support of the ABNJ Project and the plan is to make updates of the CLAV possible in near real-time by the end of 2014.
53. IOTC has a Record of Active Vessels that is published in the IOTC website.
54. Completed. The lists include small-scale vessels that operate outside the EEZ of the Members
55. See above
56. The controls on fishing capacity in IOTC are done on the basis of active vessels.
57. IOTC is the only RFMO that has adopted a Port State measure similar to the FAO binding PSM Agreement. The strengthening of the Compliance Committee also creates an incentive to improve the implementation of the measures by the Members
58. The structure (format) of the message is not provided.
59. Size limit for the application of the IOTC VMS is 15 m LOA. Although no regional VMS exists currently, implementation at national level should provide coverage of the whole region, including the high seas
60. All concerned RFMOs are using more or less the same transhipment declaration forms and reporting timeline.
61. Advance notification is provided to the flag state
62. IOTC adopted a scientific Regional Observer Scheme, based on national implementation, to improve on the catch statistics of target and bycatch species. The Scheme also includes a port sampling component for the case of artisanal fisheries.
63. The data collection standards proposed were partly based on a comparison with those existing in other RFMOs.
64. The Resolution establishing the Scheme came into force on July 1st 2010. To date, no evaluation of observer coverage levels has been conducted.
65. IOTC has its own implementation through Res 10/11, consistent with the FAO Agreement.
66. Proposals have been tabled by Members but no agreement was reached at the last two sessions of the Commission.
67. Some IOTC CPCs and non-members report data that falls short of the IOTC requirements. In recent years, the IOTC Secretariat has assisted some CPCs to improve reporting and work is ongoing in other countries.
68. In 2013 the IOTC estimated levels of input capacity in the Indian Ocean in recent years and future levels using the information provided by IOTC CPCs in their fleet development plans. However, the information available is not sufficient to estimate optimum levels and provide the Commission with advice on those levels.
69. Ditto 68. Assessment is carried out on an annual basis and presented to the Compliance Committee/Commission.
70. Ditto 53
71. Ditto 52
72. Ditto 45

[73] Various measures have been adopted aimed at reducing bycatch of threatened and endangered species (marine turtle, sea birds, sharks and cetaceans).

[74] A freeze in capacity for tropical tuna (based on capacity at 2006 level) invariably targets the purse seine fishery. There is no restriction in transfer of capacity from developed to developing States, provided that the vessels to be transferred are not in any IUU list.

[75] Capacity building activities have been undertaken in various member States for the implementation of port State Measures. The Republic of Korea, a member State of the IOTC has organized a workshop on port State measures. The Secretariat has planned Regional workshops for the future.

[76] Delisting procedures from the IUU vessels list, which are similar to some of the other RFMOs, have been incorporated in the concerned IOTC resolution.

[77] Ditto 65

Footnotes for WCPFC

See footnotes in main text.

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.

[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) due to a lack of consensus as to whether CCSBT has a mandate to make binding resolutions on bycatch matters.

[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.

KOBE COMPLIANCE AND ENFORCEMENT RECOMMENDATIONS

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].

Port State Measures

- Encourage RFMO Members to consider signing and ratifying the FAO Port State Measures Agreement at their earliest opportunity[8].

[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.

[8] However, 6 of the 8 CCSBT Members have already ratified, approved or acceded to the agreement.